Prospects and Problems of Jute Yarn & Twine in International Market

AKIJ JUTE MILLS LTD.

Use Jute Goods & Feel the Environment
INTERNERSHIP REPORT

PROSPECTS AND PROBLEMS OF JUTE YARN & TWINE IN INTERNATIONAL MARKETS

Prepared for
Mr. S.S.M. Sadrul Huda
Senior Lecturer
East West University

Prepared by
Md. Mizanur Rahman
1997 - 2 - 10 - 008
East West University

December 30, 2001
December 30, 2001
Mr. S.S.M. Sadrul Huda
Senior Lecturer of ITB
East West University
Dhaka – 1212

Sub: Submission of Internship Report

Dear Sir

Here is my Internship Report that fulfills partial requirement of my Bachelor Degree. It is very helpful as a student of Business Administration to undergo the Internship Program.

I completed my Internship Program in Akij Jute Mills Ltd. I learned a lot from them. I evaluate their performance with other jute mills and identify the major prospects and problems of jute yarn & twine in international markets. I also give recommendations that I think helpful to improve their position in jute industry. I also give suggestions to solve the problems of jute industry which will increase the export of jute yarn & twine and will capture the world market share of jute products.

I tried to accommodate your invaluable comments suggestions in my report. In this connection, should you need any further clarification, please call on me.

Thank you very much my honourable teacher for your kind immense co-operation without which this report would not has been done. I take every opportunity to express my gratitude of indebtedness to you.

Thanking you

Sincerely yours

Md. Mizanur Rahman
1997 – 2 – 10 – 008
An Internship, being a competitive as well as essential program, is the last platform of BBA Degree completion. It is a fifteen-week attachment with an organization program, and the submission of an Internship Report will fulfill the requirement of BBA. It familiarizes students with the working environment of the real world. It gives students the best opportunity to improve their interpersonal and managerial skills and also implement their theoretical enlightenment to real-life situations. After graduating, students also get access to networking opportunities when they are brought to light of the distinct business sphere, taking a leading edge in the job market. At last, it can be said that it polishes their strengths and weaknesses.
Acknowledgement

My list of gratitude is pretty long. I would like to unfold it with the name of my Internship supervisor at East West University. Mr. S.S.M. Sadrul Huda, without whose priceless and inestimable supports I would not have been able to produce this report.

I was privileged my enjoying assistance and guidance of the whole organization teams of Akij Jute Mills Ltd. I would also like to thank Mr. Sheik Nasie Uddin, Director of Akij Jute Mills Ltd. for his enormous support.

I am also indebted to following individuals and fell obligation acknowledge as follows:

1. Mr. Abdul Hakim
   Production Manager
   Akij Jute Mills Ltd.

2. Mr. Feroj Mahmud
   Export Officer
   Akij Jute Mills Ltd.

3. Mr. Zakir Hossain
   Administrative Officer
   Akij Jute Mills Ltd.

4. Mr. Mizanur Rahman
   Asst. Quality Control Officer
   Akij Jute Mills Ltd.

5. Mr. Zaimul Abedin Chisty for his important contributions.

And, for inspiration, my thanks and my love to my father, mother and brother.
# Table of contents

## Chapter one – Introduction

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>IX</td>
</tr>
<tr>
<td>1.0 BACKGROUND OF THE STUDY</td>
<td>1</td>
</tr>
<tr>
<td>1.1 ORIGIN OF THE REPORT</td>
<td>1</td>
</tr>
<tr>
<td>1.2 OBJECTIVE OF THE REPORT</td>
<td>1</td>
</tr>
<tr>
<td>1.3 SCOPE</td>
<td>2</td>
</tr>
<tr>
<td>1.4 METHODOLOGY</td>
<td>2</td>
</tr>
<tr>
<td>1.4.1 Primary sources</td>
<td>2</td>
</tr>
<tr>
<td>1.4.2 Secondary sources</td>
<td>2</td>
</tr>
<tr>
<td>1.4.3 Types of information</td>
<td>3</td>
</tr>
<tr>
<td>1.4.4 Data processing</td>
<td>3</td>
</tr>
<tr>
<td>1.5 LIMITATIONS</td>
<td>3</td>
</tr>
<tr>
<td>1.6 BENEFITS OF THE STUDY</td>
<td>3</td>
</tr>
<tr>
<td>1.7 BENEFITS OF THE INDUSTRY</td>
<td>4</td>
</tr>
<tr>
<td>1.8 BENEFITS OF THE POLICY MAKERS</td>
<td>5</td>
</tr>
<tr>
<td>1.9 REPORT PREVIEW</td>
<td>5</td>
</tr>
</tbody>
</table>

## Chapter two – Organizational Part

<table>
<thead>
<tr>
<th>Section</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 HISTORICAL EVOLUTION OF AKIJ JUTE MILLS LTD.</td>
<td>6</td>
</tr>
<tr>
<td>2.1.1 Product range</td>
<td>7</td>
</tr>
<tr>
<td>2.1.2 Specialty</td>
<td>7</td>
</tr>
<tr>
<td>2.1.3 Sister concern</td>
<td>8</td>
</tr>
</tbody>
</table>
2.2 BUSINESS STRATEGIES
2.3 TYPES OF BUSINESS
2.4 REASONS FOR FOUNDING
2.5 MAJOR COMPETITORS
2.6 UNDIVIDED ATTENTIONS TO CONSUMERS
2.7 DISTRIBUTION METHODS
2.8 ORGANIZATIONAL CHART
2.8.1 Responsibilities of Department Head
2.9 MARKET COVERAGE
2.10 RATES OF COMPENSATIONS FOR MANAGEMENT
2.10.1 Operations labour
2.10.2 Employee benefit
2.11 AFFILIATING TRADE ORGANIZATION
2.12 SWOT ANALYSIS OF ANVIL
2.12.1 Strengths
2.12.2 Weaknesses
2.12.3 Opportunities
2.12.4 Threats
Chapter Three – Working Part

3.0 PURCHASE OF RAW JUTE

3.1 GRADING OF RAW JUTE

3.1.1 Tossa Jute

3.1.1.1 Bangla Tossa A (BTA)

3.1.1.2 Bangla Tossa B (BTB)

3.1.1.3 Bangla Tossa C (BTC)

3.1.1.4 Bangla Tossa D (BTD)

3.1.1.5 Bangla Tossa E (BTE)

3.1.2 White Jute

3.1.2.1 Bangla White A (BWA)

3.1.2.2 Bangla White B (BWB)

3.1.2.3 Bangla White C (BWC)

3.1.2.4 Bangla White D (BWD)

3.1.2.5 Bangla White E (BWE)

3.2 FIBRE CHARACTERISTICS

3.2.1 Length

3.2.2 Strength

3.2.3 Lustre

3.2.4 Uniformity

3.2.5 Colour

3.2.6 Roots

3.2.7 Cleanliness
3.3 FACTORS AFFECTS THE PRICE OF JUTE

3.3.1 Supply and demand of jute
3.3.2 Quality of the fibre

3.4 WASTE OF JUTE

3.4.1 Mills waste
3.4.2 Processing waste

3.5 ASSORTMENT OF JUTE

3.5.1 Kutchta assorting of jute
3.5.2 Pacca assorting of jute

3.6 JUTE BALE MARKS

3.7 MOISTURE IN JUTE

3.8 FLOWCHART OF JUTE MANUFACTURING PROCESS

3.9 QUALITY CONTROL AND INSPECTION

3.10 PRODUCTION OF JUTE YARN & TWINE OF AJML

3.10.1 Year Wise Production
3.10.2 Month wise production

3.11 MECHANICAL SUPERIORITY OF AJML

3.12 MARKETING AND PRODUCTS

3.12.1 Seasonal Characteristics
3.12.2 Pricing Strategies
3.12.3 Stability of Prices
3.12.4 Bidding Conditions
3.12.5 Valuation of Products

3.13 SALES OF JUTE YARN & TWINE
   3.13.1 Specific Sales Area Covered
   3.13.2 Special Sales Promotions
   3.13.3 Year Wise Export of AJML

3.14 SHIPMENT PROGRAM

Chapter Four – Project Part

4.1 INTRODUCTION

4.2 MARKET STRUCTURE OF JUTE YARN & TWINE
   4.2.1 Hessian, Sacking and Twine
   4.2.2 Jute Carpet Backing
   4.2.3 Jute Yarn
      4.2.3.1 World Market
      4.2.3.2 Middle-East
      4.2.3.3 Europe

4.3 THE CHALLENGE FOR JUTE INDUSTRY IN WORLD MARKETS

4.4 COMPARATIVE ADVANTAGE BETWEEN BANGLADESH & INDIA

4.5 PROSPECTING EXPORT MARKETS OF JUTE YARN & TWINE FOR BANGLADESH

4.6 SUPPLY AND DEMAND OF JUTE YARN & TWINE

4.7 CHALLENGE FROM SYNTHETICS

4.8 GLOBAL TRADE

4.9 EXPORTS BY LEADING JUTE PRODUCING COUNTRIES
Chapter Five – Conclusion & Recommendations

5.1 RECOMMENDATIONS

5.2 IMPLEMENTATIONS

5.3 CONCLUSION

Appendix

Bibliography
Executive Summary

Bangladesh is the largest producer of jute and has the finest quality of jute in the world. Bangladesh is the major supplier of yarn sector whereas India seems to be the possible source of alternative fabric because of investment made by some countries in modern equipment. Two main supplying countries – Bangladesh and India continue to dominate the world market. Because they have lowest costs of producing jute yarn & twine. The world demand for jute yarns show a reduction over the past 4 years. I believe this can be traced the situations of increased raw materials prices will have forced the closure of tradition weaving factories in a number of countries either to be replaced with sacking hessian from the producing countries or switched to synthetics.

In Europe, we see a rapidly maturing carpet industry equipped with modern plant and machinery, able to compete on a world market. Access to information technology gives them the ability to monitor and compare performance and costs between various suppliers. As an industry we must be able to respond to these changes. In the past we have all said that jute is a natural fibre and such is infinitely variable and perfection can not be guaranteed. That attitude today is no longer acceptable or indeed true. It is our as an industry to satisfy the requirements of our customers. Their needs and expectations are increasing in many different ways. The technology and capability required is available to us. It may require investment but that investment must be made if we are to continue to be suppliers. To survive in these markets in future the jute industry must be capable of delivering a quality product every time at competitive prices whilst ensuring the delivery to the customer is made on time.

From industry we need to maintain stable prices and regular supplies if we are to maintain our markets. Quality should not be an issue and must be built into all of our products at all stages of our manufacture. Our management and workforce are critical to the success of our business. Their education and training on an ongoing basis is essential. ISO 9000 is a must and total quality management must become the norm.

From government we need continued support to achieve change. Jute is a natural asset which must not be wasted. Support policies should be reviewed and targeted to those companies and sectors to promote change and achieve growth, not to prop us sick businesses with no business of recovery. Open minded purchasing policies and a willingness to review product specifications should be undertaken to help the industry achieve the change.
CHAPTER ONE

INTRODUCTION

JUTE PLANTS
1.0 BACKGROUND OF THE STUDY

Akij Jute Mills Ltd. (AJML) is a unit of Akij Group which is one of the biggest organisations in Bangladesh. Within a very short period of time AJML got the confidence of buyers who use high quality of jute yarn and twine. In respect of production, AJML is the third largest jute yarn & twine manufacturer in Bangladesh and production capacity is about 7,000 metric tons per year. The company employees over 800 people directly and in addition gives assistance to over 10,000 independent farmers and 50 suppliers who supply raw jute to the Akij Jute Mills Ltd.

Akij Jute Mills Ltd. provides the highest quality jute yarn & twine at a competitive price. With this objective, AJML has already obtained buyer’s satisfaction and international reputation. Most of the sales are in the Middle East and Some of the European and North American countries. It also sales products especially those countries where make carpets and carpet related products. Carpet manufacturers are the main buyers of Akij Jute Mills Ltd. AJML is located at Noapara, Taltola, Jessore. Mr. Sheikh Akij Uddin, the founder of Akij Jute Mills Ltd. initiated to export jute yarn & twine in world market. They celebrate 50th anniversary of the foundation of AKIJ GROUP. Over the years, AJML extended its production capacity and has established reputation as a manufacturer of quality jute yarn and twine in Bangladesh.

1.1 ORIGIN OF THE REPORT

This report is the output of three and half months long internship program that I have gone through at Akij Jute Mills Ltd. (AJML). It also fulfills the partial requirement of an internship program that a business graduate must undergo in order to qualify for degree in East West University.

1.2 OBJECTIVE OF THE REPORT

The report generally consists of two types of objectives, such as prospects of jute yarn & twine in international markets and problems of jute yarn & twine in international markets.

The prospects of jute yarn & twine of this report was:

- to identify the benefits and opportunities of jute yarn & twine in world markets.

- to find out the position of jute yarn & twine in world markets compare to synthetics and other related jute products.
The problems of jute yarn & twine of this report was:

- to identify the obstacles and threats of jute yarn & twine face in world market.

1.3 SCOPE

The scope of this report is to analyse the production procedure and to find out the prospects and problems of jute yarn & twine in international markets.

1.4 METHODOLOGY

The data are collected from two main sources;

1.4.1 Primary Sources

- Discussion with company officers
- Personal Observation
- Desk work in different sections department
- Interviews with jute researchers
- Discussion with government export promotion officers

1.4.2 Secondary Sources

- Consultation of related books and publications
- Different statements from company brochure and journals
- Different reports, magazines and documents
- Browsing from internet
- Information from Ministry of jute
1.4.3 Types of information

Primary information was obtained from discussion with the company director, head of the department, export officers, production manager and administrative officers who are directly involved in this company.

1.4.4 Data Processing

Collected information is processed by the use of computer system. Detailed analysis, working variables and working definitions are embodied in the report.

1.5 LIMITATIONS

The possible obstacles that could hinder the information of the study have been illustrated in the following:

* Time constrained could be a major draw back in this study.
* It was difficult to communicate with the officers of all departments.
* Another limitation of this report is, they are not disclosing some data which are highly confidential for the company, and information for obvious reason, which could be very much useful.
* Many of the officers were hesitant to respond because they thought that the study was being prepared for the particular department.
* Akij Jute Mills Ltd. Has different competitors, that’s why it was difficult to compare the export performance of AJML with other jute mills.

1.6 BENEFITS OF THE STUDY

This report provides the overall situation of jute yarn & twine in domestic market as well as in international market. This study presents the current problems of jute yarn & twine facing our country in world market. The demand of jute products are declining for various reasons including high price, low quality, competition from synthetics, lack of technology and lack of diversified jute products. So, this report describes the necessary steps to boost the demand of jute yarn & twine.

* Need to increase domestic use of jute.
• Diversify for new uses of jute goods.
• Maintain quality programs whether ISO 9002 or total quality approach.
• Production methods and costs need to be reduced.

This report also identifies the prospecting countries of jute yarn & twine for Bangladesh. They are Eastern Europe, Japan, Middle East, South America offers some opportunities for market expansion of jute goods. World market now absorbs up to 2,30,000 tons of imported jute yarns & twines. Demand is met by imports from Bangladesh, India, and Thailand. The production is usually made by specialist yarn manufacturing units. The world jute yarn & fabric industry produces around two and half million tons per year of products, of this 3,50,000 tons is consumed as yarns & twines.

The European Union (EU) is the largest importing market taking 100,000 tons per year, much of it for woven carpets. North America imports about 10,000 tons per year and Japan imports about 16,000 tons per year. Another principal market is for woven carpets in the middle east, especially Turkey and Iran.

1.7 BENEFITS OF THE INDUSTRY

From this report jute industry will be aware about the overall market structure of jute yarn & twine in international markets. Which countries have the bright prospect for exporting jute yarn & twine and how much will they import per year from Bangladesh? For what reasons our jute industry is losing its export markets? What product specifications quality and price should be into their goods.

Jute industry should ensure a plentiful supply of cheap and utilising modern production methods to reduce unit labour and energy costs can ensure an efficient and profitable industry into the future. To develop new products or alter existing specifications demand access to end users so that their needs can be recognised. Jute industry can be made product modification by taking with and understanding the real needs of the end users. I believe this can only be done by the industrialist who knows the production process and its capabilities in partnership with the buyer of the products. It is possible only through partnership and co-operation that progress can be made quickly. But I realise that much work has already been done in this field by many well qualified people. I would suggest that much project should isolate. I strongly believe that any such project should be market driven to determine what is required of the product and what market could be available. Only in this way, I believe that true direction can be given. Many other projects can be identified by this route but we have seen much good work wasted because there had been no commercial exploitation, no real commercial market existed. This can not be done without a radical examination of all the criteria involved.
Co-operation from all the stockholders in jute from government industrialists, workers, trade unions, shareholders and customers are much sought if the industry is to change.

1.8 BENEFITS OF THE POLICY MAKERS

The policy makers of our jute industry will know about the current position of jute goods in world market. From this report, policy makers will be aware to the existing problems that is facing our jute industry. They may make decision in order to increase export volume of jute goods based on this report and may organise training and workshop on “department of jute based on products”. From this workshop, they may develop jute intermediates as substitutes for wooden or plywood and other packing panels to find new end-users for jute.

Our policy makers of jute goods may organise project on “Entrepreneurship Development of Diversified Jute Goods”. This will help to encourage the industrialists to come into jute sector and also to diversify new products and new uses of jute goods, which will boost our jute sector to an increasing demand in world market.

1.9 REPORT PREVIEW

The report on “Prospects and problems of jute yarn & twine in international market” is organised by dividing the whole report into five major chapters. Those brief idea is stated below:

Chapter One: Introduction Part: Briefs the reader about the report.

Chapter Two: Organisational Part: This report includes the background of Akij Jute Mills Ltd.

Chapter Three: Working Part: Specifies working experience while doing internship in Akij Jute Mills Ltd.

Chapter Four: Project Part: Discuss with the detailed information regarding prospects and problems of jute yarn & twine in international markets.

Chapter Five: Recommendation, Implementation and Conclusion.
2.1 HISTORICAL EVOLUTION OF AKIJ JUTE MILLS LTD.

The establishment of Akij Jute Mills Ltd. (AJML) is a unique event in the history of higher quality jute yarn & twine in Bangladesh as well as all over the world. Akij Jute Mills Ltd. (AJML) was established in 1994 and it is a unit of Akij Group which is one of the biggest organisation in Bangladesh. Within a very short period of time AJML got the confidence of buyers who use high quality of jute yarn and twine. In respect of production, AJML is the third largest jute yarn and twine manufacturer in Bangladesh, and production capacity is about 7,000 metric tons per year. The company employees over 800 people directly and in addition gives assistance to over 10,000 independent farmers and 50 suppliers who supply raw jute to the Akij Jute Mills Ltd.

"Akij Group" is a family concern run by Mr. Sheikh Akij Uddin who is the founder and lifetime chairman of Akij Jute Mills Ltd. Is managed by his son Mr. Sheikh Nasir Uddin. AJML is located at Noapara, Jessore. Over the years, AJML extended its production capacity and has established reputation as a manufacturer of quality jute yarn and twine in Bangladesh. The secret behind the fast expansion of "Akij Jute Mills Ltd." is that they don’t use bank for financing purposes but for formalities only.

In its infancy, Akij Group started in a humble way with jute trading which was known as the golden fibre of the country, earning highest amount of foreign exchange. Its ceaseless efforts with dynamic management and support from its numerous clients have led the Group in diversifying its business activities. In the second phase, the Group went into manufacturing handmade cigarettes popularly known as Bidis. This sector gave a real boost to the revenue earning of the Group as well as making a substantial contribution to the government exchequer. With the passage of time, the Group undertook new ventures and presently there are 15 units of industries under its umbrella. Akij Group employs more than 21,000 people in various categories.

The Group has plans for setting up more projects including cement in the near future. The projects are already in the pipeline. Foreign investors have shown keen interest in joining with them for joint ventures. Akij Group is also involved in socio-cultural activities. The group has been operating a sizeable orphanage free of charge in a district town. The group has also acquired a modern mother & children hospital previously owned by Save the Children (UK). The hospital is being operated as a non-profitable concern by Ad-din Welfare Trust.

Founder: Mr. Sheikh Akij Uddin
Born: In 1930
Village: Madha-danga
District: Khulna
AJML founded: In 1994 at the age of 64 years in Jessore.
2.1.3 Sister Concern

<table>
<thead>
<tr>
<th>SL NO.</th>
<th>Name of the Company</th>
<th>Product</th>
<th>Year of the Establishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Akij BIDI Factory Ltd.</td>
<td>Hand Made Cigarettes</td>
<td>1950</td>
</tr>
<tr>
<td>02.</td>
<td>SAF Industries Ltd.</td>
<td>Crust &amp; Finished Leather</td>
<td>1960</td>
</tr>
<tr>
<td>03.</td>
<td>Dhaka Tobacco Industries Ltd.</td>
<td>Cigarettes</td>
<td>1966</td>
</tr>
<tr>
<td>04.</td>
<td>Akij Printing and Packages Ltd.</td>
<td>printing and packaging Factory</td>
<td>1974</td>
</tr>
<tr>
<td>05.</td>
<td>Dhaka Tobacco Industries (Leaf)</td>
<td>Tobacco Leaf Processing Factory</td>
<td>1981</td>
</tr>
<tr>
<td>06.</td>
<td>Akij Housing Ltd.</td>
<td>Housing</td>
<td>1987</td>
</tr>
<tr>
<td>07.</td>
<td>Akij Match Factory Ltd.</td>
<td>Match</td>
<td>1992</td>
</tr>
<tr>
<td>08.</td>
<td>Akij Jute Mills Ltd.</td>
<td>Jute Yarn &amp; twine</td>
<td>1994</td>
</tr>
<tr>
<td>09.</td>
<td>Akij Cement Company Ltd.</td>
<td>Cement</td>
<td>1995</td>
</tr>
<tr>
<td>10.</td>
<td>Akij Textile Mills Ltd.</td>
<td>Cotton Yarn</td>
<td>1995</td>
</tr>
<tr>
<td>12.</td>
<td>Akij Particle &amp; Hardboard Mills Ltd.</td>
<td>Particle &amp; Hardboard</td>
<td>1996</td>
</tr>
<tr>
<td>15.</td>
<td>Akij Jarda Factory Ltd.</td>
<td>Chemical Treated Tobacco</td>
<td>2000</td>
</tr>
</tbody>
</table>

2.2 BUSINESS STRATEGIES

To fulfill its objectives, AJML applies seven basic strategies:

1. Purchase the highest quality of hard district Tossa raw jute.
2. Recruits highly qualified and experienced employees to ensure defects finished goods.
Always maintain stock of raw jute at least for two years to ensure no break down in shipment.

Uses the most latest technology for production.

To restructure manufacturing operations to reduce overhead costs, goods in production and to manufacture perfect jute yarn & twine.

To monitor and control production expenses.

To increase the optimum level of production.

2.3 TYPES OF BUSINESS

Akij Jute Mills Ltd. is a high quality jute yarn and twine manufacturer. They simply buy raw jute and manufacture jute yarn and twine.

2.4 REASONS FOR FOUNDING

Bangladesh is an agricultural country and its soil and climate is suitable for the cultivation of high quality jute. One day, Bangladesh was the highest jute producer and exporter in the world. But day by day, it is losing its international market. Because lack of quality in manufacturing of jute yarn & twine in our jute industries. And also the usage of jute is becoming limited. At that situation, Mr. Sheikh Akij Uddin decided to establish jute mills named Akij Jute Mills Ltd. The main objective for establishing jute mills was to manufacture the highest quality of jute yarn & twine that helps to boost the world market for the Bangladeshi jute products and also helps to expand the various usage of jute products in international markets. With this objective, Akij Jute Mills Ltd. has already obtained buyer’s satisfaction in respect of quality. So, the decision to establish jute mills was appropriate and timely.

2.5 MAJOR COMPETITORS

Major competitors for AJMI in Bangladesh are
Beximco Jute Mills Ltd.
Janata Jute Mills Ltd.
Karim Jute Mills Ltd.
Ahad Jute Mills Ltd.
Allhaj Jute Mills Ltd.
Sonali Aansh Industries Ltd.
Nawab Abdul Malek Jute Mills Ltd.
Although these competitors have came many years ago from the establishment of Akij Jute Mills Ltd. and doing their business successfully. As AJML has came later on from its competitors but has obtained buyer’s satisfaction and reputation by producing the best quality of jute yarn and twine.

2.6 UNDIVIDED ATTENTION TO CONSUMERS

- It does not compromise when it comes to quality.
- Guaranteed scheduled shipment.
- They are at the forefront of the latest technology with extremely well groomed manpower.
- They have their own Power Generating plant for uninterrupted power supply.
- At the beginning of each crop year, they procure bulk lot of raw jute to run the mills smoothly for a period of at least 18 months ensuring no break down in shipment and enabling the to ensure consistency of quality through the year.
- They keep CV (Coefficient of Variance) of count (in single yarn) within 3.5% & CV of strength within 12%.
- In Akij Jute Mills campus there are two units, one with finer yarn & other with course yarn.

2.7 DISTRIBUTION METHODS

Akij Jute Mills Ltd. has systematically organised its distribution policy, which indeed is a very vital vital factors for its market share. Through only two agents are nominated and selected based on their market coverage and long experience in the market. The company will soon increase its agency numbers throughout the country. As AJML is 100 per cent dependent on export market it provides importance on the requirement of the clients and deliver accordingly. Currently the company has achieved almost 100 per cent sales of its production.

AJML usually distribute goods by ship. Most of the shipment is done by this way. Because it is the most cheapest way of distributing any goods all over the world. If the buyer offers to pay distribute charge of goods then AJML accepts buyers preference to export goods, either it is by air or by road. So, for the export of goods, AJML considers the buyer preference if they pay distribution cost. Moreover, the company has always been proactive to revive the market through matured delivery system.
Usually AJML exports goods in terms of C&F, CIF, FOB and CAD. As most of the selling agreement, AJML pays freight for shipment of goods, so they include freight cost with the products price. Sometimes buyer sets the shipping company and informed the seller that distribute goods by the buyer’s nominated shipping company.

2.8 ORGANIZATIONAL CHART

[Diagram of organizational chart with roles and departments listed]
2.8.1 Responsibilities of Department Head

-General Manager: to assist the director in connection with the company operational affairs. He is in the charge of whole jute mills. All the departments are responsible to him for their daily activities. That is, he controls all the departments. If any dispute arises in a department then that department head is accountable to him. He has given authority to take any decision regarding the development of jute mills while it is in the production.

-Production Department: to produce jute yarn & twine as per production schedule and maintain the continuity of production.

-Quality Control Department: to carry out all the tests effectively as per International Standards. And also to ensure the finished goods is free from all defects.

-Raw Jute Purchase Department: To purchase 100 per cent hard district Tossa Jute of golden colour. When they buy raw jute, they have to consider moisture which contains in raw jute. The standard moisture they allowed for raw jute is 13 percent but they prefer as minimum moisture as possible.

-Assortment Department / Grading of Jute: to ensure paaca grading of raw jute from which roots have been cut. The assortment department may include a certain percent of root cuttings.

-Maintenance Department: to ensure the full support of machine / parts repairs, maintenance and installation as quickly as possible. If any break down occurred in the machine or manufacturing process, its their duty to solve it and come back to production.

-Customs and VAT: to calculate and pays excise duties as applicable on sale in advance. The company's custom duty and other such liabilities are also paid in regular basis. No such liabilities is unpaid. However, VAT is not applicable for the spinning industry. The financial statements have been prepared in accordance with the relevant requirements of the company. They convert foreign currencies into Bangladeshi Taka at the rates prevailing on the date of transaction.

-Export Department: to export the jute goods to overseas customers. They do negotiate and make contract with the foreign customers for the sale of goods. They settle all essential terms and conditions for export and also select shipping company. They prepare schedule of ordered goods and send to production department then export the ordered goods to the international buyers.
2.9 MARKET COVERAGE

Akij Jute Mills Ltd. covers only a very few percent of jute yarn & twine demand in the world market. It covers the carpet producing countries like Turkey, Iran, Switzerland, Belgium and England etc. AJML covers only 2.5% yarn & twine demand per year around the world.

2.10 RATES OF COMPENSATION FOR MANAGEMENT

Permanent staff, provisionally staff, master staffs and day labour are working here.

2.10.1 Operations Labour

Pay roll Procedures: payment is given on monthly, semi-annually, weekly and daily basis to the respective employees and working people. AJML also follows the system of no work no, no payment. On the basis of this rules, if an employee absent a day, he/she will loose the payment for that working day.

Procedures for Hiring and Firing: AJML follows direct and indirect system for recruiting employees. In the direct system, they put advertisement in the newspaper for inviting job application and call for interview in a specific day. Then the interview board selects the prospective candidates for their organisation.

In indirect system, most of the recruiting is done by the personal contract.

Name of Trade Union: Akij Trade Union.

2.10.2 Employee Benefits

• Early Benefit

An employee gets the additional salary of one month per year. This salary is the latest pay scale.

• Gratuity

An employee gets the additional one month’s basic salary per year. This gratuity leave will get the employees after three years of his/her joining in the company.

For example, An employee is working 10 years. His / Her salary is 10,000 per month but basic salary is 4,000 per month. So, after 10 his/her early leave and gratuity will be:
Earnly: $10,000 \times 10 = 100,000$

Gratuity: $4,000 \times 10 = 40,000$

- ** Provident Fund  

  Suppose, an employee deposits 8% to 10% of his/her basic salary to the provident fund. Then at the time of expiration of his employment contract he/she will get double of his deposit amount.

- ** Vacation Plans  

  Officers: earn leave – 30 days per year.

  Employee: 20 days per year.

  Casual: 10 days per year.

- ** Number of paid holidays  

  21st February, 26 March, 1st May, 15th August / 7th November, 16th December, Shab-e-Barat, Eid-c-Milladunnabi, Eid-ul-Fitarn (5 days), Eid-ul-Azha (5 days). Total holidays per year is 17 days.

- ** Bonuses  

  Permanent Staff: to give basic salary.

  Contract Staff: 50 per cent of consolde salary

  Others: After completing 3 month’s job then he/she will get 25 per cent of consolded salary.

- ** Transport Facilities  

  Private cars, Motor Cycle, Staff Car are given to the employees according to their job designation.

2.11 AFFILIATING TRADE ORGANIZATIONS

- ** Bangladesh Jute Spinners Association  

  55, Purana Paltan, (3rd Floor)  

  Dhaka - 1000

- ** Dhaka Chamber of Commerce & Industry  

  65-66, Motijheel C/A  

  Dhaka - 1000
2.12 SWOT ANALYSIS OF AJMI.

The SWOT analysis comprises of the analysis of the organisation's internal strengths and weaknesses and the external opportunities and threats. Such an analysis gives an organisation an insight of what they do in future and how they can compete with their existing competitors. This tool is very important to identify the current position of the organisation relative to others, who are involved in the same kind of business and also widely used in the strategic analysis of the organisation.

The SWOT analysis stands for:
2.12.1 STRENGTHS

- No Bank financing

This is one the biggest advantage of Akij Jute Mills Ltd. (AJML). This project is being run by 100 per cent own financing. When AJML was established in 1994, neither bank financing nor any kinds of mortgage financing was arranged. This is a comparative advantage of AJML which others don’t have. From the very beginning, AJML is operating and making payments by its internal resources.

- Company Image

Akij Group is one of the biggest organization in Bangladesh. It has created a great image into people’s mind by producing high quality of products. As AJML is a sister concern of Akij Group, it has a direct impact on it. Whenever people see that this is a product of Akij Group then without further inquiry they buy it. Because it has created a reputation about the quality of its products to the customers mind. This benefit is directly going to the Akij Jute Mills Ltd. That’s why, Akij Jute Mills Ltd. has an image in domestic market as well as in international markets.

- High Quality Jute Products

AJML does not compromise with the quality. It is producing international standards jute yarn & twine and selling to foreign markets. As we know that if raw materials are not in good quality then we can’t expect the best quality of goods. That’s why, the prerequisite of quality products is raw materials. To fulfill this purpose, AJML is using the finest quality of raw jute as an input materials. It is possible for AJML for two reasons. First, Bangladesh has the best quality of jute which no other country in the world can offer. Second, AJML is located in the nerve center of quality jute growing area of the country.

- 100 per cent Export Oriented Company

Akij Jute Mills Ltd. is a 100 per cent export oriented company. This is possible only for its high quality of jute yarn & twine produced by it. It has already established a good reputation to the foreign markets that its produced goods is international quality standards. What ever amounts it sales, it is done in advance. That is, before going to production and shipment, it got the advance sales offer.
**Enough Cash Liquidity**

Cash liquidity is another biggest strength of AJML. It has maintained high cash liquidity to make payments to its employees, suppliers and other bills of the company. AJML doesn’t delay to make payments its employees salary, wages and any bills of the company. It is possible only for maintaining enough cash liquidity.

**Enough Fixed Assets**

Enough fixed assets has given AJML another comparative advantage relative to its existing competitors. Lots of fixed assets, such as lands, buildings, Vehicles and other properties are currently owned by the company.

**Optimum Level of Production**

AJML is able to produce jute goods of its optimum level of production capacity. Twenty four hours the mills remains in production. So, it is in the highest level of production capacity obtained by AJML. The yearly production capacity is approximately 7,000 metric tons. As a result, AJML is utilizing the maximum capacity of its machines and getting the optimum output from its mills.

**Highest Stock of Raw materials**

AJML maintains maximum level of quantity of raw jute as stock. At the beginning of each crop year, they procure lots of raw jute to run the mills smoothly for a period of at least 18 months ensuring no break down in shipment enabling to ensure consistency of quality through out the year.

**Own Power Generating Plant**

Aki Jute Mills Ltd. has its own power generating plant for uninterrupted power supply. At the time of production, in case power has gone production is continued by supplying electricity from the power generating plant. So, it is a very big advantage than others in the same type of business. By using this power plant, AJML is able to produce the target level of finished goods and can shipped on time. As a result, shipment of goods is always done on time.

**Latest Technology**

AJML is using the latest technology to produce jute yarn & twine in Bangladesh. By using this latest technology, AJML produced the best quality jute yarn & twine which
Akij Jute Mills Ltd.

is exporting to foreign countries. It’s produced jute goods is recognized as world standards.

2.12.2 WEAKNESSES

- Lack of Employees Performance Monitoring System

AJML didn’t have any monitoring system whether employees are performing their jobs properly or not. They may spend their office time in unproductive purposes. Employees are coming to the office but the company didn’t know what activities they are doing in office. Another thing is lack of accountability of its employees to management.

- No Strategy for Developing New Jute Products

AJML is not trying to develop new jute products. It is producing only its existing product which is jute yarn & twine. Since there is a huge demand for different type of jute made products in the world market. So, AJML should develop diversified of jute products. With the diversified new jute products, AJML will be able to earn more profit than earlier. At the same time, it should identify the new uses of jute products. Without identifying various uses of jute products, this industry will not be able to keep its existence.

- Loss of Potential Coverage

As AJML is producing optimum level of output but the market is demanding more than that level of output. So, AJML is losing its potential markets and also unable to cover the most. To meet up this market demand AJML should increase the level of output by expanding production capacity and also to set up modern machineries.

- Lack of Networking and Communication System

Lack of networking and communication system is one of the major weakness of Akij Jute Mills Ltd. Strong networking and communication system is a pre-requisite for performing jobs efficiently and effectively. At present, a company has to establish information technology in order to compete with existing competitors. Because now information is a big strength which provides currently updated latest business information to the company bringing from the business world. In this case, AJML is far behind from the IT. As a result, it is losing lots of information which may be helpful to the company.
Low Extend of Product Line

AJML has only produced two types of product line, such as jute yarn & twine. Whereas other jute industry is divided into various lines of product, such as nursery products (pots), food grade jute products and geojute products etc. Lower expansion of products cause lower capture of market segment and in turn it is very hard to market the product if they can’t meet the needs of the target customers.

Low Budget for Marketing and Advertising

AJML provides very low budget for marketing and advertising. While they were in the initial stage of manufacturing jute yarn & twine, they need to go for powerful marketing as well as advertising. Because they were a new manufacturer in a well-established yarn market, AJML could sell the same quality product as the leader does but they can’t reach to its potential customers because of their low budget for marketing and advertising in comparison of the leaders.

Lack of Administrative Structure

Lack of administrative structure is another weakness for AJML. Its Administrative Department is not highly established. They need to modernize it. Akij Group is a big organization in Bangladesh but its Administrative Department is not able to do so many works effectively and efficiently. To fulfill this objective, AJML needs to restructure its Administrative Department.

Lack of Service Rule

Akij Group is not properly maintain service rule for its employees. Lots of employees benefit like provisional period, employees permanent rule, salary, promotion, compensation, provident fund, medical allowance, bonuses etc. are not well established here. Another problem is one department’s employee is doing work other department's work but he/she is not responsible to do others job. So, as a big organization, AJML has to be a very clear and specific employees service rule and compensation rule which will encourage its employees for doing better works.
2.12.3 OPPORTUNITIES

* Developing New Product

AJML should develop new jute products to capture the world jute market. As Bangladesh has the world's most finest quality of jute fiber so we can easily use this opportunity. In government sector, BJMC is trying to develop diversified of jute products. AJML can also utilize this opportunity for its future development of new product line. AJML's product has tremendous demand in its market especially for its product quality and the other is company image and logo. To meet the broaden range of customer needs AJML can expand its product line by introducing new product that will give AJML an extended source of revenue.

* To Increase Production Capacity

AJML should increase the production of jute yarn & twine. With this new world of technology, where technology is advancing every day. AJML has taken it as an opportunity. I think, it has the capability to use any emerging new technology. As the world demand is exceeding day by day, so it can easily capture the world jute products market. This is possible only by establishing modern jute machineries and technologies and employing expert manpower.

* To Make Joint-venture with foreign companies

Licensing is a very good way of cash inflow into the firm. AJML can start joint-ventures with many new companies outside Bangladesh. By entering into strategic alliance the company can increase its cash inflow in the form of revenue due to its entrance in the growth offering non-impact segment of the market. Moreover, it will also enjoy a great rise in its profit because of reduction in unnecessary cost and an increase in revenue. As Bangladesh is developing country so it has lack of modern technology and capital. So, if we go for joint-venture with foreign company then they will help us by giving capital, technology and technical assistance. For example, most of the Indian companies go for joint-venture with foreign companies and doing better than others.

* Developing Export Oriented Jute Business

There is a great opportunity for AJML to establish a 100 per cent export oriented jute products business in our country. As the world is becoming globalised, so it will be better decision to establish export oriented jute products and export them in international markets.
To Establish Carpet Manufacturing Plant

Another opportunity for Akij Jute Mills Ltd. is to establish a carpet manufacturing plant in Bangladesh. There is a huge demand for carpet all over the world. BJMC is the major carpet manufacturer in Bangladesh. But its carpet is not up to the satisfactory level, because of quality like color, design, fabric, sewing and thread not up to the standard as consumers want. BJMC made carpet from jute but its color is not good the carpet. And a bad smell contains in Bangladeshi made carpet. That’s why, BJMC’s produced carpet didn’t get market till now. Except BJMC, there are few carpet manufacturers who produced carpet, they have same problems as BJMC has. So, it is a great opportunity for AJML to establish a carpet manufacturing plant by using modern carpet making technology, high quality raw materials, and also develop R & D department for carpet plant.

Improve Business in the Global Strategies

AJML should adopt with the global strategies to improve its business activities. By establishing global strategy, AJML will be performed managerial as well as operational tasks more effectively and efficiently.

To Capture the Maximum Jute Market of the World

As Bangladesh has the finest quality of jute and Akij Jute Mills Ltd. also has the ability to produce the maximum level of output. To do this, AJML has to set up modern jute manufacturing plant. Financial strength is one of the biggest advantage of AJML to achieve this goal. So, if AJML wants to utilize this opportunity, I strongly believe they can do it confidently.

Use the Best Quality of Raw Jute

AJML has an opportunity to use the best quality of raw jute for the production of highest grade of jute yarn and twine which will be greater demand in international market. As a result, it can ultimately capture the major market share of jute yarn & twine.
2.12.4 THREATS

 Substitute Products of Jute

 Substitute products of jute like polypropylene is the main threat for the jute industry. Because polypropylene is cheaper and looks nice and also more comfortable than jute. It is also environmental friendly like jute. As a result, polypropylene is taking the market of jute and becoming more popular to the consumers day by day. Now a days, polypropylene is the largest selling substitute products of jute. The production cost of polypropylene is lower because the world’s most latest sophisticated technologies are using for the production of polypropylene. So, very few of labors are needed and variable costs are lower for the production of polypropylene. On the other hand, for the production of jute yarn & twine, it is using back dated and less sophisticated machineries compare to polypropylene. It is also needed more labors and variable costs. So, Polythene, Nylon, and Synthetics are the major threats for the jute products.

 Trade Union

 Trade union is the second largest threat to Akij Jute Mills Ltd. New as well as existing entrepreneurs are discouraged to establish industry in our country for the devastating role of trade union. Because it is a major obstacle for industrialization and sometimes it controls the industry regulated by the trade union. It is deemed that the main activity of our trade union is to do strike, obstruct and also engaged in different destructive activities in the industry. So, the luck of the industry depends on them. But it is a matter of regret that International Labor Organization (ILO) or USA are influencing trade union for their unity and to make them strong for the rights, demand and claims. As a result, they don’t care management, officers and they go for demonstration. Bangladesh is a very politically sensitive country, so trade union is not suitable for our country.

 Existing Competitors

 When large number of company performs their operation in a specific industry then competition will be very high in that industry. And it is also very difficult for newly established industry to compete with the existing competitors. Janata, Beximco and Karim Jute Mills are the largest jute yarn and twine manufacturers in Bangladesh. But if they take any action that will be beneficial to them but may cause disturbances for Akij Jute Mills Ltd.
Political Instability

Political instability is another threat to the AJML. Our political leaders are being biased by the political teams. Political leaders are very much sensitive against the opposition parties activities and they have habit to declare hartal. The activity damage our properties and all industries remain shut down. As AJML is a 100 per cent export oriented organization, so political activities are seriously affects its production and over all activities.

Government Doing Business

In our country, government is doing business in jute sector. BJMC is a government owned organization. It is the world’s largest manufacturer and exporter of jute products. BJMC owns 35 jute products manufacturing plant and its annual production capacity is over 300,000 metric tons. But BJMC is not a profitable organization. Every year this sector goes under huge loss. As a result, government gives subsidy to this organization every year. So, private sector falls under a big trouble because of subsidy. Although private sector is getting 10 per cent subsidy from the government but it is insufficient. Private sector can’t compete with the government and is very difficult for them to make profit. Government is trying to keep existence of this industry but not to make profit. That’s why, government is giving subsidy to this jute sector. As a result, private sectors are becoming discarded and will be bound to shut down their mills. It is impossible for the private jute sectors to compete with the subsidized government jute sector.

Changes in Government Policy

Since government is doing business in jute sector, so any change in the government policy has its impact over the profitability return of the project. Any government policy that may increase Interest rates, Tax, Excise Duties, and Value Added Tax (VAT) may affect jute industry. So, before taking any decision, at first AJML has to consider that government is involved in this sector.
CHAPTER THREE

WORKING PART

MANUFACTURING
Akij Jute Mills Ltd.

3.0 PURCHASE OF RAW JUTE

AJML should purchased the best quality of raw jute. It has to be checked out that there is few percent of moisiter contains in the raw jute. Because of this moisture, the wastage of raw jute would be directly increased. The quality of produced goods and production expenses depends on the quality of raw jute. That is, profit and loss of the mills largely depends on that fact. So, to make profit, AJML has to purchase the best quality of raw jute. It is the first and most vital factor of any jute mills. Jute may be purchased in the form of bundles of 1 or 2 maunds each or kutch bales of 3 or 4 maunds each or loose forms. In these forms the fibres are uncut and require selection, grading and piecing up operations before processing.

Although Bangladesh produces almost 80 per cent jute in the world. But in reality we see that AJML is suffering from lack of quality raw jute in every year for various reasons. The reason is that AJML did not begin to purchase raw jute or unable to purchase jute in time. Sometimes it started production by using low quality raw jute and in return it failed to reach the expected quality goods. As a result, labors are dissatisfied with that fact and buyers do claim against the selling goods. To avoid this problem, management of AJML should purchase raw jute at the very beginning of the year and also it must meet the demand of production at least once year.

3.1 GRADING OF RAW JUTE

3.1.1 Tossa Jute

3.1.1.1 Bangladesh Tossa A (BTA)

BTA is the highest quality of jute in Bangladesh. It contains very low moisture, i.e., 8% - 10% and the maximum root contents 5% by weight. Color and fibre are excellent. Strength is very good and density is heavy bodied. It is free from major or minor defects. For this grade of jute, root cutting should not exceed 10%. This kind of quality jute is rare in Bangladesh that is, they did not get the market. Lots of factors are associated with this problems. They are:

- Lower quality jute seeds
- Illiterate farmers
- Lack of knowledge about cultivation of jute
- Climate and soil problems
- Not properly dried in the sun
3.1.1.2 Bangla Tossa B (BTB)

It is the second highest grade quality of jute. As BTB is not found or rare, so AJML is considered BTB is the top grade jute and the highest priced jute in Bangladesh. Because it contains low moisture up to 12% - 13% and maximum root contents 10%. Strength and color are good. fibres are smooth and density is heavy bodied. It is also free from major or minor defects. Root cutting not to exceed 15%. This high quality Tossa jute is produced in hard districts in Bangladesh.

3.1.1.3 Bangla Tossa C (BTC)

This is the third highest quality of Tossa jute in Bangladesh. It is available in the market. It is like moderate which is considered as good quality jute. The maximum moisture it contains 13% to 14% and the maximum root content 15% by weight. Color is fairly good and fibres are well separated and smooth. Strength is fairly good and density is medium bodied. It is free from major or minor defects except some loose leaf and a few specks. Root cutting not to exceed 20%. In the year of 2000, jute production is not up to the expected quality, so AJML has to depend on BTC and BTD.

3.1.1.4 Bangla Tossa D (BTD)

It is the fourth category of jute in terms of quality. BTD is also available in the market. The maximum moisture it contains 14% to 15% and the maximum root content is 20% by weight. Color is fair average and fibres are well separated from each others. Strength is fair average and density is medium bodied. It is free from major defects and substantially free from specks and loose sticks. Root cutting not to exceed 20%.

3.1.1.5 Bangla Tossa E (BTE)

Some BTE has an excellent color and fibres but strength is very low. Some has enough strength but color and fibres are not expected quality. In both of this case, Akij Jute Mills Ltd. considered it as lowest grade of jute. They called it BTF. The over all characteristics of this grade of jute is, strength and color is average. The maximum moisture it contains over 16% and maximum root content is 26% by weight. It is free from centre root and dazed / over-retted fibre, and reasonably free from entangled sticks. Root cutting not to
exceed 25% - 30%. When AJML purchases raw jute and after sorting it find out some type of jute which not to be in a specific category. So, this type of jute is treated as BTE which is also the cheapest price of jute.

3.1.2 White Jute

3.1.2.1 Bangla White A (BWA)

It is the best grade of white jute in Bangladesh. The maximum moisture it contains 8% - 10% and the maximum root content 10% by weight. Strength is very good and density is heavy bodied. Very strong fibre of excellent color and lustre, good length. It is free from major and minor defects and blemish. For this grade of jute root cutting not to exceed 15%.

3.1.2.2 Bangla White B (BWB)

The maximum moisture of this grade contains 12% - 13% and the maximum root content 15% by weight. Strength is good and density is heavy bodied. Strong sound fibre, fair length, good color and good lustre. It is free from major and minor defects like shyamla color, speck, runner and free from weak fibre. Root cutting not to exceed 25%.

3.1.2.3 Bangla White C (BWC)

The maximum moisture it contains 13% - 14% and maximum root content 20% by weight. Strength is fairly good and density is heavy bodied. Color is fairly good, length is high and fibres are well separated. It is free from major and minor defects except some loose leaf, weak fibre and a few specks. Root cutting not to exceed 30%.

3.1.2.4 Bangla White D (BWD)

The maximum moisture it contains 14% - 15% and maximum root content 26% by weight. Strength is fair average and density is medium bodied. Color is fair average, length is high and fibres are well separated. It is free from major defects and substantially free from specks and loose sticks and hard centered fibre. Root cutting not to exceed 30%. The maximum moisture it contains over 16% and maximum root content 36% by weight. Strength is average and density is zero. Color is average and fibres are medium. It is free from major defects like runner and heavy crop ends. Root cutting not to exceed 35%.
3.1.2.5 Bangla White E (BWE)

The maximum moisture it contains above 15% and maximum root content 46% by weight. Strength is average and density is zero. Color is average and sometimes have no color. It is free from centre roots and dazed/over-retted fibre and reasonably free from entangled sticks.

3.2 FIBRE CHARACTERISTICS WHICH INFLUENCE GRADING OF JUTE TO HIGHER OR LOWER STANDARD

3.2.1 Length

Long fibres which allow removal of roots leaving a good length for a manufacturing purposes command a higher priced short fibres of the same character. Medium qualities 6 to 8 feet long and better qualities over 8 to 12 feet long.

3.2.2 Strength

Jute fibres are not particularly strong when compared with some other best fibres but have good tensile properties. Fibres are naturally hard and brittle and break off with abrasion. Resistance with mechanical wear is low and not durable especially on exposure to moist warm humid condition. Therefore, storage of jute in moisture reduces its strength.

3.2.3 Lustre

Better qualities have fairy high lustre, matt and pitted surface indicate weak fibre.

3.2.4 Uniformity of Color

This property is quite evident in better qualities. Inferior qualities are very irregular in this respect.

3.2.5 Color

Best qualities are pale white or silver grey, common qualities are brownish or greenish and inferior qualities and roots are usually darker without any lustre.
3.2.6 Roots

Base portion of the jute stems is more rigid and has a stronger supporting bark than the rest of the stem. This is due to longer exposure of this part to the action of the sun and water. In high grade sorting root portions are removed by cutting and baled separately known as bale cuttings.

3.2.7 Cleanliness

Cleanliness of fibres is an essential factor for high grade. Adhering portions of bark and specks are undesirable which affect grading according to their degree of presence.

3.3 FACTORS AFFECTS THE PRICE OF JUTE

3.3.1 Supply and Demand of jute

Jute goods are used for packing various commodities. Therefore, demand for jute goods is influenced by the quality of these commodities grown from season to season. The jute manufacturing industry has to carefully study the conditions governing the demand for raw jute. Thus the price payable for raw jute depends upon:

- The condition of the consuming market.
- Excess or failure of crops in any part of the world.
- Tariff policy or protections of the various consuming countries which aim to encouraging indigenous fibres.
- Over production resulting in the accumulation of unsold finished goods.

3.3.2 Quality of the fibre

Whether the raw jute market is high or low, the ultimate price of the fibre is judged by the variation in quality, color, proportion of roots present and moisture content etc. Jute fibres from certain growing areas have peculiar characteristics which effect the respective manufacturing value. This fact is responsible for one class of fibre commanding a higher price than another. Price differences are based on the considered opinions of the manufacturers in respect of the spinning quality of the various classes of fibres.
Moisture content of fibres is an important factor in the price determination of jute. Excess moisture not only increases the gross weight of the fibre but also imparts very harmful effect on the fibre itself reducing its strength and spinning quality. Jat jute (name of jute) fibre has a fine well defined structure, spins well and involves minimum waste during processing. Price differences for other varieties of jute are expressed in terms of discount on Jat jute prices. This fluctuates according to supply and demand. Tossa jute spins better than white jute of the same grade. Therefore, Tossa jute always enjoys a premium over the price of white jute.

3.4 WASTAGE OF JUTE

Akij Jute Mills Ltd. has identified the following reasons for increasing the wastage of jute:

3.4.1 Mills Wastage

- Purchase of moisture jute.
- Taking short amount of jute from the godown by the workers.
- Receiving short amount of J.B oil from the store by the workers.

3.4.2 Processing Wastage

- Lack of quality of raw jute.
- Lack of knowledge about quality characteristics and use J.B oil.
- Weather at the time of bale processing.
- Setting of machine and its rotation.
- Broken and blunt pin.
- Imposed more pressure on card pin.
3.5 ASSORTMENT OR GRADING OF JUTE

Two types of grading of raw jute are prepared:

3.5.1 Kutcha Assorting of Jute

Kutcha grading of raw jute from which roots have not been cut.

3.5.2 Pucca Assorting of Jute

Pucca grading of raw jute from which roots have been cut. The assortment may include a certain per cent of cuttings.

The following terms are important in connection with the grading of raw jute:

- **Color Average**: Color ranging between the best good color and dark color.
- **Strength Color**: Strength equivalent to that of district fibre.
- **Light Color**: Color ranging from off white to light grey.
- **Strong**: Strength equivalent to that of Jat fibre.
- **Handling**: This refers to the actual cutting and cleaning of root ends.

3.6 JUTE BALE MARKS

Jute Balers used some distinctive marks printed on their bales to indicate the quality of jute packed there in. These marks are called Bale marks. These marks may consist of letters either alone or in some geometrical forms such as circle, diamond, square or heart etc. printed in some distinctive color.

3.7 MOISTURE IN JUTE

In ordinary air dry condition, jute contains about 13% moisture but it may contain more without the fact being very noticeable. About 13% moisture in jute is a reasonable standard (actual standard 12.08% moisture content, that is, out of every 100 lbs of gross weight of jute, actual dry fibre should be 87.92 lbs and moisture should be 12.08% lbs), because in this condition neither mildew nor heart damage is
likely to develop and the fibre will neither gain nor lose in weight under normal condition of storage.

The true value of jute varies with the actual amount of fibre in it. As buying and selling of jute are based on weight, the amount of moisture present in the fibre plays an important part. If jute contains more moisture than standard, it is evident that the buyer has to purchase some water at the cost of fibre. In addition, excess moisture has harmful effect on the fibre itself.

It has been agreed upon that an official regain or standard regain or allowance of moisture is to be added on the oven dry weight of jute to find out its correct invoice weight when buying and selling take place. This allowance is 13.75%.

3.8 FLOW CHART OF JUTE MANUFACTURING PROCESS OF AJML

Akij Jute Mills Ltd. has two units for manufacturing jute yarn and twine. They are:

- Fine Unit
- Course Unit

Here, I will show the production flow chart of fine unit which is used by AJML.
3.9 QUALITY CONTROL AND INSPECTION

Akij Jute Mills Ltd. has a separate department for quality control and inspection where raw materials and finished goods are always being checked by the quality controller. They measure strength in raw jute and to measure moisture in raw jute by using moisture meter. They also measure quality ratio, corrected net weight, standard deviation, correlation co-efficient, mean and strength of the finished goods of jute yarn & twine. These experiments are very important for the good quality jute yarn and twine. Because based on these inspection, the price of jute yarn & twine are largely dependent and also represents the quality of it.

3.10 PRODUCTION OF JUTE YARN & TWINE OF AJML

3.10.1 Year Wise Production

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>1291.9</td>
</tr>
<tr>
<td>1998</td>
<td>3717.7</td>
</tr>
<tr>
<td>1999</td>
<td>4826.3</td>
</tr>
<tr>
<td>2000</td>
<td>6872.57</td>
</tr>
</tbody>
</table>
3.10.2 Month Wise Production

MONTHWISE PRODUCTION IN 2001

<table>
<thead>
<tr>
<th>Month</th>
<th>Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>555.43</td>
</tr>
<tr>
<td>Feb</td>
<td>546.79</td>
</tr>
<tr>
<td>Mar</td>
<td>462.02</td>
</tr>
<tr>
<td>Apr</td>
<td>448.25</td>
</tr>
<tr>
<td>May</td>
<td>473.35</td>
</tr>
<tr>
<td>Jun</td>
<td>542.51</td>
</tr>
<tr>
<td>Jul</td>
<td>671.4</td>
</tr>
<tr>
<td>Aug</td>
<td>684.78</td>
</tr>
<tr>
<td>Sep</td>
<td>670.13</td>
</tr>
<tr>
<td>Oct</td>
<td>623.38</td>
</tr>
</tbody>
</table>

3.11 MECHANICAL SUPERIORITY OF AJML

- Spreader Machine has built-in micro-switch control panel, which ensures feeding uniformity.

- The drawing Machines are fitted with mirror, which alert the operator to any kind of irregularities in the combination process for immediate attention.

- AJML has active blower system in its spinning frames.

- All of its Mackroll Scrolls are fitted with mechanical slab catcher.

- Electronic slab catchers are installed in the precision winding machines, so its yarn is free from count variation and slab.

- AJML is very much particular as regards quality ratio.
3.12 MARKETING AND PRODUCTS

For selling jute yarn, AJML don’t eliminate any market all over the world. Whenever they get order to sell accept it by negotiation and go for production based on the contract agreement. AJML don’t consider that a particular country’s buyers are not reliable and to pay according to the contract. Although some company in our country is highly sensitive to this matter.

3.12.1 Seasonal Characteristics of Jute Yarn

There is no seasonal impact on jute yarn. All the year round, jute yarn sales remain the same. Whether it is summer or winter, the demand of jute yarn can’t vary with the seasonally.

3.12.2 Pricing Strategies

If the demand of jute yarn increased then definitely AJML charged high price for it. On the other hand, if demand decreases the price of jute yarn is to be decreased.

3.12.3 Stability of Prices

Jute yarn price always goes ups and downs. It does not stable at a specific market price. Continuously it is varying with the market conditions. Because lots of factors are associated with it like market demand, economic conditions (inflation & deflation), labour functions, availability of raw materials etc. AJML considers future pricing for the goods but it depends on market demand. No price stability in jute yarn market.

3.12.4 Bidding Conditions

Terms and conditions used in L/C by AJML are as follows:

- Beneficiary’s name and address.
- Buyer’s name and address.
- Buyer’s bank name and address.
- Irrevocable L/C.
- Total value in US Dollar included freighted charges.
• Specification of goods.
• Types of Packing.
• Quantity of goods.
• Unit price of jute yarn & twine including freight charges.
• Name of manufacturers.
• Terms of shipment, i.e., FOB, CFR, CIF etc.
• Invoice number.
• Date of shipment.
• Bill of lading must be endorsed to the L/C opening bank.
• Types of vessel (goods in container).
• Clearance / certificate issued by shipping company.
• Name of destination/ port’s name must be marked on all shipping documents, otherwise documents will not be acceptable.
• A commercial invoice certified by local Chamber and Commerce or notarised by Notary public.
• Certificate of origin of goods issued by local Chamber and Commerce.
• List of packing.
• Inspection certificate and certificate of conformity must be certified by the Chamber of Commerce and the relative charges are for beneficiary’s account.

Following information must be included in L/C documents:

- invoice number
- buyer country’s customs tariff no. & Registration no., L/C no., Insurance policy no. and fax no.

• Third party involved on all documents are not acceptable.
• Insurance is covered by the buyer.
 Buyer’s name, buyer’s bank name and L/C number must be marked on all pages of documents.

 Name of transport company’s agent and address in buyer’s country to be marked on relative bill of lading, so that buyer knows the date of arrival of goods.

 Payment would be covered at a specific date after receiving goods.

3.12.5 Valuation of Products

 Finished goods have been valued at prevailing market price being lower than cost.

 Work-in process have been valued at 100 per cent material cost plus 50 per cent of conversion cost.

 Raw jute have been valued at average purchase price being lower than the market price.

 Other stock and stores have been valued at average cost price as per previous practice.

3.13 SALES OF JUTE YARN & TWINE

Akij Jute Mills Ltd. gives the first priority for direct sales because they think that direct sales is one of the most easiest way and maintain less formalities to sale goods in international markets. AJMI. also gives priority to sales goods to the original equipment manufacturers. Sales comprises of invoice price of the goods sold. Foreign sales are recognised when goods are shipped on board. Local sales are recognised when goods are despatched. AJMI. does not offer any incentive or discount program to exceed or increase sales volume.

3.13.1 Specific Sales Area Covered

AJMI exports most of the goods in middle east countries like Iran, Turkey and some European countries like Belgium, Switzerland and African country like Egypt.

Per cent of sales to top five customers are as follows:

 First customer – 50 per cent.
 Second Customer – 30 per cent.
Third customer - 10 per cent.

Fourth customer - 5 per cent.

Fifth customer - 5 per cent.

3.13.2 Special Sales Promotions

AJML given advertisement in the internet, jute spinners monthly magazine and attended in international trade fair for increasing customer sales. But they do not take any effective decisions with respect to special sales promotions which may increase exports to foreign buyers. The reason behind is that whatever amount they produced is able to sale without offering special sales promotions. Another reason is most of the sales occurred in advance. AJML do not take special strategies for increasing sales.

3.13.3 Year Wise Sales Of AJML

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Sales in MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>240.2</td>
</tr>
<tr>
<td>1998</td>
<td>3302</td>
</tr>
<tr>
<td>1999</td>
<td>4788</td>
</tr>
<tr>
<td>2000</td>
<td>6453</td>
</tr>
<tr>
<td>2001</td>
<td>7105</td>
</tr>
</tbody>
</table>
# 3.14 SHIPMENT PROGRAM

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>BUYER'S NAME</th>
<th>CONT. NO.</th>
<th>QUALITY</th>
<th>QNT. MT.</th>
<th>SPOOL SIZE</th>
<th>PACKING</th>
<th>SURVEY</th>
<th>REQUIRED SHIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>GITEX</td>
<td>2001-007</td>
<td>11/2 (CRM)</td>
<td>150</td>
<td>JUMBO</td>
<td>PLT</td>
<td>MILL.</td>
<td>56 MT ON 08/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56 MT ON 11/09/01</td>
</tr>
<tr>
<td>02</td>
<td>&quot;</td>
<td>&quot;</td>
<td>13/2 (CRM)</td>
<td>52</td>
<td>JUMBO</td>
<td>PLT</td>
<td>MILL.</td>
<td>28 MT ON 10/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28 MT ON 20/09/01</td>
</tr>
<tr>
<td>03</td>
<td>POLLYF LAME</td>
<td>021/20 01</td>
<td>16/1 (CB)</td>
<td>120</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>60 MT ON 20/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>60 MT ON 27/09/01</td>
</tr>
<tr>
<td>04</td>
<td>&quot;</td>
<td>&quot;</td>
<td>24/1 (CH)</td>
<td>30</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>15 MT ON 12/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 MT ON 24/09/01</td>
</tr>
<tr>
<td>05</td>
<td>&quot;</td>
<td>&quot;</td>
<td>03/2001</td>
<td>30</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>30 MT ON 10/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 MT ON 15/09/01</td>
</tr>
<tr>
<td>06</td>
<td>&quot;</td>
<td>023/2001</td>
<td>20/1 (CID)</td>
<td>45</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>45 MT ON 25/09/01</td>
</tr>
<tr>
<td>07</td>
<td>&quot;</td>
<td>026/2001</td>
<td>24/2 (THAI)</td>
<td>60</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>30 MT ON 10/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30 MT ON 15/09/01</td>
</tr>
<tr>
<td>08</td>
<td>&quot;</td>
<td>027/2001</td>
<td>16/1 (CB)</td>
<td>45</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>45 MT ON 10/09/01</td>
</tr>
<tr>
<td>09</td>
<td>&quot;</td>
<td>028/2001</td>
<td>20/1 (CB)</td>
<td>30</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>30 MT ON 08/09/01</td>
</tr>
<tr>
<td>10</td>
<td>&quot;</td>
<td>033/2001</td>
<td>20/1 (CID)</td>
<td>45</td>
<td>10X10X1</td>
<td>TRS</td>
<td>MILL.</td>
<td>30 MT ON 15/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25/09/01</td>
</tr>
<tr>
<td>11</td>
<td>CANTIONS</td>
<td></td>
<td>8/2 (CB)</td>
<td>32</td>
<td>18 KGS</td>
<td>PLT</td>
<td>MILL.</td>
<td>52 MT ON 15/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>READY STOCK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>FRADO</td>
<td>CONT. NO. 4549</td>
<td>10/1 (CRM)</td>
<td>25</td>
<td>18 KGS</td>
<td>TRS</td>
<td>MILL.</td>
<td>52 MT ON 15/09/01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12/1 (CRM)</td>
<td></td>
<td>PLASTIC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>ASDA</td>
<td>CAD</td>
<td>16/1 (CRM)</td>
<td>52</td>
<td>10X10X1</td>
<td>PLT</td>
<td>SGS</td>
<td>ON 20/09/01</td>
</tr>
<tr>
<td>14</td>
<td>SODIG</td>
<td>CAD</td>
<td>14/1 (CH)</td>
<td>14</td>
<td>5 KGS</td>
<td>CRTN</td>
<td>BUYER</td>
<td>ON 25/09/01</td>
</tr>
</tbody>
</table>

**TOTAL ORDER: 730 M.TON**
CHAPTER FOUR

PROJECT PART

JUTE BUSINESS
PROSPECTS AND PROBLEMS OF JUTE YARN & TWINE IN INTERNATIONAL MARKETS

4.1 INTRODUCTION

The traditional markets for jute sector under most threat from alternative products and technology, by far the largest sector, responsible for almost 85% of total demand. Still an important market for jute with consumption around 1,000 tons per week but representing only 3% of the total market. A developing market which has increased to represent around 10% of the market. Despite all the work which has gone into this sector to develop new products and markets, this sector is still very small at less than 2% of the total. I believe each of these product groupings demands a different approach from the industry. Each is at a different point in its life cycle and the strategy needed varies for each products type. I also believe the market strategy need to be sympathetic at this stage where government interests may not be as sympathetic to jute as those of the producing countries. There is a greater urgency to secure and develop these markets before the opportunity is lost forever.

4.2 MARKET STRUCTURE OF JUTE PRODUCTS

The markets for jute products under four broad headings:

4.2.1 Hessian, Sacking & Twine

These traditional products represent almost 90% of all jute production. They are the products under most threat from alternatives. Most of these volume is consumed internally in the producing countries where government purchasing policies offer a measure of protection to the industry. Nonetheless, it is an area where most other markets world wide have been significantly eroded by synthetic substitution or alternative packing methods. This product group represents a substantial target for synthetic companies wishing to expand. Offering a large volume of standard products which requires low technology and relatively little investment.

To survive in any size as an industry, jute needs these markets and yet the units producing the bulk of these products tend in the main to be ill equipped with the oldest technology requiring high labour and energy inputs. These are markets vital to jute but little has been done in product innovation or production methods to improve the outlook and the industry continues to rely on preferential treatment and protection of markets. Domestically we need to have this protection but we can’t to rely simply on this in the
long term to keep our market. We have a product which the consumers prefer to synthetic for many of the purposes for which jute is used but if the real price gap with synthetic were evident then like many of the developed and developing countries have already done jute would lose out to synthetic.

In international markets, the position is very different. Free market economy means jute must compete openly with synthetic. In the traditional areas of hessian and sacking, there are markets which will continue to erode. The urgency round of talks could have implications for jute with the reductions of duties on synthetic products. This favour of synthetic as their entry to the European Community was subject to control through quota measures. These quotas protect the market for synthetic bags and bagging materials produced domestically and by maintaining relatively high prices for synthetic products, provide a shield for jute products in these markets. Once this shield is removed, lower priced synthetic products will be available and jute products may have difficulty in retaining their market shares.

For this product group producers must continue to look at ways not only to contain but also to reduce costs. Production methods and costs need to be reviewed and reduced. Only by ensuring a plentiful supply of cheap raw jute and utilising modern production methods reduce unit labour and energy costs, we can ensure and efficient and profitable industry into the future. An industry not only able to deliver cost effective products to meet the demands of our customers but also able to provide security of employment under modern working conditions for our employees and also a suitable return to the millions of small farmers who rely on jute.

On the marketing side, product specifications need to be re-examined and perhaps redesigned to take account of new technology. Other factor, such as price stability and ease of delivery are of crucial importance in maintaining any market and especially one where the synthetic alternative can be produced locally. To develop new products or alter existing specifications demands access to end-users so that their needs can be recognised. We must always remember that in this sector we are providing a product to suit an end purpose. The specification for the product may have been created at a time when production facilities were the limiting factor. Only by taking with and understanding the real needs of the end users, modifications can be made. I believe this can only be done by the industrialist who knows the production process and its capabilities in partnership with the buyer of the product. It is only through partnership and co-operation that progress can be made quickly.

I realise that much work has already been done in this field by many well qualified people. I would suggest that perhaps we have looked at such projects in isolation. I strongly believe that any such project should be market driven to determine what is required of the product and what market could be available. Only in this way, I believe that true direction could be made. Many other projects can be identified by this route but we have seen much good work wasted because there had been no commercial exploitation for indeed no real commercial market existed.
4.2.2 Jute Carpet Backing

For many years jute enjoyed a virtual monopoly for primary backing. Today there would be less need to be concerned about the fate of the industry. Replaced by the polypropylene jute retreated into the secondary backing market where again for several years it enjoyed a monopoly. Synthetic eroded that market not because it was more suitable, but because the customers lost patience with instability of supply and price. Customers are more fragmented, they preferred jute and the synthetic industry had sufficient growth from primary backing. Over the last two/three years, we have seen the position change. Price fluctuations and supply difficulties have caused several major buyers to switch to polypropylene and a significant part of the market was lost. Over a 15 month period, the price of jute secondary backing increased by 50% whilst in the period polypropylene’s price increased by only 7%.

4.2.3 Jute Yarns

4.2.3.1 World Markets

The world market for jute yarn shows a reduction over the past 4 years. I believe this can be traced to two situations:

- Increased raw material prices will have forced the closure of tradition weaving factories in a number of countries either to be replaced with sacking hessian from the producing countries or switched to synthetics.

- Stockholding was increased towards the end of 1995 and early 1996, because of forecasts of increasing prices. Destocking then took place in 1996/1997.

The major market for jute yarn worldwide today is for carpet and here demand continues to grow with demand for rugs continuing almost unabated in the developed countries and increasing substantially in a number of other markets. The major markets for yarn today are the Middle-East and Europe. Both of the markets consume almost 70% of the total jute yarn demand.

4.2.3.2 Middle-East

A group of markets for around 50,000 tons. Many consumers in these markets have enjoyed low labour costs compared to Europe and were working with older machines. For these customers, there are many suppliers able to meet the standard of quality required and as a result, prices are very low and competition for this business very high. This is a situation which is changing rapidly. Many mills have re-equipped with high speed looms and quality demands have increased from these units. These markets show a perfect example of how quickly the world is moving today.
4.2.3.3 Europe

The most developed market for jute yarn where demands for high quality and excellent service must be met if we are to continue to supply. In Europe, there are still two major markets for jute yarn. Weaving of Linoleum cloth consumes some 800 tons per year spread between U.K., Holland, France and Germany. But the remaining market of some 90,000 tonnes per year predominantly for the woven carpet industry. Neither markets appear to be under serious threat from synthetics and as a result, the market dynamics are considerably different from those of the other sectors.

![Market Structure of Jute Products]

4.3 THE CHALLENGE FOR THE JUTE INDUSTRY IN WORLD MARKETS FOR JUTE YARN & TWINE

Over the last ten years, jute yarn exports have expanded in Bangladesh and India as shown below:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>44</td>
<td>55</td>
<td>50</td>
<td>64</td>
<td>72</td>
<td>87</td>
<td>99</td>
<td>113</td>
<td>130</td>
<td>125</td>
</tr>
<tr>
<td>India</td>
<td>26</td>
<td>24</td>
<td>29</td>
<td>30</td>
<td>32</td>
<td>36</td>
<td>43</td>
<td>60</td>
<td>68</td>
<td>72</td>
</tr>
<tr>
<td>Others</td>
<td>51</td>
<td>58</td>
<td>62</td>
<td>63</td>
<td>60</td>
<td>58</td>
<td>56</td>
<td>37</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Total (MT)</td>
<td>121</td>
<td>137</td>
<td>141</td>
<td>157</td>
<td>164</td>
<td>181</td>
<td>198</td>
<td>210</td>
<td>223</td>
<td>225</td>
</tr>
</tbody>
</table>

Export of jute yarn & twine in “000 Metric” Tonnes.
Yarns are now the third most important export jute product offering hessian, sacking fabrics. The growth of this market since the 1990s had three main reasons:

- The closure of yarn mills operating outside Bangladesh, India and Thailand, especially mills which had previously supplied local yarn users in Europe, Japan, U.S.A, Middle-East and South Africa.

- The growth of machine made carpet weaving (which weave jute yarns into the backing) across the Middle-East from Turkey to Pakistan.

- Market penetration of polypropylene in substitution of yarns has been lower than expected with hessian sacking, and so far is limited to less than 20% of the market for yarns in the backing of woven carpet and perhaps 60% of the market for twines.

The largest single yarn importing region is West and East Europe which consumes 110,000 tonnes per year of jute yarns & twines from the three major supplying countries as shown below:

<table>
<thead>
<tr>
<th>REGIONS</th>
<th>YARNS USED FOR CARPETS (TONNES)</th>
<th>OTHER USES (TONNES)</th>
<th>TWINES (TONNES)</th>
<th>TOTAL (TONNES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>46,000</td>
<td>2,000</td>
<td>2,000</td>
<td>50,000</td>
</tr>
<tr>
<td>U.K.</td>
<td>10,000</td>
<td>3,000</td>
<td>2,000</td>
<td>15,000</td>
</tr>
<tr>
<td>France</td>
<td>4,000</td>
<td>1,000</td>
<td>1,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Germany</td>
<td>4,000</td>
<td>2,000</td>
<td>2,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Spain</td>
<td>5,000</td>
<td>1,000</td>
<td>1,000</td>
<td>7,000</td>
</tr>
<tr>
<td>Others</td>
<td>5,000</td>
<td>6,000</td>
<td>3,000</td>
<td>14,000</td>
</tr>
<tr>
<td>Total</td>
<td>74,000</td>
<td>15,000</td>
<td>11,000</td>
<td>100,000</td>
</tr>
</tbody>
</table>

Estimated consumption of imported jute yarn & twine by regions of Europe in 1995. The two main supplying countries – Bangladesh and India continue to dominate the market. These countries have lowest costs. The probabilities are the 20,000 or so tonnes currently shipped by Thailand and China will progressively be replaced by exports from Bangladesh and India. Thai grown Kenaf continues to decline and thus put pressure on the remaining mills in Thailand (two of which are yarn producers). Manufacturing costs have increased rapidly in Thailand looks like being squeezed out by Bangladesh and India.
4.4 COMPETITIVE ADVANTAGE BETWEEN BANGLADESH AND INDIA

Competitive advantage of exports markets for jute yarns & twines are sensitive to quality and price but timely shipment is also a vital factor for success. The competitive position varies widely from mill to mill and depends on a complex mix of batch quality, the machineries used and the ability of management to get the best out of both labour and equipment.

- Bangladesh has access to better grades of jute fibres than are produced in India, but now these better grades of jute can be freely imported across the boarder from East Bengal to satisfy the needs of Calcutta mills.

- Yarn spinning technology is much same in both Bangladesh and India. But industrial organisation in the long established Calcutta mills is generally superior.

- Wages cost is lower in Bangladesh, whereas India tend to be higher. But India is offset this higher wage costs by superior productivity.

- Export yarn quality from Bangladesh in the past tended to the better than India levels due to the use of higher quality raw materials. But India is reduced this lead by the use of better batches and specialised equipment.

- Bangladeshi mills with export experience include – Akij Jute Mills Ltd., Beximco Jute Mills, Ahad Jute Mills and Janata Jute Mills are established exporters. In India – Wellington, Delta, Birla, KYTI and a number of others.

- India has a greater competitive advantage in shipping costs than Bangladesh. Because the frequency of container service to overseas markets from Calcutta as compared to Chittagong or Mongla are competitive factor.

- Labour productivity in Bangladesh is lower – often requiring 200 - 250 worker hour per ton. Whereas India requires labour 120 - 180 worker hours per ton.

- The profitability of yarn sales in export markets is affected by the ruling exchange rate of the Rupees, Taka and Baht. The Rupee is now free floating and fully convertible, which provides Indian jute goods with some advantage over Bangladeshi goods which are handicapped by an over valued currency. In India, jute yarn shippers obtain the equivalent of an export subsidy of 10% in local currency. This subsidy may be varied from to time which complicates efforts to forecast the future profitability of jute yarn exports from India.
4.5 PROSPECTING EXPORT MARKET OF JUTE YARN & TWINE FOR BANGLADESH

European markets will continue to be increasingly competitive for the foreseeable future. Markets in Eastern Europe, Japan, Middle-East, and South America offers some opportunities for expansion of Bangladeshi jute yarns & twines.

4.6 SUPPLY AND DEMAND OF YARN & TWINE

Together Bangladesh, India and Thailand have a theoretical yarn & twine capacity of over 350,000 tonnes per year. Their exports are about 200,000 per year. The spinning output for sale as yarn & twine in Bangladesh, India and Thailand is at present 300,000 per year, then it appears that export absorbs about 70% of output and indicates that some 100,000 tonnes of yarns and twines are sold on internal markets. In India 800,000 tonnes, Bangladesh 10,000 tonnes and Thailand 10,000 tonnes yarn are sold in domestic market.

Outside these three major yarn & twine producing and exporting countries three still are sizeable jute industries in China, Pakistan, Indonesia and Burma. None of these countries are imported yarn & twine exporters for internal markets.

Bangladesh yarn & twine capacity is shown below:
Total quantity of jute yarn & twine exported by Bangladesh is as follows:

By exporting jute yarns & twines, Bangladesh has earned the total value in Taka is as follows:
World sale yarn & twine manufacturing capacity and exports are as follows:

The export performance of the major jute yarn & twine manufactures in international market is as follows:
4.7 CHALLENGE FROM SYNTHETICS

In the 1990's plastic emerged a commercial by-product from the petroleum industry at the same time as growth in markets for jute strained availability and prices. Expected at first only to make a marginal contribution to petroleum, the volume and varieties of plastic over the next two decades represented a formidable force. Plastics were assisted by poor jute availability, high prices and tariffs and quotas in importing countries. Plastics captured 50% of the sacks market.

Plastics enabled cheaper products that helped develop consumer markets at a rate unknown in history. Costs of packing became far lower. Carpets were produced that could be purchased by consumers by never before able to buy them. Prices of plastics fell with economies of scale but strengthened as industry became used to earning profits on this by-product. Competitive was maintained by huge budgets for market and product development and promotion.

The jute industry fought back by trying to reduce costs, increasing productivity and new investment. This proved to be a fruitless task since it was never possible to reduce costs enough. Moreover, reducing costs required squeezing among the poorest in the world. In contrast to this, plastics were becoming cheaper due to economies of scale and improved production methods.

Synthetics substitutes were improved by manufacturers in a continuing process. In some cases, the reason for switching to plastics was a technical one and the synthetic products were technically superior. This certainly been the case for primary carpet backing where product development fitted in well with systems development for manufacture. A major reason for jute took place as former processors in consuming countries switched to synthetics and their presence and experience in the market place was not and could not be adequately compensated by efforts from producing countries. The cause of jute was not helped by variable supply and unreliable delivery. In times of shortages carpet manufacturers had to pay more and were not sure of deliveries even at a higher price.

4.8 GLOBAL TRADE OF JUTE

World trade in jute and jute products, estimated roughly $ 700 million has declined over the last two decades by around 600,000 tons. In very general terms this has led to a decline in exports by Bangladesh of 100,000 tons. India 200,000 China 180,000 and Thailand 120,000 tons.
4.9 EXPORTS BY LEADING JUTE PRODUCING COUNTRIES

Reduction in exports of 600,000 tons was offset partially by an increase in consumption in India of 300,000 and production of 100,000 tins and reduction in production in China, Bangladesh and Thailand of 350,000 tons. Production fell marginally over the two decades. Imports fell from 1.5 million to 1.2 million tons. Decline in world markets is masked by consumption of more within the Indian market who now allows limited imports from Bangladesh. Decline in exports is also masked by the fact that China has changed from a producer to an importer. There are indications that the decline is about to accelerate.

4.10 FACTORS IN THE DECLINE OF JUTE YARN & TWINE IN WORLD TRADE

Some 600,000 tons of exports have been lost over the 20 years. It would have been higher were it not for the imports by China and India in recent years due to the former reducing production and seeking to substitute part of it through imports with the later increasing consumption. The two most important factors in the decline in world trade have been the virtual elimination of use of jute carpet backing in the U.S.A although use of sacking has also declined and the collapse of the economy of the former USSR. Loss of exports around 250,000 tins to USA and 220,000 to the former USSR account for much of the decline in trade. The latter, of course due to collapse of the economy and barter trade to the former USSR, although much of the loss may be permanent. In addition, other markets such as Western Europe, Japan and Australia have also reduced their consumption.

Trade in jute suffered mainly due to price competition from synthetics but also due to unreliable supply and distribution. There is not much that can be done to compete with synthetics on price since the disparity is likely to stay for most but by no means all products. Problems of supply arise despite existence of large stocks in some years. They do so because there can be even bigger changes in crops and also because stocks are in producing countries and at the mercy of vagaries of docks and shipping from jute growing countries.

The loss of much of the market in the USA owes at least as much to problems in distribution as to prices. Secondary carpet backing of jute today cheaper than synthetics substitutes but has not made a come back because of apprehension on deliveries, poor quality control, lack of product development and no product promotion for the last ten years.
4.11 JUTE VS SYNTHETICS CARPET BACKING

Since around 1964 when the first break through to cut the monopoly of jute carpet backing is made by Patchogue Polymouth Co. of USA by introducing “Polyback” synthetic backing, it has been rough and cautious sail for the jute industry. Since the world giants in industry of USA, UK and Germany have joined to out jute carpet backing synthetics offering it in plenty with accurate specifications and far cheaper compared to jute backing. It has really come out as fierce competitor of jute. The headache it has created for the Indian industry and research is yet to find a satisfactory and long lasting cure. But it is a fact that last several years, with the good and hard work in meeting the exacting requirements of overseas buyers have brought considerable progress in improving the quality of jute carpet backing as well as offering a competitive and stable price. This has been made possible due to the persistent and hard work put in by IJIRA in consultation with JCBC, ASTM, ISLEIC and technologists from industry.

The jute industry during the last decade invested Rs. 60 crores to acquire a new technology from manufacture of carpet backing. The present complement of broad looms, when in full production, employs nearly 70,000 people, uses 1.2 million bales of high quality jute and helps earn about Rs. 100 crores in foreign exchange per year. This comes to about 40% of the total foreign exchange earnings from jute goods exports. From this, an idea can be made of the magnitude of the industry’s stake in manufacturing jute carpet backing.

There is a phenomenal increase in the use of carpets in USA year after year. It is also possible to catch up this rising trend in the affluent countries all over the world. Around 1950 only 7% families of USA uses carpets and by 2001 this figure had gone up to 95%. This sharp increase is made possible due to the introduction of tufted carpets which is far cheaper in comparison to woven carpets. The tufting process being a fast one enable the manufacture to increase production quickly. Due to the rising demand there is an increase in the tufted carpet manufacturing units as well.

4.11.1 Advantages of Jute Goods

There are many points in favor of jute and the important ones are:

- Dimensional stability, in which jute is superior to synthetics.
- Thermal stability – jute does not get deformed at evaluated temperature.
- It has that sort of a body which gives a sense of lofty feeling.
- Jute carpet backing is found ideal in modern tackles installation.
- Jute is found much better than synthetics as far as fire resistance properties are
concerned. It does not give out toxic fumes as synthetics do.

- The jute industry’s capacity to meet the rigid quality standards of buyers have also contributed to the increased confidence and faith in the products.

- Jute has got natural weight advantages which minimizes the need for “fillers” like clay, latex, etc.

- Jute has all alone been accepted as a low cost, high performance fibre and fabric. The rapid spiraling cost structure in last few years has made substitute to cut in.

4.11.2 Disadvantages of Jute Goods

All the problems are taken up from survey and depth study, and methods found for reduction or complete elimination of these defects. The complaints are:

- Poor quality
- Lot of foreign waste materials adhering to cloth
- Bow and Bias
- Low strength
- Migration of marking ink
- Returnable steel tubes
- High conversion cost and so on

4.11.3 Advantages of Synthetic Goods

The synthetic has got following advantages over jute carpet backing:

- Synthetic backing is a highly uniform product.
- Price stability for long periods.
- Quick supply and availability in large quantity.
- Home market product which helps production planning with U.S Carpet manufacturers.
Not quickly and frequently affected due to transport and natural calamities compared to jute carpet backing, the raw material of which is based on agriculture.

There is continuous fluctuation in price of jute carpet backing.

For indoor-outdoor Carpets the use of jute backing is found totally unsuitable due to the susceptibility of jute to microbial attack. The synthetics are resistant to microbial attacks.

Some mills are found favorable a good synthetic backing even by paying a higher price.

4.11.4 Disadvantage of Synthetics Goods

With all things that goes well with synthetic backing being instantly practical, easily washable, create resistant, stronger, softer and finer, the greatest disadvantage is, it is highly inflammable and therefore, very hazardous in home, offices, ships, planes, theater, hospital, public places and so on. Security of life and property being of paramount importance it is bare where the jute carpet backing can cash in.

4.12 VARIETIES AND USES OF JUTE YARN & TWINE

Jute is comparatively cheap and strong fibre and is freely available. It has so many important advantages for which it is most acceptable for “Sacks” for packing, transport and storage of agricultural, mineral and industrial products and cloth for packing, furniture upholstery, air port run ways and road constructions, carpet backing, tarpaulin, linoleum, furnishing etc. The use of jute product as world’s most important packing medium still stands undisputed in spite of fierce competitions from new concept in material handling and progressive developments in synthetics. One of the most important quality of jute bags is its resistance to stretching forces which is therefore a very valuable aid for handling, storage and transportation. Jute bags and bales remain firmly at place and does not distort when stacked.

The different traditional uses of jute and its diversification due to research is briefly here. The most common use of jute is for different type of ‘sacks’. These sacks are used for flour, sugar, potatoes, fertilizer, animal feeds, sand bags, rice, wheat, raw cotton etc. The jute bags for these different commodities are manufactured separately with different construction details, sizes and weights. These bags have different trade names also. The bags may be made from hessian cloth or from coarse sacking fabrics.
The common bags from hessian fabrics

- Onion pockets.
- Cotton packs
- Wheat bags
- Cement bags
- Seed bags

Hessian Twill Bags

- Fine twill bags from fabric
- Twill bran bags

Hessian Cloth

Hessian cloth used for variety of purposes is manufactured from cloth width commonly from 30 inches to 32 inches for narrow width fabrics and above up to 200 inches for wide fabrics. These cloths are used for packing, upholstery and for making bags. Fine cloth is dyed and printed and used for furnishings. The general constructions are based on weight over 40 inches standard width.

Canvas and Tarpaulin

This is a special heavy construction jute cloth used for special bags for defense requirements, covering the merchandise to protect from rain, sun, wind etc. Special canvas is used for in shoe lining, painting surface for art, false ceiling, partition etc.

Twill and Plain Sacking Cloth and Bags

Twill sacking cloth (a heavy coarse jute cloth) apart from making bags is made for many purposes for specific buyers’ requirements. Common varieties of bags made out of sacking cloth are as follows:

- Twill sacking bags
- Plain sacking bags

Apart from the foregoing there are many other uses of jute Fibre and Fabrics. These are as follows:
Carpets

Jute carpets of various designs are manufactured which are beautiful, cheap and decorative.

Vine and Fruit Covering Nets

This is a plain weave open mesh fabric used as a protective and supporting element for fruit trees and bushes of various kinds.

Bagging

This is a very heavy double wrap plain weave fabric used for special kinds of bags. This particular bags are used specially for packing raw cotton in American markets.

Cable Matting

This is twill or plain cloth used as cover for cable lining.

Hat Cloth

Fancy weave cloth after starching or glueing used for millinery purpose.

Padding

A double wrap plain weave heavily starched and used as padding for cheap clothing.

The Jute Cloth

This is used as small marketing and ration bags of various sizes. This is also used as "Door mat".

Twines and Ropes

The jute yarn is twisted into different piles to make good and strong twines and ropes. Colored twines are used for fancy packing of stores and merchandise.

Jute Sticks

This sticks are now commercially used for manufacturing good quality paper. It is also used for making fireworks.
4.13 DIVERSIFICATION OF JUTE GOODS

The jute industry has been closely working in short and long term projects of diversification of jute products and discovering many new uses of this important fibre in collaboration with various research organizations in Bangladesh and abroad. The greatest and successful break-through in the diversification field has been the Industry’s contribution of “Carpet Backing” to the world markets. The fast growth of this item in the manufacturing program of mills and the steady increase in world demand of Carpet Backing in spite of fierce competition from synthetics shows how well the efforts of Industry has been to capture the Carpet manufactures preference for jute Carpet Backing.

The jute is used for many union and combination fabrics. The jute rug is made cheaply and the fibre is successfully blended with wool to produce woolen blankets, clothing etc. of cheaper quality. A recent manufacturing is colored bags – plain or printed. Jute-plastic and jute-shellac combination is also being experimented for commercial exploitation. Jute fibre board can also be used for acoustics and air conditioning chambers.

One of the most important research advancement of jute is its entry into the soft furnishings and decorative uses at homes. The fine jute cloth after bleaching is dyed or printed into most beautiful furnishings. So, many beautiful jute combination yarn and fabrics are made with cotton, wool, linen, silk, and man made fibres. The jute Carpets and linoleum floor coverings are all becoming very popular household items. The fine jute fabric is increasingly used for different types of artistic and decorative works. This is also used for modern milady’s fashionable handbags and apparel.

A great amount of research and trials on end use diversification are being conducted by Industry. The research are being conducted by the following areas:

- Decorative fabrics
- Protective coverings
- Expanded latex coatings
- Expanded plastic coatings
- Rigid laminates
- Coated fabrics
- Knitted fabrics
4.14 DIVERSIFIED JUTE PRODUCTS OF BJMC

Bangladesh Jute Mills Corporation (BJMC) has been produced the following diversified jute products:

4.14.1 Jute Intermediate Bulk Container (JIBC)

Revolutionary changes have taken place in bulk handling of cargo and also for the civil construction and mining industry. Potential markets exist in intermediate bulk carrying of sand, cement, gravel/pebbly materials in the construction sites of roads and highways, 'buildings etc. It has been found convenient and economical to lay construction materials in series alone the construction site in a weight range of 500 kgs to 1500 kgs.

4.14.2 Jute Deco and Consumer Products

BJMC has developed eco-friendly jute deco and consumer products such as carry bags, shopping bags, portfolio bags, lady’s purse, hand and shoulder bags, bottle bags, prayer mats, file covers, soft luggages, seminar and conference bags, jute slippers, foam bags, fashion bags, kitchen aprons, jute wall hanging calendars, jute union fabrics and canvas, bleached and colored fabrics, design and colored curtains, sofa and cushion covers, various household items such as mats, table cloths and other specialty products to meet the household consumers requirements. These products are cheap. Although similar coarse waste cotton products are available, but jute’s special characters are most suitable for the above uses. Such cotton fabric can be saved for poor men’s clothing. No banned or hazardous chemicals are used in the above jute items.

4.14.3 Jute Nursery Sheets and Pots

Nursery pots made of polythene are being used for germination and growing seedlings of seasonal and floral plants before they are transplanted in permanent locations. It has been found that as many as 30 to 50 percent of young plants get injured and damaged when the wrapping or pots are removed for replantation, which has proved not to be practicable and economical but hazardous as well. BJMC has developed alternative jute nursery pots by giving jute fabrics time dependent chemical treatment to increase the longevity of the pots. With these jute nursery pots, transplantation to permanent locations can be directly made in the soil thereby saving time and considerable loss of expensive plants from subsequent handling. Roots of the plants in the nursery pots can be easily pass through the pots and expanded in the soil. Excessive can also come out of the jute nursery pots easily. It is hoped that jute nursery pots and sheets will have voluminous use all over the world and hopefully open newer avenues of eco-friendly.
**Type and Construction**

Jute Nursery Pockets/pots are fabricated from jute fabric of different pore sizes and strength. These are available in manufactured forms (cylindrical pocket shape) and sheets for ready fabrication to pots and pockets.

**Size**

Sizes as per buyer’s/user’s requirements are available ranging from the smallest size of 3 X 4 inches.

**Life Span**

Normal life span of jute nursery pot (in exposed dry-wet condition) is 3 months. On treatment its life span could be enhanced to 6 or more months. The operative life of all jute nursery pockets are well beyond the period required to attain desired maturity of the samplings for their transplantation.

**Advantages**

- Jute nursery pot samplings are healthy as these grow getting all the elements/conditions as in nature.
- Seedling/Sampling in jute nursery pot/pocket enables direct transplantation.
- Like poly-pot plant, it does not require tearing or removal of the pots/pockets prior to transplantation.
- Jute nursery pots/pockets save seedling from the risk of injury and loosening of seed oil usually encountered during transplantation.

**Uses**

Jute Nursery pots/pockets ideally can be used by:

- Individual for home gardening.
- Commercial nursery establishment.
- Agricultural, Forestry, Horticultural organization.
- Research organization.
- Tea and rubber planter.

### 4.14.4 Food Grade Jute Bags

The universally accepted IJIO Standards 1998/01 stipulates that the food grade jute bags should not contain unsaponifiables exceeding 1250 mg/kg. Also, the ingredients
of batching oil shall be non toxic and no undesirable odors or odors untypical of jute shall be present in the bags.

As the world’s largest manufacturer and exporter of jute products BJMC took up the issue back in 1990 in view in its responsibility and commitment to jute. BJMC experimented with various batching oils to develop a solution that would remove all concerns from the customers’ mind.

BJMC’s products thus produced have been accepted by various European Laboratories and end users.

BJMC has been supplying its food grade jute product for a decade, now with full satisfaction of the users all over the world.

BJMC’s food grade jute bags confirm to the IJO Standard 1998/01.

4.14.5 Geojute for Erosion Control

Whenever soil erosion control is under taken Geojute is required. It has become an undispensible element of erosion control activities to prevent any type of soil erosion. The people undertaking such activities, be they planners, Engineers, Assignors or Contractors, have to look for Geojute because of its manifold advantages and variety of functions. Some of them are as follows:

1. Woven from heavy and coarse cent percent jute yarn and having wide open mesh structure Geojute is the ideal erosion control material for soil slopes under all climate conditions.
2. Made from a natural fibre Geojute is eco-friendly, bio-degradable and decomposing and thereby it adds to the soil rich organic nutrients. Being free from toxins and plasticisers it has no pollutants to run off into ground water or to disturb the ecological system.
3. Its natural water absorbing capacity helps conserve soil moisture and anchor soil firmly in place and thus gives succour to soil from eroding.

Geojute is ideally suited for:

- Road and railways slopes, bridge abutments and median strips
- Drainage ditches, culverts and table drain outlets
- Lake, canal and river banks
- Farm and forestry applications
- Greensward development in parks, airports, housing estate etc.
- Sand dune stabilization
- Slag heap reclamation
4.14.6 Jute-o-Fibre Glass Products

The world is now conscious of maintaining eco-friendliness of the world—one of the methods is to conserve forest and forest resources which can be done by reducing its uses. With a view to reducing the wooden fittings, fixtures and furniture, BJMC has established a Jute-o-Fibre Industry where jute fabrics are utilized replacing conventional glass fibres. The products are made from jute with resin and other chemicals where performance characteristics matches that of wood-made ones. The jute reinforced fibre products are not affected by mites, water or moisture and generally fire retardant and chemical proof. The jute fibre products hardly requires any maintenance. Various products can be made as per buyers’ design and choice.

Some of the products are:

- Auditorium chair
- Bench, chair, table for use in schools, colleges and universities
- Sofa, centre table and side table of different designs and sizes
- Acid tank
- Water reservoir tank
- Sanitary wares
- Dead body preserve tank
- Office chair
- Dinner chair and table
- Bed side locker for use in hospitals and clinics
- Helmets of different kinds, both proof and unproof
- Jute fibre sheet of various sizes

4.15 PROBLEMS OF JUTE YARN & TWINE IN WORLD MARKET

World export of jute yarn & twine is declining due to the following reasons:

- Bangladesh May lose International Jute Goods Market

Bangladesh is likely to lose its traditional jute goods markets in Africa, Europe and far east countries because of its adopting a discriminatory pricing policy of jute bags (sacks). The export price structure of sacks has been fixed at $8.50 US dollar per 100 bags but it was reduced in case of export to India. Bangladesh Jute Mills Corporation (BJMC) has been allowed to export jute bags to India at $6.25 to $6.50 dollars. During the last two years, the BJMC exported a total of 0.15 million bales of jute bags to India. The Bangladesh Jute Goods Association (BJGA), the apex body of the
private jute goods exporters, termed the government pricing as a discriminatory step to boost the country’s jute industry. This decision has taken because India is the largest buyer of Bangladeshi jute bags. Around 60 percent of jute bags are now consumed by India.

- **Competition from Neighboring Countries**

Some of the major goods of export were facing tremendous problems from the competition of neighboring countries in respect of price and supply of the products. Exports of jute and jute goods declining since as the exports could not survive due to financial hardship. About eight private jute mills have already been closed down and some government jute mills are facing closure due to working capital. The earning from jute sector would drastically be fallen if this situation prevails.

- Most of the other markets world wide have been significantly eroded by synthetic substitution and alternative packaging methods.

- If the real price gap with synthetics were evident then jute would lose out to synthetic.

- Quota provides a shield for jute products. Once this shield is removed, lower priced synthetic products will be available and jute products may have difficulty in retaining their market share.

- In international market, the position is very different. In free market economy means jute must compete openly with synthetic. In some areas of hessian and sacking, there are markets which are continue to erode. The reason behind could have implications for jute with the reduction of duties on synthetic products. This could strengthen the competitive position against jute products.

- For growing demand of synthetics and the competition from synthetics.

- Raw jute constitutes about 40 per cent of jute goods production costs.

- Prices of the jute yarns & twines are governed by the prices of the raw jute.

- The quality of the services provided by jute yarn & twine producers which is poorer compared to that provided by the synthetic product producers.

- Price fluctuation and supply difficulties have caused several major buyers to switch to polypropylene and a significant part of the market was lost. Over a last 15 month period, the price of jute increased by 50 percent whereas in the same period polypropylene increased by only 7 per cent.

- The market for jute sector under most threat from alternative products.
Lack of advanced jute goods manufacturing technology.

4.16 PROSPECTS OF JUTE YARN & TWINE IN WORLD MARKET

Jute yarns & twines have the following potential prospects in international markets:

❖ Norwegian Investment in Jute Sector

The Norwegian Ambassador interested for joint-venture investment in environment-friendly popularizes jute goods in the developed countries. The Norwegian government to invest in any labor intensive manufacturing sector.

❖ New Equipment for Jute Mills

TI Diamond China Ltd. (TIDC), an outfit of the RS.3,100 crore Murugappa Group, has launched JM series chains for jute mills. According to TIDC’s sales manager, JM series chains for jute mills are an improved version of the existing products. To remove certain functional deficiencies of the existing products. The price of new chains has not been increased. TIDC hold about 80 per cent of the market share chains used in jute mills.

❖ US Company to S 1 Billion in Jute Based Composite Plants

A US company has proposed to invest one billion US dollar in the country’s jute sector. It has agreed to set up jute based composite plants in Bangladesh at an approximate cost of one billion dollars. This would help revitalize the country’s dying jute sector. The company has chosen Bangladesh to set up its plants for availability of best jute and cheap manpower.

❖ Government to Take Steps to Bolster Jute Sector

Bangladesh government has assured the raw jute exporters of all possible government steps to bolster the sector. The jute sector leaders raised a three point demands for revival of the sector. The demands are incentives on raw jute exports, weaving interest on bank loans, and reduction of interest rates on loans for raw jute exports.

❖ New Technology for Mini Jute Mills

With fresh investments in the jute industry virtually drying up, jute scientists have come up with a technology for village level miniature jute mills to resuscitate this sector. The tiny jute spinning units can be backed up by the jute yarn based handloom sector and small bleaching and dying units for producing home textiles, garments,
handicrafts and shopping bags which are in demand as eco-friendly items. This machinery needed for processing and spinning jute in the cottage sector. Over 90 per cent of the jute fibre is used for making bags, hessian, carpet backing cloth. The demand for these products has been sustained artificially through the jute packaging order that makes it mandatory to pack a substantial proportion of food grains, sugar and fertilizer output in jute bags.

- New Applications of Jute Yarn & twine

For more than two decades there has been a search for new applications that would take over from low value commodity usage. The main areas being investigated are:

- Jute substrate for coating or reinforcement
- Barrier fabrics
- Carpets and rugs
- Laminates
- Pulp
- Geotextiles
- Composites
- Textiles

4.17 COMPARISONS OF PRODUCTION CAPACITY OF BANGLADESHI JUTE MILLS

Over the last three years, production of Akij Jute Mills Ltd., Sonali Aansh Industries Ltd., Al-Haj Jute Mills Ltd. and Northern Jute Manufacturing Co. Ltd. have given below:
4.18 COMPARISONS OF EXPORT OF BANGLADESHI JUTE MILLS

Over the last three years, the export performance of Akij Jute Mills Ltd., Sanal Aansh Industries Ltd., Al-Haj Jute Mills Ltd. and Northern Jute Manufacturing Co. Ltd. have shown below:

![Graph showing export quantities from 1999 to 2001 for different jute mills](image-url)
5.1 RECOMMENDATIONS

In my research has two parts - organization parts and project parts. First, I try to give recommendations which I think required in order to improve the weakness and turn them into strength and over come the potential threats to the organization so that the management is able to sail the organization in this ever competing corporate world.

Jute fibres industry is fully export oriented agricultural based jute-product producing industry. The role of jute is very important for the economic development of Bangladesh. From a recent research of UNCTAD, we know that one dollar export of jute is equivalent to four dollars export of ready-made garments. Although jute and jute products export is decreasing relatively, it is deemed the third largest foreign exchange sector in Bangladesh. For economic development of the country specially development of rural people's life style is largely dependent on jute. To keep the existence of jute and jute industry, government has to come to take the following steps immediately.

To flourish the issue of the jute yarn & twine, I have identified that they have some vacuum in this Industry that need to be fulfill and lead us to find out several recommendations, which could be effectively give a solution to boost up its existing performance.

These recommendations are as follows:

a) To Determine the Interest Rate of Current Capital Loan is 7%

Through scheduled banks have fixed 14% for the jute sector, it reached 18% t the end of year because of compounding. But borrowers have to pay around 21% because of other charges. In general exporters enjoy 7% interest rate whereas jute producers have to pay 14% which make the jute exports uncompetitive in the international market.

The jute industries In our country used to take current capital loan from the scheduled bank not from export loan. To take export loan, bank gas different rules and regulations of which confirm L/C is mandatory and loan is given for the period of 30 days. Jute industry’s current capital loan is an arrangement of running loan. Jute industries mainly export jute goods based on Cash Against Documents a little bit based on L/C. Mainly from July to September within this three months, jute products producing industries buy raw jute and store it for the production of next nine months. The interest rate of current capital loan becomes too much, that’s why, the production costs of jute goods increases abnormally. As a result, it becomes unrivailed in international markets.

To survive the jute industries, it is necessary to determine 7% simple interest for the current capital loan. As a result, production costs of jute goods will decrease and in international markets jute goods will be able to sell at a competitive price and increase its exports.
b) Distribution Assistance or Subsidy

In international market, our jute products are keeping pace with high competition of artificial fibre, an endeavour government has managed to pay 10% subsidy against the export value. At present, because of economic depression of world market, our jute mills are selling jute to foreign buyers below their production cost. Now, it is essential for our government to give 25% subsidy to make up this loss.

c) Revised Jute Sector Reform Program

With the assistance of world bank, our government was made a committee of high position to implement the revised jute sector reform program. This committee has submitted a report to the Jute Ministry four years ago, but there is advancement still now. To revive our infant jute industry, it is necessary to send the revised jute sector reform program for the approval of world bank.

d) Diversify Jute Products

It is necessary to give financial and loan facilities to the non-government entrepreneurs for diversified production of jute goods.

e) Ensure the Use of Jute Goods

It is necessary to ensure the mandatory use of jute bags in our domestic cement industries. As a result, the use of jute goods will increase in our internal market.

f) Omit “Peak-Hour Rate” of Electricity

It is necessary to release our jute industry from the payment of “peak-hour rate” of electricity.

g) Plan to Privatise Jute Mills Bogs Down

Government should plan for privatising jute mills bogged down as there were extremely poor responses or no response in many cases.

h) Expand Market for Jute Yarn & twine Abroad

Bangladesh can export its market for jute yarn & twine abroad by diversifying the products and improving their quality with the installation of modern machinery and process. Bangladesh has the finest quality of jute fibre and has the possibility to produce the best quality diversified products. I suggest that comprehensive strategy to be followed in this regard, and should encompass encouragement of R & D in developing new uses through adaptation of appropriate technology and facilitate commercialisation of new products through provision of cheap and long-term credit and other material incentive at least initially.
i) Need for Increasing Domestic use of Jute Goods

I think the need for increasing domestic use of jute and jute products to ensure the future prospects of jute sector. We have to give close monitoring and supervision from the sewing. Of jute to the marketing of jute products to regain the past glory of jute. By giving efforts from the private sector and public sector should jointly be made toward the technical and managerial improvements of the jute mills and also qualitative production of raw jute in the country to overcome the problems in the jute sector. Everybody should agreed that jute sector is a part and parcel with our agro-based economy and there is no alternative to our concerted efforts to revive the jute sector. Bangladesh depends on the world market for marketing for its jute and jute products. Our domestic consumption of jute is only about 7% whereas domestic consumption of jute is over 90%. So, we have to take a number of steps to boost the domestic consumption of jute and jute products through its diversified use and production.


Government should make jute packing Act which increases the use of jute yarns. By this rule, industrialists are bound to use Jute Packing Materials for their products. It will not only have an adverse impact on the industry, but also mill workers and millions of jute growers in the country.
5.2 IMPLEMENTATIONS

Implementation entails converting the recommendations into action and then into go for results. It’s a job for the whole management team of Private Jute Mills Ltd. as well as government of Bangladesh, not for only Akij Jute Mills Ltd. As it requires group work to work out the plan effectively. While AJML’s head of the divisions, department and key operating units are ultimately responsible for seeing that new plan and product has been developed successfully. The development process typically impacts every part of the organisational structure. Implementation strategy is fundamentally an action oriented, activity developing competencies, capabilities, budgeting, policy making, motivating, culture building and learning are key parts of the process.

Sizing up a firm’s resources, strengths, weaknesses and its external opportunities and threats are commonly known as SWOT analysis that provides me a good overview of whether AJML’s all Departments are efficient enough to expand the market and grab huge market share. Implementation or action plans should broadly consider the SWOT analysis, which is grounded in the basic principle that strategy making efforts must aim at producing a good fit between AJML’s production Department and resource capability and its external situation. Without implementing all these, the task of conceiving a strategy becomes a chance proportion indeed. Private Jute Sectors like Akij Jute Mills Ltd. as well as government Jute Sectors should take up the following steps to overcome the problems.

❖ **Total Quality Management**

In order to achieve world jute products market and sustain competitive advantages Bangladeshi Jute Mills need to benchmark which will help to identify and measure Bangladeshi Jute products quality against those of its competitors and other acknowledges leaders in the market. Our jute sectors – private as well as government should introduce total quality management to improve process capabilities to improve customer value both internal and external and look for opportunities to stimulate multiple dimensions of competitive advantage. That is rather than focusing on quality, cost or speed, TQM attempts to improve all of these.

❖ **Financial Strength**

Our jute industry can achieve and increase its financial strength if they go for strategic alliances because during financial crisis our jute sectors would require more leverage to survive. Moreover, the risk of investment will be low.
Increase Promotional Activities

Our Jute Industries promotional strategy should be increased, especially where we want to sell our jute products, to make them aware and let people know what kind of products we will offer. To do this, our jute industrialist can use the internet to promote their products. They can join with big internet service provider and use some of the well known Web-pages to promote themselves. They can have their own Web-pages where they will show their product and show the specification of their products. What benefit is there and which one is good for what purposes. They should also use television media and billboard in the highways and other places to attract people attention.

Product Diversification from Competitors

AJML should differentiate its product from its competitors through product’s features that supplement the product’s basic function. Being the first to introduce valued new features is one of the most effective way to compete. How can a company identify and select appropriate new features? One way is to ask recent buyers a series of questions. How do you like the product? Any bad features? Good features? What are they? etc. AJML should produce all units identical and meet the promised target specifications. Then the product will have high conformance quality. Buyers will generally pay more for products that have more quality. AJML can differentiate its products from its rival by increasing the reliability of the products.

Monitoring and Controlling

Monitoring and controlling is absolutely crucial and need because the employee may not work properly or they might surprise which they did not through of. They have to monitor the plan and the marketing activities. They will also have to monitor the other partners whether they are performing the task or not. Whether they are in the right track or wrong.

Reward Successful Program Implementation

When an individual or a team is rewarded for achieving the organisation’s goal, they have maximum incentive to see a program implemented successfully because they have personal ownership and a stake in that success. Bonus can be given to person who does well because they will be willing to jump into critical situation and perform task that are “below” them or not in their job description.
Adopt New Design to its Manufacturing Process

AJML effectively produce jute products for the existing customers to create an image as a quality product. To implement the whole thing, AJML should follow a step by step procedure are as follows:

- **Sales force**: Knowledge of customers need, inquires from customers on prospects, knowledge of the industry and competition.

- **Research and development**: Application of basic research, original or creative thinking, testing existing products, performance records and accidental discoveries.

- **Other company sources**: Suggestions from employees use of by-products specific market surveys.

- **Outside sources**: Investors, stockholders, suppliers or vendors, resellers, advertising agencies, customer suggestions, competitors products, patent abstracts, trade shows, foreign magazines, foreign jute yarn samples, designers and top management.
5.3 CONCLUSION

Analysis of problems and prospects of jute yarn & twine is not so sufficient to measure and express perfectly within this short time of my internship period. But it is a great opportunity for me to get use to with the operational environment of AJML. I have tried by soul to incorporate the research report with necessary relevant information.

World markets now absorbs up to 230,000 tons of imported jute yarns & twines. Demand is met by imports from Bangladesh, India and Thailand. This production is usually made by specialist yarn manufacturing units. The world jute yarn and fabric industry produces around two and half million tons per year of products, of which 350,000 tons are consumed as yarns & twines.

The European Union (EU) is the largest importing market taking 100,000 tons per year, much of it for woven carpets. North America imports about 10,000 tons and Japan imports 16,000 tons per year. Another principal market is for woven carpets in the middle-east, especially Turkey and Iran.

A number of reasons so far expounded for and against will keep the battle going between jute and synthetic backing. One fact is very clear that synthetic backing is well established to cater the total needs of primary backing for the tufted and needle punch carpets. The jute industry is on and off affected due to so many factors that its production and supply become erratic and consequently the price structure. The industry is primarily based on agriculture for its raw materials. Another biggest headache of the industry and an important one has been the price of carpet backing and its changing pattern necessitated by the factors already stated plus the extra cost involved for meeting ceiling price of raw jute, entry tax, export duty, export inspection fee etc. In spite of all these drawback jute has been successfully competing with synthetic all these years.

On the marketing side, product specifications need to be re-examined and re-designed to take account of new technology. Production methods and costs need to be reviewed and reduced. To develop new products or alter existing specifications demand access to end-users so that their needs can be recognised. Only by ensuring a plentiful supply of cheap and utilizing modern production methods to reduce unit labour and energy costs can ensure an efficient and profitable industry into the future.

During the course of my practical orientation I have tried to learn the strength of AJML and what could be the future threats of AJML to relate it with my theoretical knowledge what I have gathered and going to acquire from various academic courses.
APPENDIX
AKIJ JUTE MILLS LTD.

Year Wise production from 1997 – 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production in MT</td>
<td>1,291.900</td>
<td>3,717.700</td>
<td>4,626.310</td>
<td>5,872.570</td>
<td>5872.570</td>
</tr>
</tbody>
</table>

Month Wise Production MT in 2001

<table>
<thead>
<tr>
<th>Months</th>
<th>Production in MT from January’01 – December’01</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>555.426</td>
</tr>
<tr>
<td>February</td>
<td>546.785</td>
</tr>
<tr>
<td>March</td>
<td>426.019</td>
</tr>
<tr>
<td>April</td>
<td>448.248</td>
</tr>
<tr>
<td>May</td>
<td>473.346</td>
</tr>
<tr>
<td>June</td>
<td>542.509</td>
</tr>
<tr>
<td>July</td>
<td>671.395</td>
</tr>
<tr>
<td>August</td>
<td>684.782</td>
</tr>
<tr>
<td>September</td>
<td>670.132</td>
</tr>
<tr>
<td>October</td>
<td>623.375</td>
</tr>
<tr>
<td>November</td>
<td>700.025</td>
</tr>
<tr>
<td>December</td>
<td>775.012</td>
</tr>
</tbody>
</table>
Year Wise Sales/Export in MT from 1997 - 2001-12-29

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export/Sale in MT</td>
<td>240.210</td>
<td>3301.677</td>
<td>4787.730</td>
<td>6453.165</td>
<td>7105.000</td>
</tr>
</tbody>
</table>

Month Wise Export/Sales MT in 2000

<table>
<thead>
<tr>
<th>Months</th>
<th>Export/Sales in MT from January'00- December'00</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>139.724</td>
</tr>
<tr>
<td>February</td>
<td>501.000</td>
</tr>
<tr>
<td>March</td>
<td>731.831</td>
</tr>
<tr>
<td>April</td>
<td>547.347</td>
</tr>
<tr>
<td>May</td>
<td>658.000</td>
</tr>
<tr>
<td>June</td>
<td>547.754</td>
</tr>
<tr>
<td>July</td>
<td>567.525</td>
</tr>
<tr>
<td>August</td>
<td>351.000</td>
</tr>
<tr>
<td>September</td>
<td>535.000</td>
</tr>
<tr>
<td>October</td>
<td>693.300</td>
</tr>
<tr>
<td>November</td>
<td>741.000</td>
</tr>
<tr>
<td>December</td>
<td>439.684</td>
</tr>
</tbody>
</table>
AL-HAJ JUTE MILLS LTD.

Year Wise Production in MT from 1999 - 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production in MT</td>
<td>6208.82</td>
<td>5006.07</td>
<td>5525.16</td>
</tr>
</tbody>
</table>

Year Wise Export in MT from 1999 - 2001-12-29

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export in MT</td>
<td>6203.37</td>
<td>4730.16</td>
<td>5358.74</td>
</tr>
</tbody>
</table>

Year Wise Local Sales in MT from 1999 - 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Sales in MT</td>
<td>193.23</td>
<td>387.78</td>
<td>214.57</td>
</tr>
</tbody>
</table>
SONALI AANSIL INDUSTRIES LTD.

Year Wise Production in MT from 1999 – 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production in MT</td>
<td>6668</td>
<td>6192</td>
<td>5514</td>
</tr>
</tbody>
</table>

Year Wise Export in MT from 1999 – 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export in MT</td>
<td>5548</td>
<td>5563</td>
<td>4506</td>
</tr>
</tbody>
</table>

Year Wise Local Sales in MT from 1999 – 2001

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Sales in MT</td>
<td>1355</td>
<td>811</td>
<td>470</td>
</tr>
<tr>
<td>YEAR</td>
<td>NO. OF MILLS</td>
<td>TOTAL SPINDLES</td>
<td>PRODUCTION CAPACITY (M.T)</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>----------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>79-80</td>
<td>11</td>
<td>14,220</td>
<td>39,673.80</td>
</tr>
<tr>
<td>80-81</td>
<td>15</td>
<td>19,491</td>
<td>54,379.89</td>
</tr>
<tr>
<td>81-82</td>
<td>17</td>
<td>21,229</td>
<td>59,228.91</td>
</tr>
<tr>
<td>82-83</td>
<td>24</td>
<td>28,243</td>
<td>76,797.97</td>
</tr>
<tr>
<td>83-84</td>
<td>29</td>
<td>30,288</td>
<td>84,503.52</td>
</tr>
<tr>
<td>84-85</td>
<td>29</td>
<td>30,288</td>
<td>84,503.52</td>
</tr>
<tr>
<td>85-86</td>
<td>31</td>
<td>32,524</td>
<td>90,741.96</td>
</tr>
<tr>
<td>86-87</td>
<td>34</td>
<td>36,398</td>
<td>1,01,550.42</td>
</tr>
<tr>
<td>87-88</td>
<td>34</td>
<td>39,957</td>
<td>1,11,480.03</td>
</tr>
<tr>
<td>88-89</td>
<td>34</td>
<td>39,957</td>
<td>1,11,480.03</td>
</tr>
<tr>
<td>89-90</td>
<td>34</td>
<td>42,321</td>
<td>1,18,975.59</td>
</tr>
<tr>
<td>90-91</td>
<td>34</td>
<td>42,321</td>
<td>1,18,975.59</td>
</tr>
<tr>
<td>91-92</td>
<td>34</td>
<td>45,778</td>
<td>1,34,281.30</td>
</tr>
<tr>
<td>92-93</td>
<td>34</td>
<td>47,373</td>
<td>1,33,158.00</td>
</tr>
<tr>
<td>93-94</td>
<td>34</td>
<td>50,559</td>
<td>1,58,640.00</td>
</tr>
<tr>
<td>94-95</td>
<td>34</td>
<td>52,939</td>
<td>1,61,280.00</td>
</tr>
<tr>
<td>95-96</td>
<td>36</td>
<td>59,307</td>
<td>1,89,350.00</td>
</tr>
<tr>
<td>96-97</td>
<td>39</td>
<td>66,887</td>
<td>1,92,338.00</td>
</tr>
<tr>
<td>97-98</td>
<td>41</td>
<td>68,673</td>
<td>1,95,000.00</td>
</tr>
<tr>
<td>98-99</td>
<td>45</td>
<td>90,485</td>
<td>2,30,000.00</td>
</tr>
<tr>
<td>99-2000</td>
<td>47</td>
<td>98,757</td>
<td>2,60,000.00</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY