COMPARATIVE STUDY OF JUTE INDUSTRY PROFILES IN BANGLADESH AND INDIA

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SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
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IN
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BY
SIRAJ UDDIN AHMED

Under the Supervision of
DR. AZHAR KAZMI
Professor of Business Administration

DEPARTMENT OF BUSINESS ADMINISTRATION
ALIGARH MUSLIM UNIVERSITY
ALIGARH (INDIA)
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Certified that Mr. Siraj Uddin Ahmed, a candidate for the degree of Master of Philosophy in this Department, has completed his dissertation entitled "COMPARATIVE STUDY OF JUTE INDUSTRY PROFILES IN BANGLADESH AND INDIA" under my supervision.

To the best of my knowledge and belief the research work is based on the investigations made, data collected and analysed by him and it has not been submitted in any other University or Institution for the award any degree or diploma.

January 1, 1990

(Dr. Azhar Kazmi)
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Bangladesh and Indian jute industries are the two major, traditional and agro-based industries. They have enjoyed a primacy in the industrial sector of both these countries over a long period of time. Their contribution towards their respective economy in the form of earning foreign exchange, creating employment opportunities, utilising natural resources, and finally, providing livelihood to nearly 9 million (of which Bangladesh 5 million and Indian 4 million) rural farmers is an adequate testimony to the importance of the industry. But, presently, these industries are facing a lot of problems especially in the world market of packaging materials and other end uses of jute products both in domestic and world jute markets: As a result, both Bangladesh and Indian jute industries are experiencing a depressed condition and are being treated as sunset industries.

Considering the ongoing deplorable condition, a comparative study related to the different aspects of Bangladesh and Indian jute industries has become a matter of great concern. Hence, the topic of "Comparative Study of Jute Industry Profiles in Bangladesh and India" has been chosen as the subject matter of research study.

This dissertation is an outcome of the research study undertaken. It is in partial fulfilment of the requirements for the award of M.Phil. degree in Business Administration of Aligarh Muslim University, Aligarh. This dissertation, for the first time, highlights and brings together in an integrated form a comparative analysis between the two major jute industries on the basis of several attributes to arrive at some conclusions. It is
hoped that the results of research study may facilitate policy formulation at macro as well as micro levels of the economies of Bangladesh and India.

The lay-out of the present study is as follows:

Chapter I begins with the introduction to the study. It provides general information regarding the jute industry and traces out evolution of jute economy from its early days till present day situation. Particularly, it deals with the world production and distribution of jute and jute goods based on statistical analysis. The cultivation and manufacturing processes of jute fibre and jute products have also been presented in this chapter.

Chapter 2 deals with research methodology. A literature survey, made to find out research gaps, need for research, some general and specific propositions, and objectives of the study have been included in this chapter. The scope and limitations of the study, procedure of data collection, presentation, analysis and interpretation has also been mentioned in the same chapter.

In chapter 3, collected data related to jute industry profile of Bangladesh have been critically analysed and interpreted. Analysis is done on six chosen components of jute industry profile in six different sections. These components are the nature of industry, structural change, market characteristics, state of competition, technological development and prospects of jute industry. Sections have further divided, wherever needed, for the systematic analysis of different features of Bangladesh jute industry.

Chapter 4 contains the analysis and interpretation of collected data regarding jute industry profile of India. The presentation sequence followed in this chapter is
similar to that of chapter 3.

Chapter 5 is the last chapter in the dissertation. It contains comparative analysis and interpretation between the data related to Bangladesh and Indian jute industry profiles presented in chapter 3 and 4 respectively. Similarities and dissimilarities in the attributes of each and every components of the two industries have been analysed and showed in the same chapter. In the last section of this chapter, several findings and conclusion of the research study on the basis of data analysed and interpreted in the previous chapters have been presented.

The specific references appear at the end of each chapter of this dissertation. A list of relevant books, articles, reports and statistical publications consulted have been presented in the bibliography at the end of this dissertation.
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CHAPTER - I

INTRODUCTION

1.1 GENERAL INFORMATION

No product can be better than the product of the nature. There is no denying the fact that jute is a natural crop growing abundantly in the nations of South Asia which constitute a contiguous geographical entity in this regard. Over sixty million farmers in Bangladesh, India, Nepal, Burma and Thailand are critically dependent on jute and its allied fibres for their incomes. More than 90 per cent of the global output of jute comes from these countries including China. But internationally, jute cultivation and production of goods are limited mainly to India and Bangladesh.

Jute, as a fibre crop, is the cheapest and the most widely used in the world. It is the most important cash crop and the biggest foreign exchange earner both of Bangladesh and India. Nearly one-fifth of the annual output of natural industrial fibres consists of jute. Jute is an important commodity in international trade. It is second only to cotton in terms of production, consumption and tonnage traded of natural fibres.

In India, nearly 20 lakh acres of land are devoted to jute cultivation, and the production is around 80 lakh
bales (about 14.5 lakh tones) valued at Rs. 450 crores at current prices. The total value of finished goods production is around Rs. 875 crores of which about Rs. 300 crores worth are exported. The jute mills employ about 2.5 lakh workers and some 40 lakh rural farmers derive their livelihood directly from jute cultivation. Admittedly, jute had its preeminence as the single largest item of India's exports and contributed 23 per cent of the total export earnings in the late 1960's. But in recent years that percentage has fallen to 5 to 6 per cent. Jute's importance to India is, however, much greater than the export earnings proportion suggests. It would suffice to say that even under extremely adverse conditions like rising costs, depressed prices, labour force averse to modernisation, severe competition from jute exporting countries and synthetic fibres, production cuts, antiquated technology, etc, jute products are earning foreign exchange of Rs. 200 crores annually. The health and viability of jute industry and trade is, therefore, a matter of deep concern.

Bangladesh economy is a one-commodity economy and its export structure was dominated by the single commodity jute and jute goods. It was the principle export product of Bangladesh and prior to independence (during 1950-70), jute was a leading sector of the economy of Bangladesh. The sector
prospered following the high growth in the world demand and high prices of jute in the overseas market.

The importance of jute sector in agriculture, trade and manufacturing as well as country's overall gross domestic product (GDP) has hardly been overemphasised. Although jute occupies hardly 10 per cent of the total area under crops, yet it is the chief cash crop for the large number of farmers. The overall contribution of jute sector to the export earnings reached the peak level of 88 per cent before declining later. The contribution of this sector had declined to 40 per cent (on the basis of 1987-88 target) still jute is the single largest commodity which has a dominant role in the overall structure. Apart from this, the jute industry in Bangladesh has emerged as the largest employer in the industrial sector. It employed 2.50 lakh workers and officials so far, a total of 50 lakh farmers are estimated to be involved in jute cultivation alongwith their dependents. A considerable number of middlemen are also engaged in the jute trade in Bangladesh.

From the above discussion, it is obvious that in absence of proper evaluation and recognition of the importance of jute industry of both Bangladesh and India, the interest of the jute industry as well as the economy might be
jeopardized. This may not only lead the economy towards its virtual collapse but can destroy social harmony, peace and tranquility. In this context, the issue of the development of jute industry demands a serious consideration of the international agencies, the Government's policy makers, economists, researchers, agronomists and other concerned authorities in view of its importance to society and the economy.

1.2 HISTORICAL PERSPECTIVE

An attempt has been made in this section to trace out the historical evolution of jute industry from its early days till the recent period. In order to facilitate understanding, evolution period has been divided into phases as under:

Phase I - Early Traces of Jute Till The Advent of Industrial Revolution.

Phase II - Development From Advent of Industrial Revolution Till The End of World War II.

Phase III - Post World War and Recent Growth (1946 onwards).
1.2.1 Phase I: Ancient Period Till The Advent of Industrial Revolution

Jute has been grown from ancient times in the Indian subcontinent. Through sixteenth to eighteenth centuries, jute fibre was produced as a garden plant and its leaves were used as vegetables or as medicine. It was, however, produced mainly for domestic consumption in the villages of Eastern Bengal (now the State of West Bengal and Assam in India and Bangladesh). The fibre value of the plant came to be known much later. From historical records it is revealed that jute fibre was used for cardage and fabrics in pre-biblical time. In other words, just over 125 years ago jute was not at all an important crop to be grown by the farmers on a large scale. They just used to grow it for their domestic uses along with other fibre crops.

In fact, before the advent of Industrial Revolution which was characterised by scientific inventions and technological development, the growth of jute industry was not so remarkable. The concept of "industry" in general and jute industry in particular had emerged during the period of Industrial Revolution. Hence information regarding different aspects of jute like acreage, yield, production, consumption, etc., are not found in the literature and the question of product and foreign trade does not arise.
1.2.2 Phase II: Development From Advent of Industrial Revolution Till World War II

In the early eighteenth century jute industry was in its embryonic stage. That is, it started on the way of development from within the small and cottage industry. The industry was originally a handloom industry and formed the basis of hand-spinning and hand-weaving industry. It turned out ropes, screen, matting and gunny clothing for garments and bedding materials. It was also used for other diverse purposes including bags for packing grains and other agricultural produce. Almost every family in Bengal raised some jute on its land, and sack-weaving caste was called "Kapalis". The process of raw jute through the various stages at that time was the result of domestic exploration. However, hand-made Bengali fabric were exported to American market as early as the eighteenth century.

Until late eighteenth century, jute was not well known to the outside world. It was East India Company that helped the jute fibre and fabric familiar to the overseas consumers and users. In 1793, the Bengal Board of Trade sent a small quantity of 100 tonnes jute fibre sample to the United Kingdom strictly for experimentation related to mechanical processing. But till about 1830 the manufacture of gunny-bags and jute cloth was the monopoly of the Bengal handloom
The break-through came in 1830, when the first steam-powered jute mill was set up and jute fibre was spun mechanically at Dundee in Scotland. This was the harbinger of the jute world era.

After that, the monopoly of the Bengal handloom weaver was handicapped by power weaving that was evolved on a considerable scale in and around Dundee with the setting up of a number of jute manufacturing units. Thus the years following 1830 saw a rapid decline in jute handloom industry in Bengal while the first weaving mill set up in 1938. Jute industry soon mushroomed all over Western Europe with Dundee as its main centre. With the emergence of an active jute manufacturing industry in Scotland, there was a larger demand for raw jute and British-India was impelled to export raw jute rather than produce gunnies on the handloom. Thus the demand for raw jute from Scottish mills was gaining a momentum and more and more land was being placed under jute cultivation progressively. From the 1840's to about 1870, Dundee had a near monopoly of the world's factory-made jute-cloth based on subcontinental supplies of raw jute.

The rise of jute manufacturing industry in Indian sub-continent started around 1855 at Rishra on the Hoogly, 21 kms upstream from Calcutta. That machine-manufacture of jute textile based on steam power was a small jute-spinning mill
and was established by a Scottish merchant, George Ackland. For this new achievement, in fact, India furnished land and labour, Scotland the brains and careful oversight. Ackland's unit was not successful, but it apparently showed enough promise to induce Borneo company, a trading enterprise in Calcutta, to start an integrated spinning and weaving mill based on steam-power in 1859. From 1854 to 1863-64 only two mills were built, but from 1863-64 onwards the growth of the industry was fairly rapid, and the period of great prosperity during the early 1870S led to the appearance of five mills comprising 950 looms. This tremendous growth was facilitated because of the favourable conditions like the rise of free trade in Europe, the development of railway and merchant shipping and the sharp fall in freight rates. Finally the opening of the Suez Canal in 1869 contributed towards a rapid increase in the volume of world trade, particularly the movements of voluminous agricultural commodities for which demand for jute as a packaging material was a must.

Industrial revolution came first in Britain and accordingly its industrial economy was stimulated expeditiously. India's overall industrial sector and especially jute industry was blessed much later. So jute industry initially flourished in Britain and other parts of Western
Europe. The growth of jute industry in India is conspicuous only in late-eighteenth century.

The spurt in British India's jute exports and production was the outcome of Industrial revolution and the conscious British policy of utilising the India's traditional crafts. Besides Britishers took the scheme of agricultural commercialisation in Bengal, promoted through the provision of special incentives to growers, in particular, that of timely credit. Jute growers were free from the element of coercion and "forced commerce" as witnessed in the case of growers of the other commercial crops of the region at that time, such as, indigo and opium.  

Jute was a monopoly of India and in this Bengal industry had a strong advantage. Hitherto, Dundee, which had successfully killed the handloom industry, controlled the entire market. But the Bengal industry expanded considerably between 1880 and 1900, the number of looms rising from about 5000 in 1881 to about 15000 by 1900 and the number of mills from 20 in 1885 to 35 in 1901. By 1894, the raw jute intake of the Indian jute industry was higher than that of its British counterparts. The expansion of jute manufacturing in India continued till the First World War. On the eve of the First World War, the Indian industry comprised 64 mills with over 36000 looms. This growth was again reflected in the immense
increase in the exports of raw jute and jute manufacture from India.

The first world war provided a great stimulus to the jute industry. The industry, during the war period, worked to a very large extent on the basis of Government orders. The demand for jute goods increased considerably on account of war-time need of sand bags, grain bags, gunny clothes, etc. Government imposed restriction on export of raw jute. Indian jute mills consumption of raw jute rose to an average of 55 lakh bales in 1918 from 44 lakh bales in 1915. A phenomenal increase in the reserve and depreciation fund and the level of profits to paid-up capital were incredible during war period. The ratio of net profit to paid-up capital of the jute mills as calculated by the Director of Statistics increased from 58 per cent in 1915 to 73 per cent in 1918.20 It is worth mentioning that jute industry remained largely in European hands as late as 1915 when there were 72 mills all under European control.21

Analysing the growth of jute industry during post-first world war period, an interesting feature is that the number of looms and spindles increased by a higher ratio than the number of hands employed. This was due to the introduction of better machinery that reduced the necessity of human labour. During the period 1914-1930, number of mills increased
from 64 to 98; looms from 36000 to 1,14000 and persons employed from 2,16,000 to 3,43,000. Besides, the second half of twenties showed increase in British-Indian export of raw jute, because the demand of jute expanded in countries other than Britain, viz Germany France and Belgium. The value of export of jute products from India stood at Rs. 300 million in 1921-22 which increased up to Rs. 569 million in 1928-29.

The Great Depression (1929-33) affected the industry very badly. During this period the volume of trade slumped less than its value and there was a sharp fall in price as well as in the volume of exports of both jute fibre and jute fabrics. The profitability of the industry also recorded a decline. Accordingly, over these years the industry's paid up capital, and the number of looms and spindles actually came down. Still the industry was able to face the difficulties caused by the depression much better, because of adequate reserves. At the close of the 1930s, the jute industry had 107 mills, 1.37 million spindles and over 68,000 looms, and an employment figure of about 3,00,000 workers.

During the depression year the IJMA (Indian Jute mills Association) had sought to maintain the profit margin in the industry by regulating production through restricted working hours and sealing of looms which had a
depressing effect on raw jute prices that came down more sharply than the prices of jute manufactures. In 1939-40 and 1940-41 exports of raw jutes were valued at Rs. 198 and Rs. 245 million respectively. 

The second world war (1940-45) was a period of great prosperity for the industry since the demand of gunny bags from the army and the civilian population increased enormously. The industry abandoned all output restrictions and tried to work at full capacity. But it is noticeable that while value of exports, particularly of gunny clothes, expanded greatly the volume of exports actually recorded a decline during the war. Thus the annual average value of exports of jute goods rose to $174.6 million in 1940-44 compared with $140.1 in 1935-39, whereas in terms of export volume the respective figures were 742 thousands tonnes (1940-44) and 998 thousand tonnes (1935-39). Annual output of jute textiles also fell from 1160 to 1091 thousand tonnes in 1940-44 as compared with 1935-1939. 

Profits of the industry, however, rose to a peak level; in 1945 while the index of profits for all industries had increased to 234 that for jute was 328 taking 1939 as the base year. 

On the other hand, export earnings from jute which amounted to 46.2 million dollars annually between 1935 and 1939, came down to only 26.1 million dollars between 1940 and 1944 despite a rise
<table>
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<th>Export of Raw Jute (1000 metric tonnes)</th>
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<td></td>
<td>World</td>
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</tr>
<tr>
<td>1946-50*</td>
<td>1381</td>
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Sources: (1) IJMA Bulletin (2) BJMC Bulletin (3) FAO Production Year Book (4) Bangladesh Ministry of Jute

Explanation: Figures in parentheses represent per cent quantity of total world production
* Average measure (1st two rows)
* Figures include China's export
F = F.A.O. estimate
N.A. = Not available
in the prices of raw jute. On the whole, the jute economy of India showed a strikingly uneven pattern of development during the period from 1940-45.

1.2.3 Phase III: Post World War II and Recent Growth (1946 Onward)

Production of raw jute: After World War II, exports of jute and jute manufacture recorded a marginal recovery, and the prosperity of the jute industry continued for the two years immediately following the war. At the time of partition of British-India the number of looms stood at 65,000 and the number of spindles at 1.09 million and the product at 8.05 million bales. In 1947, out of 107 mills in India, not a single one of the mills fell to Bangladesh's (erstwhile East Pakistan) share although Bangladesh belt accounted for 75 per cent of the world's raw jute production and had a virtual monopoly in the finer variety of fibre. About two thirds of world's jute and allied fibres was produced in Bangladesh until 1950. Its share declined sharply in 1950s to between 40-45 per cent of global production (Table 11). The political turmoil surrounding Bangladesh's emergence in 1971 resulted in an even more drastic reduction in its share of world raw jute production which fell to between 26-35.5 per cent during the seventies. In the period 1964-65 to 1969-70 production fluctuated mildly but during 1970-71
and 1975-80 production was well below the level of late 1960s. An all-time record was achieved in 1985-86, with the output of 11.58 lakh tonnes (Table 1.1) though the share in world total production was simply 17.17 per cent. This happened because, world wide production was at its best and likewise, India, Thailand, China and other jute producing countries had also a high output. In the recent decade of eighties, Bangladesh's share in world raw jute production dwindled from 28 per cent in 1976-80 to 17.17 per cent in 1985-86. This further rose upto 24.64 per cent in the year 1987-88 which is not at all a hopeful trend comparing with its growth trend marked in its early days of 1950's.

India's history of raw jute and allied fibres production is also noticeable. In fact world production of jute fibres were in a upward trend since after the partition (1947). At that time 75 per cent of jute growing areas were under Bangladesh (tehn East Pakistan) and, therefore, the Indian Government concerted efforts to increase the production of raw jute within the country. As a result, area under jute increased from 6.52 lakh acres in 1947-50 to 14 lakh acres by 1951-55 and the output of raw jute rose on an average from 3.80 lakh to 7.42 lakh tonnes (Table 1.1). Until the late forties, nearly 75 per cent of the Indian mill consumption was imported from Bangladesh. By the early 1960s, only
5-10 per cent of mill was being imported from Bangladesh which were discontinued entirely in 1965 due to war. Small scale trade has again been resumed since 1972. During eighties, a significant production is seen in the year 1986-88. Because of favourable climatic condition there was a bumper production of raw jute of which India's share was estimated at 17.80 lakh tonnes. Still India is occupying 40 per cent share of world total production as per the FAO statistics of the year 1987-88.

Thailand became an important producer of raw jute and allied fibres in 1960s. Its share in world production rose sharply to 20 per cent in 1966-70. In 70s its share remained between 13 per cent to 18 per cent (Table 1.1). China's production rose phenomenally from 0.35 lakh tonnes in 1944-49 to 2.06 lakh tonnes in 1985-86. Both China and Thailand are progressive so far as total production and per hectare production are concerned.

Export of raw jute: In tracing out the evolution of world export trade of raw jute and allied fibres, it is seen that India had no participation in global trade for several years following the partition in 1947 and till 1965 India was the major importer of Bangladesh jute. Bangladesh has been the single largest exporter of jute fibre in the world market.
Among the importer countries Western European countries were the largest importers since 1965. The U.K., Belgium, France, West Germany, Spain, Portugal and the Netherland were all importers among them the UK and Belgium being the largest. China became the third largest importer from Bangladesh in the late 1980s.

Table 1.1 shows that before 1953-54 all raw jute produced in Bangladesh was made available for export and until 1960 Bangladesh's share in world's exports varied from 87-92 per cent. But this share fell to an average of 80 per cent between 1960 and 1965, then to about 60 per cent between 1966 and 1970, and has been around 55 per cent in Seventies. This gradual downward trend was greatly affected by the 1960S policies of encouraging rapid expansion of jute manufacturing industry in jute exporting countries. However, with rise of domestic production of jute fibre, Bangladesh's market share increased on an average by 56 per cent in 1971-75 and then by 65 per cent in 1976-80. Here it is important to note that the decline of Bangladesh export was largely offset by Thai exports as shown in table 1.1.

Study shows that Bangladesh's export of raw jute and allied fibres rose from 62.48 per cent in 1981-82 to 83.24 per cent in 1986-87 which is absolutely a commendable
trend in world export trade. This trend could still be maintained as Bangladesh jute has the comparatively better quality and cost advantage in comparison with the traditional competitor India. But the chief impediment here is the competition from synthetic substitutes. From the mid-sixties, polypropylene has emerged as an intense competitor in the western market and has extended its threat to every major end use of jute.

So far India's export of raw jute and allied fibre is concerned, it started allowing a modest export of raw jute from the early 1960s after a ten year ban imposed in 1950-51. However, over the decade of Sixties, average annual export of raw jute amounted to only 1.8 per cent (Table 1.1) on an average. In the most recent years Indian jute fibre export attained a sizeable proportion of 4.9 per cent in 1971-75, 2 per cent in 1975-80 and again 7.87 per cent in 1981-82 of world total export. This was possible only because of good harvest. The shortage of fibre in the three following years ruled out its exports, but in context of excess supply and falling prices in 1985-86 an attempt to export raw jute was made albeit without much success. Indian export of raw jute is to a lone buyer (USSR) for several years, which purchases mainly the superior grade of fibre (such as TD/2 and TD/3).
After independence in 1947, Bangladesh (erstwhile Pakistan) decided to set up its own jute processing industry. Availability of cheaper raw jute provided the initial impetus. By 1951, the first jute mill was set up. Rapid expansion of jute industry with a view to capturing a progressively larger share of the export market was another theme of Government jute policies.

**Jute goods production:** With a view to capturing a progressively larger share of the export market, Bangladesh Government had taken some economical and industrial policies which helped in rapid expansion and growth of jute manufacturing industry. As a result, between 1951 and 1970 about 50 mills were established in Bangladesh (erstwhile east Pakistan). This growth was not significant during the decades of 70s and 80s. The number of mills raised to 77 during the aforesaid period. Presently, 70 mills of Bangladesh jute industry are functioning smoothly.

The growth and development of Indian jute industry was disrupted by the partition of 1947. The industrial units went up to 112 in 1950. But at present only half of the mills are undertaking production activities more or less properly. The rest of the units are either closed down or declared insolvent owing to several causes such
as non-availability of raw jute, incurring losses for long period, unfair labour practices, severe competition from substitute products and the like.

Besides Bangladesh and India, of the developed countries, Western Europe, the U.S.A., Japan and USSR are the major jute manufacturers. Argentina, Brazil, China, Egypt, Kenya, Peru, India, Thailand & Zaire are the major jute manufacturing countries among the developing world.

The growth of jute industry depicts that India is the largest producer of jute goods and has had a dominant position for nearly a century. Bangladesh has come into the scene as a manufacturer much later. Its rapid expansion of the milling capacity started in the Sixties. In 1967-68 Bangladesh replaced Western Europe as the second largest jute goods producer. In 1972 India had 43,035 looms, Bangladesh had 23,836 and Western Europe totalled only 12,377. World's loomage roughly estimated in the year 1981-82, was 1,09,275 of which Bangladesh's share was 25,250 and India's share was 44,200. Bangladesh's loomage number rises upto 26,060 in the year 1987-88.

Bangladesh doubled its production of jute goods from 1.32 lakh tonnes to 2.60 lakh tonnes between 1955-56 and 1959-60 and again from 2.6 lakh tonnes to 5.27 lakh tonnes
between 1959-60 and 1967-68. Its share in world production was 8.5 per cent in 1958-59, 17.2 per cent in 1967-68 and 20 per cent in 1976-77. As Bangladesh's production increased, the rest of the world production of jute goods declined from 47 per cent in 1958-59 to 28 per cent in 1976-77. The fall of others' share of world production reflects the rapid decline of jute goods production in western Europe. This inturn was a result of increased raw jute consumption by Bangladesh mills, which made less jute available for export to Western Europe. During seventies and eighties production of jute goods in Bangladesh shown no remarkable change in quantity excepting certain ups and downs which was the effect of irregular supply of raw jute due to unfavourable weather condition, flood, cyclone, draught, prices etc.

For India, the production of jute goods increased for 10.27 lakh tonnes in 1955 to 13.36 lakh tonnes in 1965 and since then there has been no significant increase in output except in 1980 when an all-time record of 13.85 lakh tonnes was achieved. The output in 1985 was 12.87 lakh tonnes. In the year 1987-88 the production of jute goods was recorded at 10.03 lakh tonnes.

Distribution of jute goods: In the earlier discussion, it was mentioned that Bangladesh (erstwhile East Pakistan)
TABLE 1.2
WORLD TRADE OF JUTE GOODS
('000 Metric tonnes)

<table>
<thead>
<tr>
<th>Year</th>
<th>World export</th>
<th>Bangladesh</th>
<th>India</th>
<th>Other countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961-65</td>
<td>6603</td>
<td>1250(18.93)</td>
<td>4324(65.49)</td>
<td>1029(15.58)</td>
</tr>
<tr>
<td>1966-70</td>
<td>6886</td>
<td>2167(31.47)</td>
<td>3598(52.25)</td>
<td>1121(16.28)</td>
</tr>
<tr>
<td>1971-75</td>
<td>6245</td>
<td>1981(31.72)</td>
<td>2949(47.22)</td>
<td>1315(21.06)</td>
</tr>
<tr>
<td>1976-80</td>
<td>5966</td>
<td>2391(40.07)</td>
<td>2268(38.01)</td>
<td>1307(21.92)</td>
</tr>
<tr>
<td>1980-81</td>
<td>1354</td>
<td>516(38.1)</td>
<td>490(36.19)</td>
<td>348(25.71)</td>
</tr>
<tr>
<td>1981.82</td>
<td>1255</td>
<td>548(43.7)</td>
<td>369(29.4)</td>
<td>338(26.9)</td>
</tr>
<tr>
<td>1982-83</td>
<td>1201</td>
<td>535(44.55)</td>
<td>323(26.89)</td>
<td>343(28.56)</td>
</tr>
<tr>
<td>1983-84</td>
<td>1017</td>
<td>521(51.2)</td>
<td>234(23.00)</td>
<td>262(25.8)</td>
</tr>
<tr>
<td>1984-85</td>
<td>1113</td>
<td>484(43.5)</td>
<td>278(24.91)</td>
<td>351(31.52)</td>
</tr>
<tr>
<td>1985-86</td>
<td>1100</td>
<td>494(44.9)</td>
<td>255(23.18)</td>
<td>351(31.92)</td>
</tr>
<tr>
<td>1986-87</td>
<td>1091</td>
<td>530(48.6)</td>
<td>268(24.56)</td>
<td>293(26.84)</td>
</tr>
<tr>
<td>1987-88</td>
<td>1050</td>
<td>500(47.6)</td>
<td>277(26.38)</td>
<td>273(26.02)</td>
</tr>
</tbody>
</table>

Explanation: 1) Figures in paranthesis represent per cent quantity of total world export.

2) Average measures (1st four rows)

Sources: (1) IJMA Bulletin; (2) BJMC; (3) FAO Trade year Book & FAO Production year book; (4) Bangladesh, Ministry of jute and (5) FAO Quarterly.
started setting up jute mills from 1951 onwards and, therefore, it is obvious that it started sending jute goods in the export market since early fifties. Exports of jute manufactures from Bangladesh which were 6.7 per cent of total export of jute goods in the world during 1951-60 went up to 18.93 per cent in 1961-65. The jute industry sector experienced a rapid growth during 1950-70, immediately before the independence of Bangladesh, these jute mills accounted for about 34.47 per cent (table 1.2) of total world export. The general world inflation of 1973-74 certainly gave scope for some increase in the price of jute without impairing its competitive position against synthetics, but such a scope is limited. It might have been expected to recoup some of the loss resulting from deterioration in terms of trade, but the jute crop in 1974 were almost certainly well below normal levels. Official estimates put the amount of jute produced at about two-thirds of normal. During 1973-75 the performance of jute industry was disappointing. High hopes were placed on the exports of jute and its manufacturers when the first five year plan was drawn but the record to date provides very little encouragement for optimism about the prospects of industry and the position deteriorated in 1974-75.  

Bangladesh's share in jute goods exports again started declining in 1980-81 and further rose on an average
about 50 per cent of the world trade. Quantitatively in 1987-88 about 5 lakh tonnes of jute goods were exported by Bangladesh in the world export market.

Studying the evolution of Indian export trade it is revealed that India has been a principal exporter of jute goods in world. But this growth and prominence in the world market declined during fifties after the establishment of jute industry in Bangladesh. Moreover, from mid-sixties, Polypropylene has emerged as a close substitute of jute. Consequently India now faces severe competition in global market.

Export of Indian jute goods which had been rising slowly during fifties, began declining since mid-sixties (table 1.2); volume of exports which were on an average 65.49 per cent of the world total export during 1961-65 declined gradually to 38.01 per cent in 1976-80. During 1980-81 global exports of jute goods declined by 2.63 lakh tonnes to 10.96 lakh tonnes. In the same period, Indian exports fell from 4.90 lakh tonnes to 2.55 lakh tonnes while the country produces 14 lakh tonnes of jute goods a year. Domestic consumption is about 11 lakh tonnes. Unless this balance of three lakh tonnes of jute goods are not exported, prices in the domestic market may remain depressed. As a result, sickness in the industry may spread even further.
In the year 1986-87 and 1987-88 India's share in world export is quite insignificant as bulk of jute goods is consumed domestically. Because of higher cost and qualitative inferiority, Indian goods are not in a position to compete in world market.

In recent years Indian export of jute goods have declined. After touching a peak of Rs. 333 crores in 1984-85, the exports came down to Rs. 242.62 crores in 1987-88.37

Admittedly, jute has declined from its preeminence as the single largest items of India's export to an insignificant role in current years. This happens mainly because, synthetic substitutes have been developed as packaging material in Western countries. This downward trend for export trade of jute goods affects the industry directly. As a natural fibre, how jute plants are cultivated and how fibres are taken from jute plants are discussed in the next section.

1.3 JUTE CULTIVATION

Jute is the commercial name of the fibre derived from a special type of plants that belongs to the genus corchorus in the family Tiliaceae under the botanical
classification order. The genus *chorchorus* consists of ninety-seven known species of which eight species are found in Indian-subcontinent. They are *C. capsularis*, *C. olitorius*, *C. trilocularis*, *C. urticaefolius*, *C. facicularis*, *C. depressus*, *C. tridents*, and *C. aestuana*. Of these, only two, *C. olitorius* and *C. capsularis* known as Tassa and Bogi (white) jute respectively in Bangladesh have been exploited economically and are grown in a number of countries in large areas. Allied fibres of jute, viz., Kenaf (Thailand), Mesta (India and Bangladesh) roseelle and urenalobata (Zaire) are considered lower grades of jute. Flax and hem are other good fibres.

Jute has been grown from ancient time in the Indian sub-continent. It is an annual crop grown mainly in the tropical region. It is a naturally produced, the cheapest and most widely used industrial raw materials on which jute industry's development depends to a large extent. The cultivation of jute is greatly influenced by some geographical (i.e. climate, soil etc.) and economic factors (i.e. Labour, machine, capital, market etc.). A high temperature ranging from 70°F - 100°F and relative humidity 70-90 per cent are favourable for growing jute plant. Sufficient water is required both during sowing and harvesting season. Two and three inches of rain falling during sowing period and at weekly intervals thereafter
appear to be good enough for the growth of plant. Both the amount and timing of rainfall affects jute acreage. At harvest time, abundant water is necessary for retting purpose. During rainy season jute grows best on rich sandy and loamy soil, capable of absorbing moisture quickly and retaining it. Rich loam, of course, gives the quality fibre. 'Beel' or low lands and ordinary deep water "Aman" lands produce more vigorous growth and longer fibre but the quality of the fibre is poorer. Saline soil is not good for jute plant production.

Jute growers are to undergo different steps in the process of cultivation of jute plant getting ultimate raw jute fibres as a product. These steps can easily be understood from the diagram in Exhibit 1.1.

EXHIBIT 1.1
DIFFERENT STEPS IN THE PROCESS OF CULTIVATION OF JUTE

Ploughing → Sowing and manuring → Weeding hoeing and thinning → Harvesting → Steeping and retting → Preparing for sale → Extracting

The different steps in the process of cultivation are described further.
1.3.1 Ploughing

First the land has to be prepared for cultivation. During the month of November-December, immediately after the recedence of flood water low lands are prepared for sowing seeds. The ploughing and cross-ploughing of land are continued before sowing in the month of February or March. Two ploughings and two cross ploughings with ladder­ing and harrowing are sufficient enough to make the land ready for sowing. Sometimes more ploughings is needed depending on the soil condition of the land. Idigenous means are frequently used in tilling the land rather than the use of modern and scientific means so far developed.

1.3.2 Sowing and Manuring

After the preparation of land farmers start sowing seeds in the land. Usually, farmers collect jute seeds from their own previous year's production. Sometimes they collect it either from market or from fellow farmers. Government authorities also supply high-yield variety of jute seed to the farmers. But farmers pay less heed to the supply of seed from Government authority.

Sowing goes on from February to May according to the position of the land, nature of soil and the amount of rainfall. The usual and optimum time of planting is
15th March to 15 April for capsularies and 15th April to 15th May for olitorius. System practised in sowing seeds is called seeding. There are two types of seeding—row seeding and Broadcasting seeding. Much time and effort have been devoted by research institutes both in India and Bangladesh and various seed drills have been tried for the purpose of making comparative study of row and broadcast seeded jute. Row seeding is more advantageous and scientific than traditional broadcasting seeding. Studies done in India show that sowing seeds in row reduced the cultivation cost by 24 per cent. On the other hand, Bangladesh Jute Research Institute (JRI) found that plant spacing 3 cm by 8 cm gave 9.7 per cent more fibre and reduced weeding labour by 29 per cent and harvesting labour by 10 per cent.\(^{38}\) Row seeding ensures best weed control and efficient use of sunlight though it requires additional labour and better soil preparation which the farmers are not at all prepare to undertake. The quantity of seed used commonly is nine pounds per acre.

Much care is to be taken just immediate after the sowing otherwise better yield would not result. So farmers use both natural and chemical fertilizers to ensure better growth of the plant. Where there is
plenty of slilt deposit, particularly near the river-belts, no manuring is necessary. Jute growers of both Bangladesh and India have been very much dependent on locally available manures for manuring land since the early time of jute cultivation. Generally they use cowdung, composit ashes, well rotten or ever dried water-hyacinth etc., which have proved to be very useful for healthy growth of jute plant and larger fibre production. The use of chemical fertilizer in jute cultivation has started from 1950. After that time many research studies have been undertaken to prescribe the various use of fertilizer to the farmers. As for example, Bangladesh jute Research Institute (BJRI) recommended 100 pounds of cowdung plus 15 pounds urea, 10 pounds TSP (Triple Sulphur Phosphate), and 10 pounds of murate of potash before sowing and 45 pounds of urea per acre after the plants are 6 to 7 weeks old. Another study revealed that the average nutrient requirement varies between 50-60 N, 20-40 P₂O₅ and 10-80 K₂O pound per acre in the two species (i.e. Capsularis and Oliterius). Nitrogen is the most important element used to increase the vegetative growth of jute and the yield of fibre. Phosphorus helps to prevent lodging and improves fibres quality while increasing efficiency of Nitrogen utilization. The use of potassium is highly effective in reducing the incidence of disease. But in actual practise jute growers are very often found
to be reluctant and they pay less importance to the use and culture of manuring.

1.3.3 Weeding, Hoeing and Thinning

In the process of cultivation of jute, manuring is followed by weeding, hoeing, and thinning. Jute crop is infested with a large number of weeds and these need to be removed very carefully so that the young plant can easily derive their nourishment from the soil, air, heat and water. Sometimes plants grow thickly and in this case thinning is required to facilitate easy growth of the plant. Thinning is also carried out along with weeding and hoeing. After sowing, it takes 3-8 weedings or hoeings for the proper growth of jute plants. The labour required for weeding and thinning for broadcast sowing jute is almost 40 per cent of the total labour required for the crop.

1.3.4 Harvesting

Jute is a six-monthly crop. It may be harvested within four months if necessary and for seeds it requires eight month. But too early harvested crop fibre yields will be low and the fibre will be immature. Delayed harvest results in high fibre yield but poor quality
fibre that requires prolonged retting. The proper time for harvesting is when the fruits have just formed. But in fact, both in Bangladesh and India farmers used to harvest the crop earlier for fibre. They keep a small patch hardly 5 per cent of the total cropped area and mostly in comparatively high land for procuring seeds from plants of that portion. Jute plants are left in the field for four to five days to shed leaves after the harvesting is over.

1.3.5 Steeping and Retting

Harvested crop is then required to be steeped for early retting. Therefore, steeping is to be done in fairly deep, clean, sweet and gently flowing stagnant water. Retting is delayed in running water owing to the insignificant activity of retting bacteria. In the process of retting, plants are tied into bundles and these bundles are carried to retting place arranged in heaps and submerged under a weight of logs, earth and weeds. In the hot weather, that is from July to September the retting is finished in 10-21 days whereas in cold weather it takes or more than two months. The submerged bundles have to be examined from time to time so that the stems are not over retted. Over retting not only makes the fibre darker in colour but it also weakens the fibre.
1.3.6 Extracting

After proper retting, bundles are taken out of water. The fibre is then extracted from the plant. Extraction can be done in two different ways. In some cases it is done directly by hand or a number of plants are taken together at a time and by giving a jerk to them fibres of all the plant is extracted out. In the second process the sticks become broken into pieces and almost useless. Subsequently, each bundle of fibres extracted from a bundle of plant is washed well by swinging and shaking them in water until the foreign bodies are washed way. Next, 20-30 small bundles of fibres are made into a big bundle and allowed to stay overnight for rinsing the water. On the next day, the fibres are exposed to sun and this is continued for two to three days till the fibres are fairly dried and free from all moisture. The farmer once again cleans jute fibres by removing bastis, dusts etc. and again weighs them into bundles of 10 Kgs each and make them ready for sale in the market. Different types of bundles of different weights are seen to be practised and it varies from place to place depending upon the requirement of market. Thus, the fibres are extracted from the plant and bundles of fibres undergoes certain process to convert them into
different kinds jute products. Manufacturing process of jute goods is given in the next section.

1.4 JUTE MANUFACTURING

Almost all jute is grown for sale. A farmer hardly uses one per cent of his produce. This is unlike the other agricultural commodities like rice, pulses & oilseed, which are used to the extent of 85 per cent of the produce. Therefore, after the cultivation, raw jute moves from the hand of growers to its ultimate consumers or users through some sort of market mechanism. This mechanism of marketing involves a number of operations such as assembling, transporting storing, grading, sorting, precessing and exporting. These operations are done at different stages by a number of middlemen who form a link between producer of raw goods and the consumer or user. In normal practice, jute fibre undergoes three different forms to reach the mill-gate and at the export points such as:-

1) from the village to the primary market or 'haat'.
2) from the primary market to the bailing centre or the secondary market.
3) from the secondary market to the mill gate or shipping points.
The middlemen who operate at the various stages and constitute the set up of jute market are Farias, Beparis, Arathdar, Brokers, Dalals, Kutch balers, Pucca balers and shippers. In this way jute fibres are marketed both internally and for export.

Raw jute involves a number of process in the mill in order to produce the finished goods. A large number of machineries and materials are needed for this purpose. Generally, the following processes are undertaken in producing jute goods from the raw jute fibres. The different steps in manufacturing of jute goods are shown in Exhibit 1.2.

EXHIBIT 1.2

DIFFERENT STEPS IN MANUFACTURING OF JUTE GOODS

- Assortment and Bailing
- Batching
- Carding
- Drawing and Doubling
- Spinning Retting and Twisting
- Winding dressing and Sizing
- Weaving
- Finishing
1.4.1 Assortment and Baling

Assortment means the tying of jute fibres into small bundles for easy operation and handling. This is usually done at the farmers' level. But sometimes, it has to be done in the mill if the farmers fail to assort their fibres. Small bundles, thus made are again tied together into a standard weight which is called bales. Each of the bale contains fibres weighing 400 lbs. or 181.44 Kgs (in British measures).

1.4.2 Batching

Jute is hard, smooth-surfaced, somewhat woody fibre and does not have much spinning quality. It would make a rather hairy yarn at the cost of a very large heavy waste, if sent forward in its natural state. It is, therefore, processed to adapt it for spinning. In order to loosen and soften the fibre before its use a special type of emulsion is added to the jute fibre. This emulsion is prepared using mineral oils, water and emulsifier (soft soap). The process of softening the jute fibre to make it ready for spinning is called Batching.

1.4.3 Carding

In this phase strict form of jute fibre is broken down sufficiently into an entangled mass and converted
finally into a ribbon form. The weight of the fibre delivery then becomes uniform per unit of length. The carding is done by two types of machines-Breaker and Finisher.

1.4.4 Drawing and Doubling

The regular and uniform elongation of ribbon, to make it lighter is called 'drawing' and the running of two or more ribbons together to form one ribbon at delivery is called 'Doubling'.

1.4.5 Spinning, Reeling and Twisting

The conversion of ribbon into yarn of uniform thinness and strength which is ultimately used in weaving textile is called spinning. Reeling consists mainly of winding the yarn on the circumference of a reel of definite size into 'skeins' and Hanks' of a definite continuous length. Making a thread of strong and compact form, single yarn are twisted, doubled, folded or plied together and this process is named as twisting.

1.4.6 Winding, Dressing and Sizing

Winding is the operation of transfer of yarn from one package to another such as winding from bobbin to
spool for warp and winding bobbin to cops for weft. Warp is the thread which forms the length of the cloth and the transverse thread is known as weft. There are two distinct types of yarn, one is meant for weft and the other for wrap.

The winding of yarn is essential for various reasons and purposes. For subsequent operation of Beaming the yarn wound into spools, helps in better package, less wastage, and ease in transportation. The yarn wound into cops are used in shuttles for weaving cloths. Warp yarn invariably requires harder twist than weft yarns and also of superior quality, because they are subjected to greater tension than weft yarns during the process. The winding is also done into spools and cops for storage and sometimes for direct sale of yarn.

'Dressing' is the term used to explain coating of the warp yarns with some adhesive substance while beaming. Sized yarn helps weaving operation by minimising friction, adds weight to the yarn and gives a good finish.

1.4.7 Weaving

This is a process by which warp and weft yarns are woven in a fabric. It is the art by which two or more series of threads crossed at right angles to each
other are bound together to produce cloth. Woven cloth consists of lengthwise threads termed warp and crosswise threads called weft shots or picks. In the loom, the warp threads are passed through the splits of 'reed' which determines the pitch of the threads in the same relative position to each other during weaving, feats up the shots of the weft and supports the shuttle. The device which produces woven fabric by the interplacement of two sets of threads is known as loom. It is thus a mechanical device with a series of intermitted motion in order to give a woven fabric. Two types of looms are found in practice namely powerloom and broadloom. Loom operated by power in naturally known as powerloom and broadloom is used for weaving wide cloth for carpet backing.

1.4.8 Finishing

The term relates to all the processes to which the fabric is subjected after being woven and before making up. Thus under the influence of routine process employed, three main factors may intervene to modify the surface of fabric, namely the quality of the materials, the character of the yarn, and the structure of the fabric. A combination of the yarn and the process like—Damping, cloth repairing, calendering, measuring, cutting, sewing, cropping, bag banding (in case of sack bags),
hand hemming etc. are done. Calendering is done to make the surface of the cloth smooth and glossy so that it looks nice and attractive. It is done using pressure, heat, dampness and starch. After calendering, finished jute products come into existence in the form of hessian cloth, sacking, carpet backing, etc. which are then sent to the domestic market as well as, to overseas market for trade.
REFERENCES


3. Ibid., p. 116.


11. Ibid., p. 8.


26. Ibid., p. 2.
39. Ibid., p. 69.
CHAPTER - II

RESEARCH METHODOLOGY

This chapter highlights various issues related to the research methodology adopted for the present study. Starting with a brief survey of literature which ends with a justification for the choice of the research problem, this chapter goes on to describe the need for research study. Certain general and specific propositions have been made on the basis of literature survey. Further the objectives, scope, and limitations of the study have been outlined. In the end, the methods adopted for data collection and presentation, and analysis and interpretation of data have been described.

2.1 LITERATURE SURVEY

Bangladesh and India are the two main jute producing countries. Of late, China, Thailand and Nepal are also producing jute. The climatic conditions soil and other physical and economical factors are responsible for the better growth of this fibre crops in the aforesaid countries. Since ancient period of history and particularly after 1855, jute has become such an important cash crop that many studies and researches have been undertaken regarding development of jute's agricultural,
industrial, trading and commercial aspects. These studies and researches were made at institutional, national and even at international levels.

A brief and concise, but relevant, survey of literature was conducted to find out the research gaps that exist presently. The different aspects covered in the survey include jute agriculture, productivity, marketing, exports, competition, pricing, research and development, industrial relations, and international context related to jute and jute products.

2.1.1 Agricultural Aspect of Jute

In the agricultural aspect Burger² has analysed a model wherein he has studied growing, processing, and trading of raw jute fibre in details and suggested measures for the overall development of the said sector. In another study Goswami³ et al. have shown the effect of cultivation of autumn paddy on the acreage of jute cultivation in the better quality jute-growing state of Assam (India). Bangladesh Agriculture University⁴ and Bangladesh Agriculture Information Service⁵ conducted study separately for the upliftment of cultivation-process of jute. They suggested some improved ways and means in cultivation process which could easily enhance the per acre yield of jute fibre.
Being a cash crop both the Governments of Bangladesh\textsuperscript{6} and India\textsuperscript{7} have been showing much interest in removing various obstacles in the way of cultivation and distribution process of jute. Both the Governments very often from study teams or commission to conduct study to ensure incentive prices and facilities towards the jute growers and traders. De\textsuperscript{8} in his article has given an overview of jute procurement problems and solutions thereon.

Although India is producing more jute fibre than that of Bangladesh yet this quantity is not sufficient enough to meet the raw material requirements of its jute industry. As a result since 1947, Indian agriculture sector of jute had been carrying out research\textsuperscript{9} constantly to boost up production and thereby achieving an autarky in domestic supply of raw jute. As a prime agricultural sector, Bangladesh has also undertaken different projects and scientific research study\textsuperscript{10} on jute cultivation.

2.1.2 Productivity in Jute Industry

From literature survey, it is seen that some studies have been conducted on productivity of jute industry both in Bangladesh and India. On Bangladesh jute industry, Habibullah\textsuperscript{11} studied the productivity
trend and suggested some policy measures. In another work\textsuperscript{12} he indicated that the superiors or the line Sardars, by which name they are called in the jute industry, have a great influence on workers' productivity than the superiors. The superiors are mostly productive-centered and confine their role to 'policing' while the line sardars blend and integrate their production-orientation with their employee-orientation and obtain more favourable worker response to higher productivity. Contrary to popular belief, his study showed that job experience and education of jute mills workers have little influence on their productivity. The other fundamental finding of the said work were that workers' pay satisfaction, economic motivation, and machine adjustment have considerable influence on productivity.

Rabbani\textsuperscript{13} also studied the productivity of jute industry both of Bangladesh (the then Pakistan) and India but from the economic point of view. He focused on some economic determinants and calculated their effects on jute industry. He found that economic determinants like capital, market, labour, etc., have got much influence on the productivity of an industry in general and individual worker in particular. Chakrayarti\textsuperscript{14} has studied the productivity of Indian jute industry from different angles. He showed only the trend of productivity over
a certain period of time and criticised the causes of the ups and downs of productivity trend found in his study.

2.1.3 Marketing of Jute and Jute Products

Marketing of jute and jute goods in both domestic and international market is a issue of great concern. Domestic jute market is not so significant. That is why, literature on domestic market of Bangladesh jute industry is hardly available. But in the case of India's domestic market of jute and jute goods, much study and research has been done. In one study Verma\textsuperscript{15} has indicated that the present demand for jute goods has been increasing if compared with the demand of 1970s. This increase is the direct impact of Mandatory Act of using jute packaging materials in packing food grains, sugar, cement and fertilizer. Some diversified products have again enhanced the prospect of jute good's domestic market in India.\textsuperscript{16}

2.1.4 Competition in Jute Industry

Bangladesh and Indian jute industry are the two major and traditional competitors exporting jute goods in the world jute market. Much literature regarding
export-markets are available. Rabbani, Khan, Ahmad, and Ahmed have studied jute industry of Bangladesh and its different aspects. But they had given much importance on international trade of jute goods. These studies indicated various policy measures for the development of export-trade of Bangladesh jute industry.

Verma, Iqbal and Mongia had widely investigated problems and prospects of Indian jute industry. In the study of Verma, export behaviour of Indian jute goods at the disaggregative level of hessian and sacking, carpet backing and other jute goods since mid-fifties to 1980s have been shown categorically. He has depicted a movement in the quantity sale of all these categories and recorded ups and downs of jute goods demand in export market. He pointed out that Indian export market has been affected by price of polypropylene and world gross domestic product index of jute goods of importing countries. Iqbal opined in his work that Indian export market of jute goods is in downswing trend, and though latest diversified jute products are showing a healthy sign but it should not be at the cost of major items of jute products. Moreover, he has proved that the traditional stronghold of Indian jute is gradually shifting from international market to domestic market of India. The work of Mongia is absolutely based on
SAARC (South Asian Regional Cooperation) principles. He suggested some policies for SAARC member countries producing jute goods. The aim of the study was to ensure cooperation among the jute producing countries to safeguard their interest in world jute market.

In fact, as stated earlier, Bangladesh and Indian jute industry are the major players in world jute market. Severe competition of wasteful nature between these traditional competitors very often vitiate the trading interest of the concerned rivals. Some studies were also done with the initiative of both the countries to find out some common policies regarding overseas market. Rahman and Bagchi\textsuperscript{24} jointly studied the feasibility of setting indicative prices. They recommended a common price level which could derive benefit for both the competing industries in the world jute market. International buffer-stock\textsuperscript{25} of jute and jute goods was another important aspect of export trade market studied earlier. Presently, International Jute Organisation (IJO)\textsuperscript{26,27,28} has undertaken some research projects to expedite the world jute trade in favour of its member countries.

Jute industry's success and failure depends on the price policy administered both in the case of
raw jute and jute goods trade. Price of raw jute has got much influence over the price structure of finished products. Osman, et al.\textsuperscript{29} Thomas\textsuperscript{30} and Rahman, et al.\textsuperscript{31} have made some empirical study on the price issue of raw jute and jute products. Both price for domestic and international market are discussed in their studies.

So far market competition is concerned, FAO\textsuperscript{32} has conducted a study regarding the impact of Synthetics substitutes on jute goods products in the market of packaging materials. The study revealed that since mid-sixties synthetics had been eating up the market share of jute goods globally. At the present juncture, competition from synthetics and its severity has become a headache for jute producing countries while formulating marketing strategies for their products. Industrial analysts and critics are also highlighting the consequence of fierce competition from synthetic packaging materials\textsuperscript{33,34,35}.

2.1.5 Technical Aspects of Jute Industry

Literature survey reveals that jute industry of Bangladesh and India have been conducting research on the aspects like cost reduction, product development, equipment and technology improvement, market expansion,
and others. At present, R&D (Research and Development) institutions of both the industries have undertaken product diversification programme to successfully handle the dangerous effect of synthetic substitutes. IJIRA (Indian Jute Industries Research Association) and BJRI (Bangladesh Jute Research Institute) have some projects with UNDP. These projects are trying to find out various usages of jute fibre.

Jute industry is a labour-intensive industry. Hence, its success depends mostly on good labour-management relations. Sen, Bhattacharyya, and Sengupta have studied separately industrial relations of jute industry. Findings and suggestions of all studies are more or less common. The researcher have suggested maintenance of good labour relations to ensure smooth production environment in the industry.

The research works of Ahmad, Norbyo, Khan, and Sankar had given a general and descriptive view covering almost all aspects of jute industry of both Bangladesh and India. These works are very much concerned with the problems faced by the industry and their solutions.
2.1.6 Research Gaps

It is obvious from the above survey of literature that no comparative study has yet been done between the two major jute and jute goods producing countries. Of course, some experts/researchers have highlighted the need for common marketing strategy regarding world jute market to lessen the wasteful competition between Bangladesh and Indian jute industry. Most recently, IJO has undertaken some programmes to protect the mutual interest of both the industries under study. Besides, various agreements are under active consideration at the government level of Bangladesh and India in regard to jute industry. In spite of all these facts, the present comparative study of jute industry profiles in Bangladesh and India is of great importance in formulating policy measures which could help protect common interest of the concerned industries.

2.2 NEED FOR RESEARCH STUDY

Bangladesh and India are the two principal jute growing and jute goods manufacturing countries. They are also the traditional competitors in the world jute market. This competition very often becomes mutually disadvantageous and, as such both the countries have
to incur heavy losses. Moreover, the effects of synthetic and other substitutes are gradually eating up the market share of jute made packaging materials of both the countries in domestic and overseas market.

Of the two jute and jute goods producing countries, Bangladesh economy is characterised by dominant traditional, low industrial base, unemployment and under employment, and low per capita income. Bangladesh jute industry is the country's single largest industry which employs more than 61 per cent of the labour force engaged in the large and middle scale industry of the country. This industry is also the single largest foreign exchange earner. At present about 42 per cent of the total foreign exchange is earned by the industry on account of exports of jute goods only. Being an agro-based industry the industry indirectly provides livelihood to about 50 lakh farmers. In consideration of the degree of importance and impact on the overall economy, Bangladesh economy is termed as "one-commodity economy". In this context, K.S. Ramachandran has rightly remarked that "Bangladesh has nothing to boost of except its jute industry".

During sixties, jute industry had shown a better economic performance. But for the last few years owing to innumerable problems such as competition from synthetic
and other substitute products and competition between or among the jute producing countries, Bangladesh jute industry seems to be failing. At present, the industry is standing at a crucial juncture.

In contrast, Indian economy is more progressive and thus its industrial sector has been undergoing tremendous development and growth for the last few years. Especially, jute industry of India is in a position to benefit from the current economic changes and development.

Indian jute industry had developed about 100 years earlier than that of Bangladesh jute industry. Hence its contribution towards the economic development has been far reaching. Even in the decade of 1960s, jute product was the second item (in order of importance) of Indian export products. Today, the industry is well-structured and likely to be well-equipped with technology and equipment that produce more diversified jute products suggested and innovated by its advanced R & D infrastructure. As a pioneer industry, Indian jute industry can claim to possess all the characteristics of an ideal industry. Even then, it faces threat from synthetic substitute products, like that in Bangladesh, in both internal and international jute-market.
Both the jute industries of Bangladesh and India are facing problems that are more related to distribution than to production. But being experienced, Indian jute industry is handling all sorts of problems successfully. This has become only possible as the Indian jute industry's management is likely to be more strategic in getting the industrial policies adjusted with the day to day changes in the internal and external business environment. Bangladesh jute industry has, therefore, many things to learn from the experience of Indian jute industry which may help in formulating policy measures and thus save the industry from the present crisis.

Jute industry is the most important industry for the economy of both Bangladesh and India but it faces a precarious situation and is being treated as sunset industry. As such, a comparative study of jute industry profiles of both the countries, having almost similar history, culture, and tradition, is of much necessity at this stage of development. The study would help one to evolve certain concrete measures on the basis of the experience of Indian jute industry. Moreover, the analysis of industry profiles would help in assessing the ongoing situations regarding these two industries and assist the planners and policy-makers of the concerned countries to look into the issue with greater zeal, mutual co-operation and collaboration in the
light of the spirit of SAARC (South Asian Regional Cooperation) in its real perspective.

2.3 PROPOSITIONS

Certain propositions could be framed on the basis of the survey of literature and the need for research discussed in the previous sections. These propositions have been divided into two categories: General and specific propositions.

A. General Propositions

1. The jute industry of the world is at present an ailing industry and thus losing its primacy over other industries.

2. The jute industry is essentially an export-oriented industry but the world export of jute products is showing a gradual decline.

3. As major jute and jute producing countries, severe and wasteful competition exists between Bangladesh and Indian jute industries.

4. The demand for jute and jute goods in the traditional markets of developed countries is decreasing.

5. The jute industry is producing mostly traditional items of jute products.
6. The emergence of synthetic products is a serious threat to jute products and it is eroding the demand for jute products in packaging-material markets.

B. Specific Propositions

1. Jute and jute goods industry of Bangladesh is more export-oriented as compared to that of India.

2. Bangladesh jute industry is likely to maintain better distribution channels as compared to that of India.

3. Bangladesh has advantages over India with regard to availability of cheaper and superior varieties of jute fibre.

4. Marketing problems of jute products in India are not more severe than that of Bangladesh.

5. Promotional measures undertaken by the Indian jute industry are better than that of Bangladesh.

6. Diversification, in terms of range of products, is likely to be wider in Indian jute industry as compared to that in Bangladesh.

7. Technological development has taken place faster during last two decades in Indian jute industry as compared to that in Bangladesh.
8. The future prospects of Indian jute industry are likely to better than that for Bangladesh jute industry.

2.4 OBJECTIVES OF THE STUDY

The aim of the study is to make a comparative analysis of jute industry profiles of Bangladesh and India.

The specific objectives of this study are to prepare and make a comparative analysis of jute industry profiles of Bangladesh and India with respect to the following features:

2. Industry Structure
   - Phases of growth
3. Market Characteristics
   - Market segmentation
   - Users and their characteristics
   - Products and their demand pattern
   - Distribution facilities
4. State of Competition
   - Major players
   - Market shares
5. Technological Development

- Research and development

6. Prospects of Jute Industry

2.5 THE SCOPE OF THE STUDY

The following points describe the scope of the present study:

1. The scope of the present study has been limited to Bangladesh and Indian jute industry in general and their profiles in particular. Of the different jute and jute goods manufacturing countries in the world, Bangladesh and India are the countries have got physical, geographical and economical factors favourable for the production of jute and jute goods. On the other hand, these two countries are the main jute goods manufacturers in the world jute and jute goods market.

2. The study is restricted only to the case of jute industry. There are some subsidiary or dependent industries which have some sort of link with jute industry. They are excluded from the scope of study.
3. The agricultural aspect of the jute industry has not been included in the study. But the analysis of Bangladesh jute industry includes some information and data related to agricultural sector to show the difference between the nature of the jute-trade of the two countries.

4. The period covered in the study is from 1947 till date in the case of Indian jute industry and from 1951 till date in the case of Bangladesh jute industry. The fact is that, Indian jute industry was well established at the time of partition (1947), whereas, Bangladesh (erstwhile Pakistan) jute industry was set up in 1951. Relevant data essential for analysing various industry profiles have been collected for the said span of period.

5. In determining the scope of the study special attention has been given to several important industry-profiles factors such as industry structure; competitive situation; technological development; market characteristics; and prospects of the industry. But some other aspects such as finance, production, personnel, marketing etc., are not covered in the study. Parameters like cost structure, price, export-procedures
and so on have also been excluded from the scope of the study as they are believed to more relevant to a micro-level study.

2.6 DATA COLLECTION AND PRESENTATION

2.6.1 Collection: The study is explorative and is based on secondary sources for the collection of qualitative information and quantitative data. "Data collection is the process of obtaining valuable and reliable information for purpose of research". So, as per research plan and objective, data relating to international, historical and present perspective have been collected. Data regarding jute industry of the world and as well as its past and present performance and position have been had from publications of different agencies of U.N.O. like F.A.O., UNDP, UNESCO etc., while data required for preparing the jute industry profiles of Bangladesh and India have been gathered from diverse sources of government and private authorities of the said countries. The researcher has visited Dhaka (Bangladesh) and Calcutta (India) as these are the places where important offices of jute industry are located. The researcher has personally contacted the necessary secondary sources for the purpose of data collection. Besides, library research has been utilised in most of the cases.
Necessary data for analysing Bangladesh jute industry profiles are obtained from the following resources:

1. Ministry of Jute Industry, Govt. of Bangladesh.
2. Various reports of BJMA.
4. MIS Division for BJMC.
5. Bureau of Business Research, Dhaka University, Dhaka.
6. BIDS (Bangladesh Institute of Development Studies) Dhaka.
8. Federation of Chamber of Commerce of Bangladesh, Dhaka.
9. Reports, magazines, newspapers, articles and paper presented by eminent scholars in the national and international seminar on jute industry.

In the case of developing jute industry, profiles in India, related data are procured from the resources stated as under:

1. Ministry of Textiles, Govt. of India.
2. Planning Commission, Govt. of India.
3. IJMC, JMDC and other concerned offices of jute industry.

5. Data Bank, compiled by some organisation.


7. The dailies e.g., The Economic Times & Financial Express.

8. Seminar papers and Articles.

In the process of data collection, of course, the researcher took precautions about the authenticity, reliability, suitability and adequacy of the data and the sources. At every step, latest possible information have been chosen to make the proposed study. Further care has been taken to see that present time conditions and comparisons between the two industry can be easily understood.

2.6.2 Presentation: Data collected from different sources are then presented according to the requirement of information in analysing various profiles. To make them purposeful and more related with the issue, some rearrangement were done without distorting the original
quantitative figure. Some calculations have also been done especially in the case of similarities and dissimilarities between the various components of the two industry structures. Quantitative data collected as to world jute industry's perspective has been presented year-wise. For better understanding, first Bangladesh jute industry profile then Indian jute industry profile is presented followed by a comparative analysis. Few figures, tables, and exhibits are also used in the presentation of data.

2.7 LIMITATIONS OF STUDY

The proposed industry profiles were expected to have a wide coverage and required unlimited time, money and effort. The duration of the course and study is only one year. Moreover, limited time is given for the completion of dissertation. Within this short span of time, money and effort and other means, it was not possible to survey each and every aspects of jute industry.

Industry profile involves considering a number of issues but this study is made only for jute industry profiles of Bangladesh and India. Micro-aspects like management and its functional areas are not included in the present study.
Another limitation of the study is that it is done mainly based on secondary sources of information. It is so because of time and financial shortcomings. The study is meant for the partial fulfilment of M.Phil. degree and only one year is allowed for the course work as well as research study. Hence, a thorough search based on primary data has become impossible within this stipulated time. The financial resources of this research scheme is not at all feasible for investigating through primary data. Moreover, industry studies, because of their nature can be conducted satisfactorily through secondary sources of information.

Lastly, as the study is related to both Bangladesh and India, the investigator has limited time, resources and energy at his disposal for collecting materials visiting Bangladesh and Calcutta (India) frequently, where jute industries are located. Thinking over all such constraints, the study has been conducted within a manageable limit.

2.8 ANALYSIS AND INTERPRETATION

With the objective of comparative study based on some specific and general propositions the investigator has analysed and interpreted the collected data into two distinct ways. Information gathered relating to
Bangladesh jute industry has been described and interpreted under the heading of jute industry profiles of Bangladesh (chapter-3). On the other hand, data collected on Indian jute industry has been analysed separately under the heading, jute industry profiles of India (chapter-4). Six aspects of jute industry profiles have been chosen for investigation and they are analysed in six separate sections. To make the analysis more specific and easily understandable, some of the sections are again divided into sub-sections.

More or less same order and design has been followed in analysing both the jute industry profiles of Bangladesh and India. The following aspects have been taken and shown in different sections separately:

1. Nature of jute industry;
2. Industry structure;
3. Market characteristics;
4. State of competition;
5. Technological development; and
6. Prospects of jute industry

All of these profiles have been studied and analysed in such a manner that some peculiarities in the characteristics of each of the industry under study could easily be identified. The analysis is primarily descriptive
in nature. However, statistical comparison based on figures like production and export data has been done whenever required. More emphasis is given on analysing the current situations prevailing in both the industries.

Information and data thus collected and analysed have been interpreted in the form of comparison between the two industry profiles in separate chapter (chapter-5). Both similarities and dissimilarities between the industry under study have been found out with regard to each of the profiles. As findings of the study, similarities regarding a particular characteristic is interpreted first, then dissimilarities between the two industries are shown. Moreover, to have a brief idea about the overall interpretation and comparison a bird's-eye view of the comparative analysis in a tabular form has been presented at the beginning of the relevant chapter (chapter-5).
REFERENCES


CHAPTER - III

PROFILE OF JUTE INDUSTRY IN BANGLADESH

Right at the outset, it is worth mentioning that Bangladesh jute industry is the most important industry vital for the national economy. Being an agro-based industry, it provides livelihood to a large number of jute cultivating families and employment to 45 per cent of total workforce engaged in the large-scale manufacturing industries.¹ A few years ago jute industry was the only earner of huge foreign exchange inevitable for the economy. But, at present Bangladesh jute industry is in the grip of countless serious problems and the industry's overall condition has been deteriorating. Therefore, it is necessary to have a look into the different weakness and opportunities now prevailing in the industry.

With this end in view, a systematic analysis of the various activities of Bangladesh jute industry has been portrayed in this chapter. This study would also be helpful in comparing the Bangladesh jute industry's activities with those of Indian industry, the main competitor of the former in the world jute market.
3.1 THE NATURE OF BANGLADESH JUTE INDUSTRY

Bangladesh jute industry is the largest traditional export-oriented, and leading agro-based industry. Bangladesh export structure is so dominated by jute and jute goods that the economy is termed as "one commodity" economy.

The industry produces both traditional and non-traditional items of jute products. The traditional items including hessian sacking and carpet backing cloth. Hessian and sacking are used as packaging materials while CBC as floor covering.

The first jute mill in Bangladesh was set up in 1957 and in mid-1960s the industry started exporting small quantity of jute goods. By 1974-75 number of jute mills stood at 77 with a looms capacity of 17515. At present, 70 mills are in operation of which 33 are in public sector owned and managed by government and the rest 37 are in the private sector. Public sector accounts for 60 per cent of the total production though the number of mills is less than that in private sector.

The industry being labour-intensive could employ about 2.50 lakh workers. Its contribution to the total export earnings was 88 per cent in the late 1970s and
at present the rate has declined to only 40 per cent.

3.2 STRUCTURAL CHANGES IN BANGLADESH JUTE INDUSTRY

Jute industry of Bangladesh is a premier industry of the economy. During early 1960s, it had been yielding a huge amount of profit. But this profit margin has fallen from 80 per cent to 35 per cent in current decade. There is fluctuation in the economic performance of the industry. Despite incurring losses frequently, its contribution of foreign exchange to the government exchequer is highly commendable. Over 90 per cent of industry's installed capacity is being utilized and the annual turnover amounts to about Taka* 783 crores.

3.2.1 The Phases of Growth

Bangladesh jute industry has been experiencing a high rate of growth and development. However, its growth and expansion is not uniform due to several changes that have taken place in the overall national and economic policy. With the shift in political power as well as the Government, the economic policy, in general, and industrial policy, in particular, is bound to change. Each shift has a great impact on jute industry which alters the administrative and organisational structure extensively.

* 'Taka' is the name of Bangladesh currency. As the currency rates varies very often, so the figure is kept same as that of Bangladesh currency.
Starting from the partition of British India in 1947, Bangladesh jute industry passed through two significant phases - one during the period 1947-1970 which can be designated as the Pakistan period and the other after 1971 which can be called as Bangladesh period.

During Pak-period, jute industry's growth can be termed as golden period of "Golden Fibre" and throughout the same period the development of the industry was in upswing trend characterised by the installation of more looms and establishment of more jute mills. The world jute-market was dominated by Bangladesh jute products earning a big amount of foreign exchange, contributing substantially to the exchequer. In the later part of Pak-period jute industry faced a lot of problems.

After the emergence of Bangladesh (1971), jute industry has also shown a sea change in policy-making. As part of implementation of socialistic economic policy, jute industry has been nationalised with all other industries and thus the private sector was abolished. Before 1971 jute industry of Bangladesh (erstwhile East Pakistan) was in the hand of both public and private sector. In the mid 1970s the next government came into power and new policy was formulated regarding jute industry. As
per the new policy several mills were disinvested and some were handed over to their Bangladeshi ex-owners with a view to encourage private sector. Now jute mills are working in both private and public sectors.

During Pakistan period (1947-1970), the jute industry had no separate ministry. The Pakistan Jute Board was the main government body responsible for designing and administering policies related to raw jute. Trade policies in both jute and jutegoods were the domain of the Ministry of Commerce and Industry. After the advent of Bangladesh (1971) Jute Board took the new name, Bangladesh Jute Board to carry out its previous functions and responsibilities.

The entire jute industry was nationalised in 1972 and Bangladesh Jute Mills Corporation (BJMC) was created for the purposes of:

1. control, supervision and coordination of the activities of the nationalised jute mills;
2. establishment and development of the industrial enterprises of jute sector;
3. earning much foreign exchange through the export of jute goods;
4. retain and if possible expand Bangladesh share of world market for the goods.
5. ensuring stable and remunerative prices to jute growers through its purchase policy;
6. helping to ease the unemployment problem being the largest source of industrial employment; and
7. remaining commercially viable so that it does not have to draw upon the scarce budgetary resources of the government.

BJMC came into existence initially with 67 nationalised mills. Ultimately with the subsequent nationalisation, placement or new construction, number of jute goods manufacturing units rose to 79 and non-jute units to 3 i.e. in total 82 units were under the control of BJMC.

Bangladesh jute industry had been facing a number of problems during two years immediately before the liberation of Bangladesh (1971). The mills were looted, jute godowns damaged, administration shattered, expertise lacking, spares missing, workforce disorganised, and above all, financial position was miserable. The situation deteriorated further in the post-liberation years for sales non-availability and shipment problems, huge loss of production due to uncontrollable reasons (e.g. power failure, strikes, social instability accompanied by deterioration of law and order situation) low efficiency
in general, and huge interest of borrowed long-term and short-term capital. All these adverse situations caused operational losses to the industry.

Following the change of regime in 1975 there was a significant policy change aiming to increase the size of the public sector and correspondingly expand the frontiers of the private sector by disinvesting a large number of jute mills to their Bangladeshi owners. As per the new policy, denationalisation and disinvestment started functioning from 1976 and is still in action. At present 37 mills being disinvested are in private sector leaving only 33 units for public sector. Private sector jute mills are being administered and controlled either by the owner-managers themselves or by Board of Directors as per joint stock Company Act 1913 as adopted by Bangladesh. Moreover, Bangladesh Jute Mills Association (BJMA) supervises and coordinates the different activities of its member units every now and then. On the other hand, private sector jute mills are being managed and controlled by BJMC, a government body.

As per statistics of 1987-88, out of 26,082 operable looms of the industry, BJMC and BJMA hold 15,808 and 10,274 looms respectively. Almost 90 per cent of total looms
in both the sectors are operating of which 60 per cent are being operated by BJMC.  

### 3.3 MARKET CHARACTERISTICS OF JUTE INDUSTRY

The market for jute is international in character. About 90 per cent of the jute and jute goods are sold in the overseas market and rest of the quantity is consumed in local market. Jute is used mostly as packaging materials and from the early days of jute industry its products are manufactured for, and sold in, the developed countries that produce a bulk of different kinds of industrial and agricultural products. Jute goods are used for packing voluminous produce for easy handling, protection, and transportation.

The USA, Australia, and EEC are the important markets for jute and jute products. Countries like Middle-East Countries, South-East Asia, and the rest of American countries are also importing jute and jute goods from Bangladesh. At present some developing countries are still purchasing huge quantity of jute and jute goods from Bangladesh.

Jute goods market can also be differentiated on the basis of different constructions of jute products.
Each of the construct maintains special segment of world market. Specifically carpet backing is better liked in the US and European market. Hessian and sacking items have general demand in almost all foreign markets.

Another important feature of the jute market is that, it is a duopoly market (i.e. Bangladesh and India are the two major players competing in the export markets).

Jute market, at present, suffers from substitution effect of synthetic products. During the last two decades a displacement of jute bags and sacks by modern methods of bulk handling and consumer packing is taking place. International major buyers are setting up synthetic packing materials manufacturing units in their countries which makes the present jute-market or buyer-market. Bangladesh jute industry has to depend on overseas market as its domestic market does not have a high potential.

3.3.1 Market Segmentation

Bangladesh jute industry's market could be classified on the following bases:

(a) International Vs Domestic market:

Bangladesh jute industry is essentially an export-oriented industry; the major portion of its annual output
is exported to international market. In this, it has to compete with India, Thailand, China and some European countries. A small portion of jute goods is consumed domestically.

(b) Raw jute Vs Jute goods market:

Another important basis of market segmentation is the nature of the products. Bangladesh exports both raw jute and jute goods. Bangladesh jute industry cannot consume total raw jute produced in the agricultural sector. About 50 per cent of its raw jute is exported and the remaining quantity is used by jute industry. Hence the industry has to deal with the marketing policies related to both raw jute and jute goods markets.

(c) Traditional Vs Non-traditional market:

The segmentation like traditional market and non-traditional market is of great significance in jute marketing. Uptil now, traditional market is playing a vital role with the production and distribution of traditional items of jute goods. This market deals with the products like Hessian, Sacking and Carpet backing cloth (CBC).

But some new products are being produced that have the capacity to meet the emerging demand of the market.
to compete with synthetic substitutes of traditional jute packaging materials in both domestic and international market. These new and diversified items are called non-traditional products and their market is known as non-traditional market. Traditional segment of Bangladesh jute goods market is wider than that of non-traditional market segment. Bangladesh jute industry sells non-traditional items of jute goods like various types of jute-made handicrafts, household decoratives, hand bags, school bags, products developed from jute and synthetic mix-yarn, etc. in the non-traditional market.

(d) Hessian, Sacking and Carpet backing market:

For the smooth conduct of marketing operation, Bangladesh jute industry again segmented the jute goods market giving importance on the size, shape, quality and use of the products as desired by the market. Accordingly, segmentation is done as hessian market, sacking market, carpet backing market and the like. Each of the segments has much significance while fixing prices, discounts, credits, etc. Separate marketing strategies are also adopted for the different market segments.

In the world jute market, some important buyers show equal interest with respect to purchasing all
categories of products but others show interest in purchasing only a particular category. As for example, the USSR market always demands hessian and sacking while US demands all of the items giving priority to carpet backing cloth.

3.3.2 Users and Their Characteristics

Bangladesh jute industry is dealing with two classes of users- users of raw jute and users of jute goods. As mentioned earlier, Bangladesh exports 50 per cent of raw jute to the foreign users. These users are of traditional character. European countries consume the major quantity of the raw jute exported from Bangladesh. Especially, "Dundese" jute industry in U.K. was, and still is, fully dependent on Bangladesh for supply of major quantity of raw materials. In fact, due to the restrictions imposed on Indian raw jute export, Bangladesh is enjoying more privileges in raw jute trade. The USA and Japan also import raw jute of Bangladesh to meet their jute industry's requirements. Once China and India are named in the users list. India is still importing raw jute from Bangladesh to feed its large industry, especially in the year of poor cultivation or in case of fulfilling special orders received from importing countries who intend to purchase
jute goods. Pakistan has recently started purchasing raw jute from Bangladesh.

So far, jute goods users and their characteristics are concerned, most of countries of world (excepting India, Thailand and Nepal) are using jute goods of Bangladesh. The countries that are using different categories of jute products are Australia, the USA, rest of the countries of America, USSR, centrally planned countries, EEC countries, rest of Europe, North Africa, East Africa, West Africa, Middle East, South-East Asia, Pakistan and other small user countries. As individual consumer, the USA and Australia are presently consuming about one fourth of the total export of Bangladesh. The USA's purchase is characterised by higher quantity of carpet backing item. More than 50 per cent of the total production of carpet backing is used by the USA. USSR and centrally planned countries are using insignificant quantity of Bangladeshi jute products.

Among the overseas users, hessian and sacking categories are more preferred to CBC and other jute products. Carpet and CBC are being mostly preferred by users like EEC countries, Middle, and South-East Asian countries. Of the developed countries Japan always remains inclined towards Bangladeshi products considering the
better quality of the same. Centrally planned countries, West Africa, and Pakistan are not using Bangladeshi carpet and carpet backing. They use or consume only hessian and sacking.

It is evident from the buying pattern and quantity of jute products of different overseas users that their demand is declining gradually. For instance, the USA consumed 19.8 per cent of total Bangladeshi export in 1983-84 which declined to 13.7 per cent in 1986-87. Same trend is also available in case of other users. The latest shift of this kind is nothing but the effect of synthetic substitutes that have flooded the market of packaging materials.

Of the domestic users, Bangladesh Government, is the largest user. Each year Government does require a good number of jute bags for packing food grains produced under procurement policy of the Ministry of Food. Besides, sugar, fertilizer and cement industry, use jute bags in packing their products. Thus the domestic users are increasing in number.

Non-traditional jute goods users bear peculiar character. Most of the users of domestic and international market belong to upper class of the society who these non-traditional items. The reason is that non-traditional items are mostly fancy and decorative goods.
3.3.3 Product and Their Demand Pattern

Bangladesh jute industry is producing, as mentioned in the preceding sub-section, both traditional and non-traditional items of products. Each of them has separate demand in the market. Some products are demanded in the internal market and others are demanded internationally. The list of traditional markets includes the products like hessian, sacking and carpet backing cloth and others. Of course, 'others' comprises cotton bagging, yarn, tape, mats, wall-cover etc.

Bangladesh jute products had their demand in both developed and developing countries. This situation in demand lasted till mid-1960s. After that the demand of jute items has started dwindling and a considerable change has been taken place in the jute market. In fact, the premier position of jute mills all over the world as a soft packaging medium has been gradually eroded over the last two decades. In industrialised countries, a fall in jute usage has been evident in almost all end uses. In several developed countries the failure to tide over the protracted recession in both floor covering and packaging industries has adversely affected the demand of jute. The difficulties have been compounded by severe competition from synthetic products.
Since the middle of 1980s, demand of hessian and sacking has been found to increase, to some extent, in developing countries while it was stagnant in the case of developed western economy and the USA as well. Studies show that, of the total demand of jute goods of overseas markets, hessian and sacking are now satisfying 80 per cent, CBC 19 per cent and remaining 1 per cent by carpet and other jute goods. As per the current shifts in demand from developed to developing countries, about 60-65 per cent hessian and sacking are being consumed by the developing countries of Africa, Middle East and some other countries. Especially, Africa and Middle East jointly account for more than 45 per cent because these two categories of jute goods still do not have to face competition from synthetic substitutes in these countries.6

With regard to carpet backing cloth, this product is demanded by the USA, Australia, EEC Countries and Japan. The USA alone consumes over 62 per cent of Bangladeshi carpet backing, Australia consumers 5 per cent, EEC countries about 16 per cent and the rest of the quantity is consumed by Middle East, Japan, African and rest of the American countries. USSR and other socialist countries do not show interest in purchasing carpet backing. Hence Bangladesh jute goods has no demand in these markets.
However, the demand of Bangladesh jute carpet is sure to increase day by day because of its qualitative superiority over jute carpets of its only competitor, India. No other country is still producing jute carpet. Apart from this, although synthetic carpet manufacturers are constantly engaged in research and development efforts to produce better quality products they have not yet been successful in gaining a competitive position with respect to jute carpet.

In the domestic market, demand for all kinds of traditional products was not good during the previous period. But, with the rapid growth and development of economy demand of hessian and sacking are increasing gradually. This raises hopes that, within a short span of time, different economic sectors would be able to consume a major portion of jute production and, thus to reduce jute industry's overdependence on foreign buyers.

3.3.4 Distribution Facilities

Separate distribution facilities are available in the case of jute and goods in both domestic and international markets. Many private and public business organisations, trade association, and international middlemen are involved in it and have developed a
distribution network that makes possible smooth sale or export of jute and jute goods from their growers and producers to the ultimate users.

**Raw jute distribution:** Jute growers are hardly in a position to have a direct sale to the buyers or users. Usually, jute moves from grower's level to its end user's level through several distribution channels. Distribution network followed by Bangladesh Public Sector or Government Sector in the overseas market could be exhibited as has been done in Exhibit 3.1.

**EXHIBIT 3.1**

**DISTRIBUTION CHANNEL OF JUTE IN OVERSEAS MARKET (PUBLIC/GOVERNMENT SECTOR)**

Bangladesh Jute Export Corporation (BJEC), Bangladesh Jute Trading Corporation (BJTC), and Bangladesh Jute Marketing Corporation (BJMC) are three important government undertakings distribution jute in the overseas market. They procure jute from growers through their appointed dealers and purchasing Centres and very often from private
trade-middlemen. The raw jute, thus procured is sent to the ultimate overseas buyers/users.

In the internal market, BJMC and BJMA are two important and ultimate buyers/users. BJMC collects jute through its more than 150 Centres spread over jute growing areas which are different from the Centres established by BJMC for raw jute export-trade purpose as stated earlier. Moreover, BJMC has 70 purchasing centres at different mill gates. BJMA purchases jute through various types of trade-middlemen for its member jute mill's consumption. The channels followed by private sector in both domestic and overseas market are quite different from those followed by public sector.

In the private sector, jute is distributed in the overseas market according to the distribution channel depicted in exhibit 3.2. There are trade-middlemen

EXHIBIT 3.2
DISTRIBUTION CHANNEL OF JUTE IN OVERSEAS MARKET (PRIVATELY)
like brokers (local and foreign), pucca balers, kutcha balers, dealers, agents, 'baparis', and 'arathdars'. The foreign brokers have their offices mostly at Narayanganj. (Narayanganj is a town where 'Adamjee Jute Mills' is located. This is the largest jute mills in Asia) help shippers in contacting the buyers abroad. The trade-middlemen collect jute from growers for their respective shippers for some commission or discount. Exporters/shippers are the last persons in the distribution channel who make the final disposition of raw jute to the ultimate buyers/users.

Private shippers/exporters have an association of their own, named as Bangladesh Jute Association (BJA). It aims at improving trading of both the internal and export-trade by coordinating the activities of individual trade units and pursuing concerted policy in the matter of local and overseas distribution.

**Jute goods distribution:** Like jute's distribution operation, jute goods are also distributed in both domestic and overseas market under various channels. In the overseas market, distribution takes place in the following way in the public sector mills (exhibit 3.3).
EXHIBIT 3.3

CHANNEL OF DISTRIBUTION OF JUTE GOODS IN OVERSEAS MARKET (PUBLIC SECTOR)

In the case of public sector, BJMC procures all production of its member units and sends to overseas market.

EXHIBIT 3.4

ALTERNATE CHANNEL OF DISTRIBUTION IN OVERSEAS MARKET (PRIVATELY)

Distribution of jute goods in the private sector can be undertaken following any one of the channel as shown in the exhibit 3.4. Jute products may be sold by the individual manufacturing units to the overseas market directly, or through middlemen to shippers or via BJMC.

In the domestic market, jute goods are distributed among different categories of private users either directly or through middlemen. But the public sector's requirements
are fulfilled by the BJMC with the help of its own products.

3.3.5 Pricing

Bangladesh jute industry has to maintain price policies separately for jute and jute goods in both domestic and international market.

**Pricing of raw jute:** Bangladesh has historically supported producer prices of jute fibre at the farm level through a system of statutory minimum prices (SMP). But the SMP pricing policy has been abolished by the Government since 1979-80 to cope with record stockpiling of jute fibre. At present growers' price is set in line with minimum export-prices for fibre to ensure jute farmers as remunerative price.

Prices of jute fibre at growers level fluctuate from year to year. Statistics shows that the growers level price was Taka 763 per bale (180 kgs) in 1977-78 which declined at Taka 564 in 1980-81 and further rose to Taka 2578 in 1984-85. The price level was quite satisfactory and it was due to the demand of the market. But in 1985-86 the amount again dropped to Taka 954. Since then, prices of raw jute accounts for TK 800- TK 850 per bale on average.
Government declares minimum export price for raw jute every year. But this price is for local market especially for the raw jute traders and shippers/exporters. In the international market this minimum price does not hold good. Export price of raw jute is determined in the market on the basis of demand and supply situation. Hence the export price level of raw jute is flexible and subject to changes. In the later part of 1970s this price level was on average TK 1150 per bale (180 kgs) and in the mid-1980s it rose up to TK 2700 which is the highest rate as yet. For the last three years the price level has been showing an average rate of TK 1450 per bale.

Pricing of jute goods: Every year Bangladesh government declares a minimum export price (MEP) for jute goods at the factory level on the basis of cost-plus pricing system after considering the different market factors. Both the public and private sectors of jute industry make their sale following the declaration of MEP. But supply and demand laws determine the price level in the export market. Bangladesh jute goods are always sold at a higher price in the export market because of their superior quality.

Last ten years price statistics show that the export prices of the traditional items of hessian (per hundred yard), sacking (per 100 kgs) and CBC (per tonne)
were US $ 20, 51 and 689 respectively in the year 1978-79. This level soared up in 1984-85 at a rate of US $ 27, 70 and 908 which receded to US $ 19, 54 and 729 respectively in the following year 1985-86. Since then the price level of the aforesaid items are seen to be more or less stable which is on an average US $ 17, 45 and 750 respectively. But it is noticeable that the prices of hessian and sacking are gradually decreasing while CBC price increasing to some extent. This is so because CBC is in a better demand and competitive position in the export-market of jute goods.

3.4 THE STATE OF COMPETITION

Bangladesh jute industry is facing acute competition from jute manufacturing countries as well as intense competition from substitute products especially in the international market. Competition within the industry's member units does not have strategic importance as units of both private and public sector are using same quality of raw jute available from same sources. Only there might be a slight difference in cost composition which is due to the quality of technology used by different jute mills. Besides, domestic market consumes a little quantity of jute goods and, therefore, market competition is hardly recognised.
3.4.1 The Major Players

In the domestic market some competition exist between private and public sector of the industry. In the overseas market there are a few competitors of which India is the traditional and main competitor. China, Thailand and Nepal are the newcomers in export market. But their role is not significant so far as competition is concerned. Bangladesh and India are the main exporter - competitors. The jute export market is therefore duoplistic as far as nature of competition is concerned.

3.4.2 Market Shares

During pre-independence period that is upto the later part of 1970s, Bangladesh held about 40 per cent of total export market of jute goods. In 1981-82 the exported quantity was 5.48 lakh tonnes that meant 44 per cent of the total world exports. This upswing trend went on and reached to over 51 per cent though the exportable quantity was 5.21 lakh tonnes in 1983-84. For the last four years, on an average, 5 lakh tonnes of jute goods are being sold which account for about 46 per cent market share. For instance, in 1987-88 out of world export of 10.5 lakh tonnes Bangladesh exported 5 lakh tonnes i.e 48 per cent share of the market. 10
3.4.3 The Major Suppliers

Fortunately, Bangladesh jute industry does not have to get supply of raw jute from outside countries. The quantity produced in agriculture sector is sufficient to meet the individual requirements. Bangladesh used to export about 50 per cent of its total yields each year after satisfying the industry's need. Of course, most of the quantity reaches from the growers to the factory level with the help of some middlemen and purchasing centres. Jute industry in Bangladesh never suffers from problems like shortage of raw materials.

3.4.4 The Major Buyers

The USA, Australia, EEC countries and Japan were, and still are, the major buyers of the industry. Since late 1970s, Africa and Middle East have become important buyers along with the traditional buyers from developed economies. At present, they are buying 46 per cent of the industry's total export and seems to be more prospective. Because there is no packaging materials industry as yet in these countries.

Of all the major buyer-countries, Africa never purchase CBC. All the three items are being purchased
by the major buyers in varying quantity. They also buy non-traditional categories of jute product to a greater extent.

In the domestic market, government/public sector is the major buyer. They make the purchases for packing cement, sugar, fertilizer and foodgrains either procured locally or received as foreign aid.

3.4.5 The Competitive Situation

Bangladesh jute industry had gained its competitive maturity in the later part of 1960s. Thereafter, it started sending jute goods in the world market where India had the monopoly up to mid-1970s. The competition between Bangladesh and India very often outweighed the later. But from mid-1970s onward the competitive position resulted in a sea change and it has become more tough, severe, and strategic.

It is worth mentioning that Bangladesh jute goods has been enjoying cost and price advantages over its Indian counterpart for the last few years. The international buyers consider the terms and conditions of trade more favourable and moreover, they deem the quality of products more suitable for their purpose. Besides,
according to ongoing marketing strategy, India has diverted its distribution of jute goods more to overseas than to domestic market.

The present marketing strategy of India may be thought to facilitate and help in increasing Bangladesh's share in export market. But, in fact, not only Bangladesh but China, Thailand and Nepal have also increased their market share at the cost of India. As a result, today Bangladesh has been facing competition from all of these new but strong competitors along with its old adversary, India. However, in CBC market segment a fierce competition is still seen to be confined between Bangladesh and India.

Most important aspect of competition is that from synthetic substitutes. Recently synthetic products are competing in every end uses of jute products. In addition, to manufacturing substitutes of hessian and sacking as packaging materials, synthetic industry is producing both primary and secondary synthetic carpet. Developed countries once using jute-made packaging materials are now establishing more synthetics manufacturing units.

The emergence of synthetics as substitute product resulted in the decline of Bangladesh's export both terms of volume as well as share in the world market. Hence the industry is in a deplorable condition. The synthetics
are gaining market acceptance in both domestic and overseas market showing their relative advantage over the jute products in consideration of price durability, and other qualities for the last two decades. But the competition effect is not very serious for Bangladesh as, at present, it could sell about half of hessian and sacking categories to African and Middle East markets where synthetics industry has not yet been set up.

Unlike hessian and sacking (packaging materials), Bangladesh jute carpet is in a better position than synthetic carpet because its demand is ever increasing. Even in the synthetics producing countries like the USA and other developed western countries jute-carpet is having bumper sales.

3.4.6 Export Market

Bangladesh exports 50 percent of jute fibre and 90 percent of jute goods out of the total production of each respectively. The export market for raw jute covers countries like the USA, Japan, US and other European developed countries besides India.

So far as jute goods export market is concerned, Bangladesh has historically garnered 25, 35, and 45 percent of the world jute goods market in the decades of
1960s, 1970s and 1980s (till 1988) respectively. It is evident from the figure that Bangladeshi export-market for jute goods shows an upward trend. The trend is also seen in case of value and quantity-wise analysis of the last ten years export market's performance.

The export earnings have increased from TK. 384 crores in 1977-78 to TK 1089 crores in 1984-85. Thereafter, an average quantity of 5 lakh tonnes was exported, earning TK. 930 crores for the last few years. An equal amount of export earning is also likely in the period 1988-89.

Individual country and region-wise major export market of Bangladesh jute industry are the USA (14 per cent), Australia (4 per cent), Japan (3 per cent), Africa (23 per cent), Middle East (23 per cent), EEC (15 per cent) and the USSR (5 per cent). The small export-markets are the rest of America (3 per cent) centrally planned countries (2 per cent), Pakistan (2 per cent), the rest of Europe (0.39 per cent) and rest of the world (5.61 per cent).

Of the different markets, at present, Africa and Middle East countries are the most important and prospective customers. African countries purchases includes hessian and sacking except carpet backing. Middle East countries take all of the items including jute carpet
which is more preferable. Bangladesh jute carpet is marketed mostly in the U.S.A., Australia, Japan and Western countries. USSR and other centrally planned countries purchase small quantity of hessian and sacking. Non-traditional goods have overseas market, especially, in developed countries.

3.5 TECHNOLOGICAL DEVELOPMENT

Bangladesh jute industry is using modern technology because most of its jute kills were established in the period between late 1960s and mid 1980s. But to cope with the latest changes in manufacturing process of jute textile, it has undertaken some research and development work to imbibe newer and sophisticated technology. Bangladesh Jute Research Institute (BJRI) has been set up under the supervision of Bangladesh Ministry of Jute to perform the task of research and development both at growers and industry level. BJRI has three wings named as under: 13

1. Agriculture Research wing (ARW);
2. Technological Research wing (TRW); and
3. Jute Seed Production (JSP)

1. Agriculture Research Wing (ARW) deal with the production of jute fibre. It tries to improve methods and techniques to prepare land, sow seeds, attend weeding,
retting, extraction of fibre, storage of fibre, preparation of fibre for marketing, transport etc. ARW has a laboratory where jute scientists and experts are conducting research on these aspects of jute production.

2. Technological Research Wing (TRW) is involved in the work of processing of raw jute for conversion to manifold jute yarns. Sometimes it takes the service of BCSIR (Bangladesh Council for Scientific and Industrial Research) laboratory to develop jute blended textile fibre for producing diversified jute products with the quality to satisfy new demands of the market.

3. Jute Seed Production (JSP) tried to find out high-yielding variety of jute seeds through cross fertilization and other similar projects.

BJRI's technological research wing has not yet reached a level where it could provide all sorts of technological assistance to the jute manufacturing units. Most of the time the industry has to import machineries and spare parts from other industrially developed countries including its counterpart, India. Other research wings of BJRI are successful in their respective fields.
3.5.1 Research and Development

Due to change in demand, emergence of competing substitutes, introduction of new technology, imposition of new trade rules and severe competition in the export market, Bangladesh jute industry has undertaken research and development programmes on different aspects. At present research work is being carried on the following fields:

1. Spinning and testing techniques including the spinning of samples of fibres obtained from the Jute Agricultural Research Laboratory. The object is to assess or compare the relative spinning quality.

2. Spinning fine yarn for new and extended uses.

3. The investigation regarding the relation between the physical and chemical characteristics of fibres and its spinning quality, the main objective being to ascertain or compare the fineness of the fibre.

4. Testing of other fibres which are likely to compete with jute and their spinning machinery.

5. Dyeing of jute fibre and fabrics.

6. Testing jute in combination with other fibres for the production of textiles.
7. Testing jute stick for industrial uses.

Jute scientists and researcher have so far developed jute blended diversified products like 'juton' and 'Patwool'. There are printed screen materials in the domestic market which are also a research product.

International organisation like UNDP, World Bank, FAO are conducting and financing research projects for developing newer variety of jute and jute goods in Bangladesh International Jute Organisation (IJO), whose Head Office is in Dhaka, Bangladesh is also pioneering some research project.

Bangladesh Ministry of Jute, Bangladesh Institute of Development Studies (BIDS), Universities and some other institutions are also conducting research on different aspects of jute industry's management such as strategic management, market, finance, price, labour-management relations, productivity and the like.

3.6 PROSPECTS OF BANGLADESH JUTE INDUSTRY

Despite submerged in innumerable problems responsible for its present ailing condition, Bangladesh Jute Industry could have a brighter prospect. The industry has some inherent and natural advantages over and above
its competitors in terms of both fibre and products.

Bangladesh produces the best quality products hessian, sacking and CBC with finest and longest smooth fibre which attracts a better demand in the world export market, when compared with other competing products. The price of raw jute and conversion cost of Bangladesh jute goods is comparatively lower. Hence it could be easily sold at a lower price without affecting profit margin.

Moreover, India's mandatory use of jute packaging materials Act 1987 has resulted in the shrinkage of its export quantities. As a result Bangladesh jute industry would be facing lesser competition in the export markets.

To avoid much dependence of the developed countries where synthetics have flooded the packaging material market, Bangladesh would have the alternative market of Africa and Middle East which are expanding markets. Having no synthetics manufacturing industry of their own, they are consuming about half of the exportable volume.

Bangladesh's domestic market of jute goods is expanding gradually with the economic growth of the countries. Various policy measures have been taken by the government to produce newer varieties of non-traditional item having capacity to create and meet new demand
in the market. All these factors signify that Bangladesh jute industry is more prospective though at the same time it seems to be vulnerable to competition from synthetic packaging materials if compared with its past performance.
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CHAPTER - IV

PROFILE OF JUTE INDUSTRY IN INDIA

In the first chapter of this dissertation the historical background of the jute industry in global perspective has been described. Evolution and growth of Indian jute industry has also been traced out there to some extent. This chapter deals with the different aspects of jute industry in India rather than its past history. Of course, attention has been given to recent development characterised by some significant structural changes that the jute industry is currently undergoing.

Indian jute industry, one of the oldest and the largest foreign exchange earner for the economy, is passing through a crisis which is quite serious in nature. Especially, jute fibre is a major crop for the cultivators of West Bengal and jute provides livelihood to a large number of people of this state. Depending on the availability of raw jute, Indian jute industry has been localised in and around Calcutta, the capital city of West Bengal. Hence, West Bengal's economy is critically dependent on jute industry. In other words, jute is one of the largest pillars on which rests the edifice of West Bengal's economy, and its collapse would bring down the entire structure\(^1\).
Since several decades, Indian jute industry has had a positive image in business world, and it could easily attract the attention of big business houses and entrepreneurs. Accordingly, it once launched the Birlas, Kanorias, Goenkas and many more on the high road to riches. But it is disheartening that people have been writing critically about the industry, believing that it is dying. Rising competition, dipping profits, assertive labour, growing sickness, mismanagement and fraud, have all contributed to a downswing in its fortune.\textsuperscript{2}

Over the past thirty five years or so, the jute industry in India has gone through various vicissitudes in respect of production, consumption and exports. Presently caught between the steady declining prices of jute goods, rising inventories of some items, jumping input cost on the one hand, and shrinking demand on the other, the Indian jute industry is on the verge of becoming sick.\textsuperscript{3} The industry is facing competition both globally and locally either from substitute products or from other manufacturing countries. Keeping all these in mind, this chapter has been devoted to dissection and analysis of factors that are crucial for "assessing industry attractiveness"\textsuperscript{4}. 
4.1 NATURE OF INDIAN JUTE INDUSTRY

The growth of jute, "golden fibre", is a fascinating chapter in the history of organised industry in India. Its contribution to the building up of India's largest foreign exchange earning industry and an important packaging material throughout the world has been one of the India's ancient industries. The most important feature of jute industry is that it is traditionally agro-based. Hence the industry's success depends on the supply position of raw jute produced by the farmers in the agriculture sector. Farmers grow jute only with a view to sell it to the industrial sector because raw jute is grown for commercial purpose.

Jute is also predominantly a crop of small farmers and tenant cultivators. The production of jute is crippled by the typical hazards and constraints of small-scale farming in a quasi-feudal rural economy that thwarts growth. On the other hand, a large portion of the tract in India being rainfed remains vulnerable to uncertain weather conditions. In India, despite these odds, nearly 20 lakh acres of land are devoted to jute cultivation, and presently the production is around 80 lakh bales (about 14.5 lakh tones) valued at Rs. 450 crores. More production and regular supply of raw jute thus helps in the smooth
running of jute industry.

The importance of Indian jute industry for its economy is highlighted by the fact that the industry still employs about 2.5 lakh workers and supports 40 lakh farmers. This industry has a history of over 134 years and has been operating mainly in the eastern region which constitutes Bengal Delta that is endowed with liberal supplies of water for cultivating and retting operation of raw jute.

Another feature of jute industry is that its production is more labour-intensive than capital-intensive and thus could easily afford employment for a good number of workers and employees. At present, Indian jute industry employs about 2.5 lakh workers and supports 40 lakh farmers. Besides, many people are either doing job in different organisations dealing with jute-related business or doing business of jute goods personally. These people are also deriving their livelihood directly or indirectly at the cost of jute industry.

Indian jute industry was highly export-oriented in its early era. Today, it has changed its strategy and is now more oriented towards domestic market. In its gradual growth in production, jute industry is showing
rise in production volume of about 13.84 lakh tonnes in 1987-88 from about 10.51 lakh tonnes in 1947-48. The sixth five year plan (1980-85) target for jute industry was placed at 15 lakh tonnes of which 9.5 lakh tonnes were to be consumed domestically and 5.5 lakh tonnes were to be exported. While the actual achievement in 1984-85 is estimated at 13.68 lakh tonnes of which 10.5 lakh tonnes were consumed in domestic sector and 3.18 lakh tonnes were exported. This means that though the target was not achieved, domestic consumption had increased showing a decrease in export-target. This trend in jute goods use will be discussed later in detail.

Now, in the seventh five year plan (1985-90), the demand of jute goods is estimated at 16.25 lakh tonnes for the year 1989-90. Where domestic consumption is estimated at 13.55 lakh tonnes; export has been projected to be at 2.7 lakh tonnes. Whereas the target of the combined jute-fibre and mesta crop for 1988-89 period is estimated at 70 lakh bales against 65 lakh bales during last year (1987-88).

Indian jute industry was the producer of traditional jute products. Currently, it is producing both traditional as well as non-traditional items. The products like hessian, sacking and carpet backing cloth (CBC) are being
treated as traditional items. Out of total production of nearly 14 lakh tonnes, non-traditional items constitute an insignificant share of 0.2 per cent.  

Of the different jute goods, 70 per cent products are marketed in domestic market and the rest of the quantity is exported. This increase of offtake in domestic market is characterised by hessian and sacking. They are used for handling food grains, fertilizers, sugar, cement and other industrial and agriculture products. Only carpet backing cloth, being popular in the export market, is sold more in the overseas market.  

4.2 STRUCTURAL CHANGES IN INDIAN JUTE INDUSTRY  

Today jute industry is not yielding much profit as it was in the past. But still its share in foreign exchange earning is quite remarkable. A few decades ago, Indian jute goods constituted about 23 per cent of the country's total export earnings. This period continued upto mid-fifties. Then a decline set in, and during the current decade the margin of foreign exchange earning from export has dwindled to a meagre 2.9 per cent of total exports. Annual turnover of the industry on an average, is about Rs.500 crores while the capital investment is about Rs. 30 crores. The total production capacity of
the industry, on an average, is 1.30 lakh tonnes whereas it produces 1.21 lakh tonnes i.e. 85 per cent (as shown in table 4.1) of the total capacity of being utilized. Indian jute mills consume about 76.2 lakh bales of raw jute.9

TABLE 4.1
INSTALLED CAPACITY AND CAPACITY UTILISED IN JUTE INDUSTRY

<table>
<thead>
<tr>
<th>Year</th>
<th>Installed capacity (million tonnes)</th>
<th>Production (million tonnes)</th>
<th>Capacity utilised (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>1.65</td>
<td>1.38</td>
<td>84</td>
</tr>
<tr>
<td>1982</td>
<td>1.58</td>
<td>1.29</td>
<td>82</td>
</tr>
<tr>
<td>1983</td>
<td>1.46</td>
<td>1.33</td>
<td>91</td>
</tr>
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<td>1984</td>
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</tr>
<tr>
<td>1987</td>
<td>1.22</td>
<td>1.04</td>
<td>85</td>
</tr>
</tbody>
</table>


4.2.1 The Phases of Growth

It is now widely debated whether the Indian jute industry is a sunset industry in India. "It has certainly lost its glory over the years from a position of leading
earners of exports to one which needs frequent government intervention to keep it alive".10

The growth of Indian jute industry could briefly be summarised and described under five milestones as under:

1. **Introduction (1855)** - The birth of Indian jute industry with the establishment of the first jute mill in India.

2. **Growth (1855-1950)** - Number of jute mills increased upto 106, looms upto about 66 thousand, and spindles upto about 1295 thousands.

3. **Maturity (1951-65)** - During post independence period "Grow more jute" programme launched to face the serious problems owing to shortage of raw jute supply. Governmental effective measures successfully achieved the level of self-sufficiency within seven years. Number of jute mills rose to 112. Jute industry was flourishing and earning huge amount of foreign exchange through exports during this period. With the profitability of exports and no difficulty in disposing the balance of output in international market, many companies were able to declare dividends and implement modernisation schemes to some extent.
4. Decline (1966-1980) - Having turned the corner in raw jute, yet another challenge was loss of export market to synthetics mostly during this period. Bangladesh emerged in the global market with its quality products and well equipped with newly installed sophisticated machinery. This has become a threat in world market. Besides importing countries like USA, Japan and all European countries started producing synthetics as a substitute for packing commodities. Consumption pattern changed from overseas markets to domestic markets. Lock-out and closures were followed by some sick mills. Some mills added new lines of production with their jute mills only to survive in the face of ensuing distressed condition. Labour-management relation deteriorated followed by strikes, hartal, and other detrimental trade-union activities.

5. 1981 Onwards till date - During this period a series of losses have taken place due to the inroad of synthetics in packaging. Besides, the industry has been facing an uneven competition from two more new competitors and traditional old competitors. The two new competitors - Thailand and China, are rising in the global market as they enjoy advantages in production of raw jute and jute goods at a much lower cost in comparison with India.
4.2.2 Current Position of The Industry

At present Indian jute industry consists of 67 operating units mostly located in and around Calcutta.12 Number of jute mill companies in operation are localised in West Bengal (54); Andhra Pradesh (4); Bihar (3); Uttar Pradesh (3); Madhya Pradesh (1); Assam (1) and Orissa (1). The number of operating units are fluctuating because of frequent closures owing to sickness, strikes, lock-outs and shortage of raw materials. The operating units include 6 units which were nationalised under the provision of Jute Companies (Nationalisation) Act 1980, to secure the proper management of such undertakings in order to survive the interest of the general public, ensuring the continued manufacturing and distribution of articles made of jute which are essential to the needs of the economy of the country. The rest of the units are in the private sector. The 6 jute mill companies which have been nationalised are:

1. Alexander Jute Mills Limited (Calcutta);
2. Union Jute Company Limited (Calcutta);
3. Kinnison Jute Mills Limited (Calcutta);
4. National Jute Manufactures Corporation Limited (Calcutta);
5. Khardah Company Limited (Calcutta); and
There are some jute mill companies producing only jute products while a few are engaged in producing other goods in addition to jute products. Six companies are engaged in the production of only jute goods like gunnies, carpet backing cloth, twines and other related items. The conglomerates of the jute industry have fared better than those depending entirely on jute manufactures. Also the total profitability was affected by the continuous loss of the jute division even with greater ability of the conglomerates to implement modernisation scheme. These units can of course, hope to salvage their jute mills if there were prospects of better future.

4.3 MARKET CHARACTERISTICS OF JUTE INDUSTRY

The markets for jute industry are directly dependent on the production volume of agricultural food grains, cement, sugar, fertilizer, and other consumable and industrial goods which are to be packed for easy transportation, protection, and handling. Jute goods are marketed in both overseas and domestic markets. Earlier 75 per cent of the total produce were consumed by the overseas consumers from developed world. Especially, the USA, USSR, Japan, Netherland, Australia, and EEC countries are the main importers topping the list of overseas market's consumer. Besides, some developing nations of
Africa and Asia are also purchasing jute goods from India.

Jute industry's foreign market had a high level of trade transactions, profit and foreign exchange earnings upto mid-sixties. But with the advent of synthetic substitute as packaging materials, a structural change affected the markets of jute goods' monopoly in packaging material production and distribution. As a result, markets for jute products started shrinking in international market that resulted in the change of marketing strategies of jute industry. Due to the gradual decline in foreign markets, Indian jute industry has adopted the policy of giving more emphasis on domestic market rather than overseas markets.

Realising present market trend and competitive position in overseas markets, in light of both substitute products, importer's attitude, and competing jute goods producing countries, some policy measures have been undertaken at both government as well as industry levels. In the interest of the industry and, moreover, to ensure a widespread domestic market, Government of India has enacted a legislation called the "Jute Packaging Materials (compulsory use in packing commodities) Act, 1987", under which 100 per cent of food grains, 100 per cent of sugar,
50 per cent of urea fertilizer and 70 per cent of cement are mandatory to be packed by jute packaging materials. This act is intended to help domestic market to become more controlled and strong in order to keep the jute industry running smoothly.

4.3.1 Market Segmentation

Market segmentation, "is the division of the market into those subgroups which has special market needs and preferences and which present sufficient pockets of demand to justify separate marketing strategy". But on the basis of the definition the market of the jute industry is very difficult to classify. No basic changes are found in the market structure as the jute products are basically meant for packaging goods. However, considering different characteristics like quality, geography, application and use, jute industry's market can be categorised, as shown in Chart 4.1.

CHART 4.1
MARKET SEGMENTATION IN JUTE INDUSTRY

<table>
<thead>
<tr>
<th>Basis for classification</th>
<th>Segmentation/Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Quality of Products</td>
<td>Hessian market, sacking market, Secondary carpet cloth (CBC) market. Primary CBC market.</td>
</tr>
<tr>
<td>B. Geographical location</td>
<td>International and Domestic market.</td>
</tr>
<tr>
<td>C. Application and use</td>
<td>Industrial users and consumer market.</td>
</tr>
<tr>
<td>D. Nature of the product</td>
<td>Traditional and non-traditional market.</td>
</tr>
</tbody>
</table>
4.3.2 Users and Their Characteristics

Of the international and domestic market segments the users of international segment are very much sensitive to factors like price, quality, freight rate, fiscal policies and credit facilities. Any normal and favourable measure in overseas marketing policy could easily attract the user of this segment. International buyers also differ in placing orders for traditional items. In the USA, demand and hessian and other jute goods (except carpet backing) has been declining while the demand for carpet backing clothes is still in upswing trend. Even the development of textile secondary including bond and vinyl floor coverings, could not divert this trend of the market of jute carpet backing in USA.

In the Western Europe, the market for secondary textile backing including bonded vinyl floor coverings is not yet developed upto the standard of the USA. The scope for jute goods to be sold in the European market is therefore quite good. The technical advantage of jute secondary are considerable, and even limited marketing efforts could raise the demand significantly in the European market.

Indian jute goods market in Japan is in down-swing trend as per current trade statistics. This trend might
be due to the use of substitute products like paper and PP bags for packing rice and other foodgrains.

The USSR, now, is the prestigious customer exclusively of Indian hessian and sacking products. This market is permanent and regular for Indian industry's exports. Most recently it has also shown an encouraging interest in buying non-traditional item alongwith regularly purchased traditional items. This sort of order is an additional achievement for Indian industry that would give an extra advantage in the USSR market. Moreover, USSR is likely to purchase 50 per cent of India's total exports in this year (1989-90).

So far as low-income jute-using regions are concerned, Africa and Middle East countries are using Indian hessian and sacking though their demand trends fluctuates year-to-year which often creates ambiguity in overseas market forecast. Users of Latin America, and West Asia also prefer Indian jute goods but their total consumption is not significant.

Most of the Indian domestic uses of jute goods are under compulsion to use jute bags according to the Mandatory Jute Packaging Materials Act, 1987. But there are some objections raised by cement and fertilizer
industries against the Mandatory Act. Even the Indian Institute of Packaging has estimated cement loss due to packaging in jute bags. There are several other studies at hand which are indicative of similar loss. The fertilizer manufacturers find PP bags better for packing purpose rather than jute bags. They claim that in using PP bags, the quantity deterioration chance could be avoided and the bags could be stored safely even under incongenial condition.

The capacity of domestic market, particularly, is expanding and it should be possible to secure a definite growth in the offtake of jute goods in the rising output of food grains, fertilizers, cement and sugar. But only in respect of sugar and food grain gunnies are still being utilised while better alternative packaging materials are being extensively used for packing cement and fertilizers. The use of jute bags for packing cement was not generally favoured in 1987-88 as there is a considerable loss of material through spillage, lump formation and quality also got deteriorated under humid condition.

In the domestic market, the use of non-traditional shopping hand bags is being eroded by polyethylene bags. Some fancy jute goods like purse, school bags, vanity bags etc., are of increasing demand among the school-
going children, women, and overseas tourists. Besides, newer and more diversified traditional and non-traditional items are under active consideration of the industry to create both internal and international market share in the future.

4.3.3 Products and Their Demand Pattern

Jute industry of India is producing both traditional and non-traditional categories of jute products. But its traditional items are more prominent. Basically hessian, sacking and carpet backing are the three important constructs which have international as well as indigenous demand. From the introduction to maturity stage of mid-sixties, the demand pattern was international in character as most of the jute products at that time, were sent to overseas market to satisfy the demand of foreign customers. But after mid-sixties demand pattern changed from that of a global market to domestic market.

The level of economic activity in jute-using sectors determine its demand in the home market. Same is the case with overseas market demand also. Therefore, demand of jute products is a derived demand in nature. Demand for hessian and sacking depends on the production in various sectors of national economy such as agriculture
and industrial sectors of cement, sugar and fertilizer industry. Demand for carpet backing may depend on building construction, and demand for other goods depends on household incomes. The GDP (gross domestic product) reflects these economic activities. Demand for jute goods may further be affected by technological change. Techniques of bulk handling eliminate demand for containers, particularly of sacking bags.

Indian jute industry depends on the overall requirements for jute products in the world market. But it is further affected by its own export price in the world market in relation to price fixed by other competing countries. Price of polypropylene, being a substitute products in the overseas market, badly affects the global market demand of jute products. Besides, importing countries' world gross product index is the best determinant of jute goods demand in the same countries. 16

Recently it has been noticed that India's pattern of jute goods exports has gone a sea change. In the year 1955-56 hessian accounted for nearly 45 per cent, sacking constituted nearly 50 per cent, carpet backing 1.2 per cent and other jute goods accounted for 3.8 per cent of the total exports. In 1984-85 these items constituted 55, 10.2, 27 and 7.8 per cent respectively. That means, between
1955-56, and 1984-85 the share of sacking declined by 40.8 per cent, while share of hessian, carpet backing and other goods went up by 10.0, 25.8 and 4 per cent respectively.17

Quantitatively, in the international market jute goods demand has dropped from 5.21 lakh tonnes in 1980-81 to about 2.40 lakh tonnes in 1987-88. Demand of carpet backing dropped sharply to 33,700 tonnes from about 1.37 lakh tonnes in the same period. Value-wise export earnings have remained more or less steady at about Rs. 230 crores, bulk of it coming from hessian and carpet backing.

According to Indian Jute Manufacturers Association (IJMA), internal consumption of jute goods has gone up from about 7.4 lakh tonnes in 1976-77 to a peak of 10 lakh tonnes in 1985-86 before declining to 9.57 lakh tonnes in 1987-88. According to Mr. Bharat Jalan of IJMA the jute industry had anticipated an upswing in domestic demand for jute goods in the years to come. Different measures have already been taken by the government in this regard. Now the industry is concentrating on exports of higher-value products as it has been priced out in lower and middle segment of the global market.18

The demand for jute goods projected in the seventh five year plan (1985-90) for its last fiscal year (1989-90)
is at 16.25 lakh tonnes while domestic and overseas market demand is projected at 13.55 lakh and 2.7 lakh tonnes respectively.

4.3.4 Distribution Facilities

A wide distribution network is maintained by the jute industry for effective marketing of its products in both internal and international markets. Sometimes the individual jute mills, in case of private sector, make direct exports to the overseas buyers. There are exporters/shippers who handle the maximum export trade. They procure licences from the government for conducting export business. Again exporters/shippers appoint some dealers and agents. These persons are responsible for collecting jute goods from the doorstep of different jute mills for the exporters. There are also some foreign agents, having their offices at Calcutta, conducting jute goods export trade. On the other hand, IJMA supplies different types of information with regard to international and domestic market to its member units and very often it takes active part in export business as well.

Exporters/shippers and foreign agents deal only with jute goods in private sector's produce. But public
sector's distribution and supply of jute goods in the foreign market are vested in the hand of National Jute Mills Corporation (NJMC) and State Trading Corporation (STC) jointly. Some consortium of jute mills led by the STC often operate the foreign export order jointly with other authorities like NJMC, private jute mills and members of Calcutta Jute Fabric Shippers Association. Normally, NJMC units share 20 per cent of the global business through STC-mills consortium.19

In the domestic market mandatory users get their supply of jute bags from Directorate General of Supplies and Disposals (DGS & D). DGS & D, a supply department of the Ministry of Commerce, collects together the required quantity of jute bags, from different jute mills. It is the monopoly buyer in the domestic market. It lifts almost 40 per cent of the bags manufactured in the country and distributes the stock, among the statutory users and other government agencies. Another study reveals that DGS & D purchases jute bags to the extent of 2 lakhs annually which accounts for 25 per cent of the total production of 8 lakh bags in a normal year.20

Jute goods like gunny bags, sacks etc. are directly distributed by the Indian jute manufactures to the buyers
or consumers of other segments of the domestic market. But in case of jute carpet and some non-traditional items like household decoratives, school bags etc., the producers usually make sale through trade-middlemen. At this time, thinking over the importance of distribution channel mainly in the importance of distribution channel mainly in the international market, Government of India has been trying to redress and formulate a new distribution policy.

4.3.5 Pricing

Price is an important parameter very much sensitive to raw jute suppliers, jute goods manufacturers, customers and users of both home and foreign markets. Indian jute industry's price policies should be viewed in two different ways - price policies for raw jute and price policy for jute products.

There are some factors that influence the price policies of jute goods. Particularly, the movement in raw jute prices affects the price level of jute manufacturers over the long term, the raw jute cost being the major ingredients in the cost structure of jute goods. The raw jute price comprises 40 per cent of the cost of conversion of raw jute into final jute products.21
Price level of jute industry is responsive towards the price level of synthetic substitute products in the market. Consumers/users' decision is very much influenced by the price factor when they are taken in the context of a competitive market. Rate of excise and sales tax, freight and port charges effects are also considerable factors in taking pricing decision for jute goods products.

**Minimum Support Price (MSP) for Raw Jute:** Every year Government fixes a minimum support price for raw jute. Most recently Government has declared an increased rate of support price policy and it has been welcomed by all sections as it would encourage production of jute crop among the growers. The minimum support price for the basic variety of raw jute; TD-5 grade, has been fixed at Rs.280 a quintal for 1989-90 against Rs. 262.50 quintal for 1988-89.

Making a statement in Lok Sabha on 16th March, 1989, the ex-Agriculture Minister, Mr. Bhajan Lal, said the variety for fixation of minimum support price for raw jute had been changed from W-5 to TD-5 grade, the early sown oliterious jute, in Assam because of the wider adoption of the TD-5 grade. The minister said that it had also been decided to increase the price differential
between TD-5 and W-5 grades of raw jute to Rs. 15 per quintal as against Rs. 12.50 a quintal in the previous session (1988-89). The corresponding prices for other grades of capsularies jute would be fixed by the jute commission in the light of normal market price differentials.\(^\text{22}\)

There is an expectation that increase in MSP would encourage farmers to boost production. Previously this type of price policy was statutory in kind and therefore, called statutory minimum price.

**Pricing of Jute Goods:** The prices of jute goods are determined by forces of demand and supply as well as by direct government intervention. On the demand side, there are domestic and international markets. The statutory measures are invoked to control the prices of principal categories of sacking viz H-Twill and DW flour bags as large quantities of these items are bought on public account every year.

Jute goods prices in the domestic market are quoted by the Gunny Trade Association (GTA) in the home market. The GTA quotations are treated as sacrosanct by all Government agencies like DGS&D.\(^\text{23}\) Even NJMC, which is a conglomerate of public sector jute mills, as per
rules, is not allowed to sell its production at a price lower than the GTA quotation. The formula for quoting price of jute goods by GTA is the average prices of previous months, or the date of the actual placing of orders plus 5 per cent which is called cost-plus pricing policy. Other than sacking grades, non-traditional items are priced by the traders of jute goods at the customer level depending on the demand and supply situation of the market. There is no organised mechanism in pricing these products.

Pricing policy followed for jute goods in the overseas market is a bit different. Each year Government fixes a price rate considering different aspects of international market segment. Exporters' interests are also kept in mind while formulation of price policy by the Government. Of course, demand and supply of jute goods is the prime mechanism followed in pricing jute goods for overseas market. Since late 1960s, Government of India was practising a price policy for overseas market which is known as Minimum Export Price (MEP) policy. The rationale of minimum price scheme is that in the absence of floor prices there would be wasteful competition among exporters leading to undesirable fall in export price. The MEP were ostensibly fixed after considering market demand, price of the competitive products and domestic
cost of production, and aimed also to check under-invoicing of exports. Current MEP data is not included here since the rate varies very frequently.

4.3.6 Promotional Activities

Different types of promotional policy measures are launched by jute industry of India in different segments of market with a view to ensuring adequate marketing communication. Among notable instances of state participation in market-promotion of jute goods in the overseas market are:

(i) Joint Government-industry delegation visiting different jute importing countries for studying market condition and demand structure in these countries and recommending measures for market improvement;

(ii) Participation by Jute Manufacture Development Council (JMDC) in international fairs and exhibitions;

(iii) Assessing the export prospects of Indian jute textile in different importing countries, both developed and developing, through specialised studies by individuals or institutions often with assistance from international agencies, such as ITC, Commonwealth Fund for Technical Cooperation, and the European Economic Commission (EEC).
There are a number of agencies, such as Trade Development Authority, the Trade Fair Authority, the Indian Institute of Foreign Trade and IJMA, which are engaged in promotional activities, each organisation largely in an independent manner, and sometimes even at cross-purposes.

The JMDC has undertaken a few programmes regarding promotion of jute items in the domestic market. These are as under:

1. holding of exhibitions on jute decorative cloth and packaging materials in big cities;
2. stocking of jute decorative cloth with large retail and wholesale dealers in such cities; and
3. sponsoring of specialised studies on jute versus synthetics at individual industry as also micro-levels and national seminars on the issue.

As a promotional device JMDC has most recently published a quarterly news letter "Jute News". This news letter has been devised to provide the industry and its customers a quarterly update on news and events as well as to supply vivid information on market trend and policy decisions. The JMDC Secretary Mr. A.K. Biswas said JMDC had been extending $ 10,000 per annum to the USA jute carpet backing council to counter the synthetic lobby through advertisements in American trade publication.
Internal Marketing Assistance and External Marketing Assistance Schemes are two promotional policies adopted by the industry for accelerating domestic and international market respectively. Some other promotional measures are being thought of to popularize the non-traditional diversified products (so far developed by the jute industry) among different sections of indigenous and foreign customers/users.

4.4 THE STATE OF COMPETITION

Dundee (England) based European jute industry was the main competitor of Indian jute industry during nineteenth century. In 1920s jute industry of India had become the owner of about 106 units of jute mills and started utilising most of the indigenous favourable production ingredients and thus within a short span of time it has become a monopoly supplier of jute goods in global marketing beating Dundee based European exporters. Its monopolistic character continued upto 1950-51. Since then one more competitor i.e. East Pakistan (now Bangladesh) came onto the scene of export market with its modern machine produced quality jute products.

Before the birth of Bangladesh, Indian jute industry had to face a very fierce competition from Pakistan jute
industry. The global market was shared by these two competitors, more or less equally, with a slight dominance of one over another. Immediately after 1971, Indian industry occupied a better position and this lasted up to mid-seventies. From that period onwards it again faced a competitive situation in the world market vis-a-vis its traditional counterpart, Bangladesh.

Recently, Indian jute industry suffers from high cost production particularly when compared with main competitors namely Bangladesh, China and Thailand.

In domestic market no competition is seen between or among the industry units, but jute industry has been facing competition from synthetic and paper made substitutes of which synthetic products is the recent threat to jute products. From latest information available it is learnt that Indian synthetic industry has become stronger having at present 400 HDPE/PP manufacturing units with an investment of Rs. 400 crores. In the global export market, same type of competition is also being confronted by Indian jute goods from synthetic products.

In this era of competition, Indian jute goods are subjected to price wars. Polypropylene (PP) is a by-product of crude petroleum oil. But interestingly oil price hike
only slightly affects the price level of PP and other synthetic products. PP - hessian was always considered to have a greater advantage relating to prices if compared with jute hessian. As regards primary and secondary carpet backing, however, the relative competitive status of jute and synthetic products has varied from year to year.

Since 1973, the competitive position of the jute carpet had, generally, been better than that of synthetic-carpet. The price of lighter CBC have ruled substantially lower than those of synthetic carpet backing. But very often Indian industry failed to maintain this advantage over synthetic substitute because of the inter-year irregularity in supply of jute goods in export market.

Indian jute goods have some sort of supremacy over some market segments where it could easily beat synthetic products. To safeguard such supremacy Indian jute industry alternatively undertakes aggressive marketing policy and capturing its desired segments in the global market. In USA, CBC market is in an advantageous position as the Indian exporters have launched various promotion activities for capturing and retaining the same market.25

At this moment, jute CBC is competitive price-wise vis-a-vis its synthetic substitutes. While landed price
of CBC of India in the USA is 66 per cent linear yard of 5.50 oz cloth (registration price 47.5 per cent), that for synthetic backing is being quoted around 72 per cent with a discount of 4 per cent for bulk consumers. Despite this price advantage, the share of Indian CBC exports in the USA import market continues to remain pegged at 45 per cent mainly due to undercutting of registration price by a section of private exporters in Bangladesh and long-term contract with synthetic producers for ready supply to US tufters. Many USA tufters have been forced to switch over to synthetic materials for backing purposes as supplies from India were not stable at reasonable price in the past.26

In respect of India it might be a tall order as the jute industry had started to regain a foothold in the overseas market, especially for CBC in the recent years. A new thrust for jute goods export is still in the planning stage. Besides in a cut-throat price war situation jute has to face handicap of being totally dependent on the price of raw jute.27

4.4.1 Export Market

In early days of industry about 80 per cent of its total manufactures went to the export market and the rest
were consumed domestically. Now more than 30 per cent of total production is being exported which is nearly a reversal of the earlier pattern. Value-wise export earnings for the last few years remained more or less steady at around Rs. 230 crores. With a modest beginning of Rs.114 crores in 1950-51, the exports of jute goods is estimated to be Rs. 300 crores in 1989-90.

Major international buyers of Indian jute goods are the USSR (46 per cent), USA (12 per cent) Canada (2 per cent) and Australia (2 per cent). Rest of the market is shared by other countries. Region-wise the figures are European countries excluding USSR (21 per cent), Africa (5 per cent), Far East (3 per cent) and rest of the quantity is purchased by middle east and some other countries.²⁸

A peculiarity in purchase of different construct of jute goods is quite evident from the study of several years' exports. The USSR is purchasing only hessian and sacking while CBC is more consumed by the USA and Japanese market. Other countries are making purchases from all categories of products. Indian jute export market enjoys additional benefits in selling its products specifically in the markets of USSR, Africa and Commonwealth countries having good and traditional relationship with these countries.
On the recommendation of a recent study, Indian Institute of Foreign Trade (IIFT) has suggested good scope for jute exports in Latin American countries. The study suggested that India should concentrate its efforts on Argentina, Mexico, Venezuela and Cambodia for marketing carpet sacking and the thrust should be toward Argentina, Chile, and Mexico. It said further that exports of jute products like wall coverings, jute carpets, jute blankets, fabrics for school bags, shopping bags, tapestry and furnishings, jute laminations, and jute boards has ample prospects in Latin American markets.

As stated earlier, the Soviet Union is the largest purchaser of Indian jute products. Over the past few years its share in total export of India was, on an average, 46 per cent which amounted to 120-130 thousand tonnes per annum. Today India offers or large section of jute products namely light type of jute bags and jute fabrics for packing agricultural products, chemicals, fertilizers and furnitures in the USSR. India is always careful about the quality and timely delivery of goods exported to USSR. This is ensured by a member of Indian state organisations such as the Office of the Jute Commission and Indian Jute Mills Association (IJMA). As a counterpart "Exportlen", a Soviet Foreign Trade Association looks into the interest of its
Government.\textsuperscript{29} In the coming year (1989-90) it is hoped that, 50 per cent of the targeted exports will be taken by the USSR but the rest 50 per cent might prove tricky for exporters.\textsuperscript{30}

Indian jute goods exports is severely affected due to its unfavourable freight rate from India to Japan, unlike in the case of Bangladesh and Thailand where rates are in favour of the importing countries. The government-cum-jute industry delegation, which visited Japan in September 1988, in connection with the 'Tokyo International Packaging Exhibition', has suggested formulation of a price mechanism to make Indian products competitive with that of Bangladesh. Although the quality is superior, Mr. Saptharishi, Joint Secretary, Ministry of Textiles, said that Japanese buyers prefer supplies from Bangladesh as they are '10 to 15 per cent cheaper.

Another improvement in the Japanese Packing market has been the Government's decision to officially introduce 30 kg odourless rice bags from end-1988. Since industry can manufacture this special type of lighter bags, it is expected that India could garner a large chunk of its market. Japanese market is also prospective for Indian-made non-traditional jute goods items. According to Mr. Saptharishi, "there is a big market in Japan for jute
decoratives, fabrics furnishing, handloom and handicraft items, and jute blended blankets".31

In Europe, USA, and in other countries the demand for jute goods is also gaining momentum as the Government have taken a lot of promotional and market development measures with a view to regain and revive its old share in the years to come. Product diversification, modernisation programmes and the addition of non-traditional items in export-list are the positive steps for the furtherance of export-trade and the industry is hopeful of its future. At present Government have declared some schemes like cash compensatory support (CCS), minimum support price (MSP) and external market assistance programme to boost up the export volume in overseas market.

4.5 TECHNOLOGICAL DEVELOPMENT

To suit present changing economic and market conditions some changes in technology are being undertaken by each and every industry for updating the machinery and equipments and also for improvement in process control. These technological changes help in achieving higher efficiency and productivity of the plant and machinery, lowering wastage, and reducing cost of production. Intensive
research and development programmes are adopted to get the above benefits. Indian jute industry is not an exception in this regard. Its modernisation endeavour in the early 1960s managed to install silver spinning system in place of rove-spinning and broad looms in place of spinning frames.

During the first half of 1980s jute industry was passing through a critical phase owing to the fierce competition from synthetic substitutes and also from other jute producing countries. Appreciating this dismal position of jute industry for the first time in the history of jute industry, the Union Government came out with an integrated package and remedial measures for modernisation and diversification of jute industry. In September 1986 the Prime Minister announced:

a. a fund of Rs.150 crores for modernisation;

b. a specialised fund of Rs. 100 crores for updating operational aspects;

c. waiving of import duty on new technology, jute mills machinery, and spares; and

d. a prescription of mandatory usage of jute packaging materials on different end use sectors in the country.32
It is admitted widely that the entire policy package of the Prime Minister is helpful in transforming the scenario of jute industry since 1987 which was otherwise on the decline with the closure of a large number of mills and loss of employment of nearly one lakh industrial workers.

Presently, Mr. Bharat Jalan of IJMA says, Indian jute mills have fairly advanced technology in weaving. "We are now manufacturing many products which till recently were the monopoly of the western mills".  

At the spinning level, the industry has fairly updated technology. Weaving technology is being upgraded to develop sophisticated products. Various types of looms and other machineries, both imported and indigenous, are being developed and experimented with. But Mr. Poddar, former IJMA Chairman, admits that in the past two years, the industry has not succeeded in finalising and locating "correct machines" to speed up the modernisation programme.

The circular looms developed by indigenous machinery manufacturers may help the jute mills to raise their output of sacking bags economically for domestic and export markets. Though the jute industry of India is old and using outdated machinery, its technological development programmes are being implemented at various stages.
through some technological and research institutes. These institutions are sponsored either by Government singly, or jointly with jute industry.

4.5.1 Research and Development

There are some Research and Development (R & D) institutions conducting different studies and research on agricultural, technological and production aspects of Indian jute industry. The R & D institutions are being assisted to take up research work on new areas for the development of jute industry as a whole. These institutions and their activities are as follows:

(1) Indian Jute Industry's Research Association (IJIRA): It is dealing with both mechanical and chemical process for converting jute fibres into new product or for developing old and existing products for different end uses. IJIRA also undertakes the tasks of developing instruments for quality control standardization and testing different jute products. These testing instruments are widely used in different jute mills of India and some overseas countries.
(2) **Indian Institute of Jute Technology (IIJT):** This institute provides elaborate scientific and technical training in the spinning and weaving of jute, quality control of jute goods, and maintenance of machinery to the jute mill workers, supervisors, and technicians.

(3) **Jute Agriculture Research Institute (JARI):** Research into problems and prospects of cultivation of jute and allied fibres is conducted by this institute.

(4) **Jute Technology Research Laboratory (JTRL):** It helps in formulating different ways and means regarding jute-technology through research findings.

IJIRA is now working on an R & D profile that is closely linked to the industry's requirement. The association is already collaborating in a project involving some jute mills to develop lightweight, cost-efficient bags to meet the current needs of international customers. Development of jute-based decorative fabrics and high-value-added products like jute-reinforced plastics and some substitutes with innovative designs etc., will claim priority attention in IJIRA's R & D programme. It also plans to lay emphasis on consultancy work to help industry reduce its production costs.
Jute goods fall an ever-increasing challenge of competition in traditional packaging outlets. IJIRA has geared to this challenge for jute through newly initiated IJIRA-UNDP project to enable pragmatic diversification of products for domestic use and export, and through improvements in the quality of jute products. Even in the first four years of its duration, this project has made an impact in terms of jute fabric based rigid packaging substitute for the scarce wood/plywood used in packaging apples, mangoes, grapes, tea, etc.

This novel development using chemically processed jute fabrics is practical and essential and has been widely welcomed by apple and tea growers. It is undergoing intensive consumers' acceptability trials now in the state of U.P., H.P. and J & K. Ministry of Textiles have agreed to promote this development through initiation of internal market assistance (IMA) for the introduction of this new jute based rigid packaging or jute chests.

Other thrust area being tackled in the IJIRA-UNDP projects are biotechnology based softening and sizing of jute products through setting up a centralised enzyme plant for treating and upgrading jute quality for use in jute exports to Russia.
Geo-jute is another product developed by R & D. It is used for soil erosion control and for agricultural mulching. Blended jute products, household use in carpets upholstery and jute based fabrics for soft luggage are further developments in jute products.

4.6 PROSPECTS OF JUTE INDUSTRY

Indian jute industry's future is bright and more prospective. This position will be much more discernible from FAO's latest report about jute industry. According to FAO report, prospects for jute growth in overall consumption will continue during the next few years till 1995. FAO's analysis shows that the world jute demand could exceed 4.3 million tonnes by 1995 compared to 3.6 million tonnes in 1979-81 and 4.1 million tonnes in 1986. Jute consumption in the developing region would rise by about two per cent per year in the period till 1995. The rate of growth in demand during the coming years would be higher than that of seventies though at a slower rate. Regarding India FAO said that in 1988, it was the largest jute producer in the world and it could retain this position even in 1990.

Pessimists say that jute industry's future is bleak as it is now in a dying condition and loosing competi-
tiveness in both domestic and international markets. In other words, they opine that being a traditionally used packaging materials jute products would be overthrown by synthetic substitutes which are more accepted by all users.

But with the active policy measures taken by union Government in 1986 for the survival of the economy's oldest jute industry, the entrepreneur society, traders, farmers, industry labourers, exporters, importers and all other concerned interest groups have been activated either directly or indirectly.

As a substitute products of jute goods, synthetics are not said to be all blessings. It has some demerits which are inherent and these could easily be manipulated by jute products they being a product of the 'Nature'.

It did not take long for the consumers of packaging materials to realise the advantages of jute. It exhibits excellent properties of versatility, biodegradability, re-usability and fire resistance, specifically when compared with the synthetic materials. In certain sectors, in the long term perspective, consumers have found jute packaging more cost beneficial.

Jute carpet backing cloth (CBC) exhibits technical superiority when compared with synthetic substitutes.
The price of secondary backing is cheaper and more competitive than the synthetic secondary backing. In the primary backing market, synthetic backing is in monopoly position. But its prices are increasing day by day with the increase of petroleum oil, its main source of raw materials. So jute goods are being again welcomed by its esteemed customers/users of world market. Especially primary jute backing is most welcomed. This is indeed a ray of hope for jute industry's future.

Product diversification as a very successful measure has been given priority by the industry. As a result 'Geo-jute', union bags, jute chest for packing apples, tea etc., developed by the R & D institutions have become more popular in the domestic as well as overseas market. Though all these items are not yet produced and distributed commercially, yet within a short span of time they would come in the market. Addition of these products to the product line is absolutely prospective for jute industry of India.

Unlike other competitor jute producing countries, India's Mandatory Jute Packaging Materials Act, 1987 is sure to prevent it from immediate downfall and thus, the Act is helping the industry inadvertently.
Some aggressive promotional strategies are now under implementation for penetrating into newer international market segments. International forums and organisations like International Jute Organisation (IJO), FAO & UNDP are also coming forward with their assistance programmes and suggestions for the development of jute products, technology and domestic and overseas markets.

During the last few years Indian economy's growth has shown a tremendous progress and it would continue to accelerate in coming years. Due to the expanding world economy, the demand for packaging materials like jute and its products is sure to move up. Therefore, it could easily be confirmed after having analysed the congenial factors above that Indian jute industry's future seems to be bright and prospective.
REFERENCES


6. Ibid., p. 186.


COMPARISON BETWEEN THE JUTE INDUSTRY PROFILES OF
BANGLADESH AND INDIA

While designing this chapter the same sections and sub-sections are maintained which have been followed earlier in analysing jute industry profiles of Bangladesh and Indian in Chapter 3 and 4 respectively. In this chapter, the findings of the proposed study are depicted in the form of comparison between the two profiles. Both similarities and dissimilarities have been analysed and shown separately for each aspect of the profile. The last section of this chapter present some major findings and conclusions resulting from the present research study.

5.1 NATURE OF THE INDUSTRY

Similarities:

Both the industries of Bangladesh and India are agro-based, labour and capital intensive and are mostly producing traditional items of jute products.
Dissimilarities:

Bangladesh jute industry is more export oriented. Its domestic market consumes only 10 per cent of the total production, while Indian domestic market consumes 70 per cent of its total production. For Bangladesh, jute industry is the only single largest and top-most foreign exchange earner, while India has many other industries which are far ahead of jute industry in this regard.

Once Indian jute industry exported about 80 per cent of products but at present it is exporting only about 30 per cent of its total production. The situation is quite reverse if compared with the past. In case of Bangladesh, the quantity of jute goods export is still in upward trend.

Bangladesh jute industry deals with both raw jute and jute goods while Indian jute industry deals only with jute goods in the overseas market.

In terms of the geographical impact of developments in jute industry, there is an important dissimilarity. In the case of India, West Bengal's economy faces trouble for any deplorable situation of jute sector as jute cultivation and jute goods production are confined to this
state. The national economy of India does not suffer severely for the downfall of jute sector. But for Bangladesh, jute industry's failure has a great impact on the national economy. Bangladesh jute industry is still responsible for the maximum yield of foreign exchange and offers the best opportunity for employment.

Bangladesh jute industry provides employment to 40 per cent of the total workforce employed in large-scale industry of Bangladesh while Indian jute industry employs an insignificant portion of total workforce engaged in nation-wide industrial sector. Bangladesh jute industry's workforce is not so skilled and experience as that of India. Indian jute industry is old and thus its labour could claim more expertise than that of Bangladeshi workforce. Undoubtedly, Bangladesh jute industry enjoys the advantage of cheap labour but their productivity is low if compared with that of Indian jute industry's labour.

The jute industry of India is extremely well organised and in point of efficient organisation, it is second to none whereas Bangladesh jute industry cannot claim fully that the industry is well organised.
5.2 STRUCTURAL CHANGES

Similarities:

Frequent structural changes take place in the case of both the countries' jute industries. Especially, changes in organisational and ownership patterns are the common phenomena. Study of Bangladesh jute industry reveals that originally the industry was in the hands of private sector, owned and managed by some business houses like Adamjee, Dawood, Dada, Amin, Haroon etc. But, in 1972, jute industry has been nationalised abolishing all private interference and ownership. Subsequently, in 1975, nationalisation policy had been withdrawn and some jute mills were again privatised but partly. Now both private and public sector are owning and managing jute industry in Bangladesh.

Some changes are happening in the case of Indian jute industry. Before 1980 all jute manufacturing units were owned and managed by a few big business houses like Birlas, Kanorias, Goenkas, etc. In 1980 six mills had been nationalised. Some mills are adding new lines of business alongwith the original jute manufacturing activities. Again, some industrialists have closed their jute mills and shifted to other new lines of business which are quite different from jute business.
Both the Bangladesh and Indian public and private jute mills are being guided by the Joint Stock Company Act, 1913, as applied in the concerned countries.

**Dissimilarities:**

At present, Bangladesh jute industry is owned and managed almost equally by private and public sector. While in India, except 6 mills in public sector, the rest of the units are in private sector, owned and managed by some big business families like Rirlas, Goenkas etc.

Bangladesh jute industry includes 70 jute manufacturing units and all are operating. On the other hand, India currently has 67 units where operating number of units fluctuates every now and then owing to strikes, lock-outs, closures, labour unrests and shortage of raw materials.

In terms of scale of operation, however, Indian jute industry is much larger as compared to that of Bangladesh. The installed production capacity of the jute mills on a monthly basis is 1,15,000 tonnes in India and 56,000 tonnes in Bangladesh. Accordingly, for the same purpose, India consumes 6,37,650 bales a month as against 3,10,000 bales of jute in Bangladesh.
### TABLE 5(A-E)

**A BIRD'S EYE-VIEW OF JUTE INDUSTRY IN BANGLADESH AND INDIA: COMPARATIVE STATISTICS AND FEATURES**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Bangladesh Jute Industry</th>
<th>Indian Jute Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. General Statistics and Features</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Inception of Industry</td>
<td>In the year 1951</td>
<td>In the year 1855</td>
</tr>
<tr>
<td>2. Total number of jute mills</td>
<td>82 mills</td>
<td>112 mills</td>
</tr>
<tr>
<td>3. Number of mills in operation</td>
<td>70 mills</td>
<td>67 mills</td>
</tr>
<tr>
<td>4. Number of units in private sector</td>
<td>37 mills</td>
<td>61 mills</td>
</tr>
<tr>
<td>5. Number of mills in public sector</td>
<td>33 mills</td>
<td>6 mills</td>
</tr>
<tr>
<td>6. Production capacity utilised</td>
<td>About 90 per cent</td>
<td>About 80 per cent</td>
</tr>
<tr>
<td>7. Annual turnover</td>
<td>74,000 crores ($261 million)</td>
<td>64,000 crores ($312.5 million)</td>
</tr>
<tr>
<td>8. Nature of products</td>
<td>Producing only jute goods</td>
<td>Same other products in present in most of the jute mills</td>
</tr>
<tr>
<td>9. Quantity of raw jute production annually</td>
<td>About 10 lakh bales</td>
<td>About 70 lakh bales annually</td>
</tr>
<tr>
<td>10. Quality of jute and jute products</td>
<td>Super quality</td>
<td>Comparatively inferior quality</td>
</tr>
</tbody>
</table>

| **B. Export-related Statistics and Features**                                   |                                           |                                       |
| 1. Percentage of output sent in overseas market                                 | 90 per cent                              | 30 per cent                           |
| 2. Share in world jute goods market                                             | 48 per cent                              | 26 per cent                           |
| 3. Major competitors in world jute market                                       | India, China, and Thailand               | Bangladesh, China and Thailand        |
| 4. Major buyers in export-market                                                | USA, EEC, African Countries, USSR and EEC| Middle-East and Japan                 |
| 5. Quantity of jute goods exported annually                                     | About 5 lakh tonnes                      | About 2.7 lakh tonnes                 |

| **C. Marketing-related Statistics and Features**                                |                                           |                                       |
| 1. Goods sent to overseas market                                                | Raw jute and jute goods                  | Only jute goods                       |
| 2. Percentage of output consumed in local market                                | 10 per cent                              | 70 per cent                           |
| 3. Impact of synthetic substitutes                                               | Highly felt in overseas market           | Affects both domestic and overseas markets equally |
| 4. Channels of distribution                                                      | Maintains strong channels in the case of overseas market | Maintains strong channels in the case of domestic market |
| 5. Product diversification policy                                                | Not so effective                         | Most effective                        |
| 6. Marketing facilities                                                          | Export market is wider but domestic market is not so promising | Export market is not wide but domestic market is ensured by compulsory Jute Packaging Materials Act, 1987 |

| **D. Workforce-related Statistics and Features**                                |                                           |                                       |
| 1. Workforce employed                                                           | 45 per cent                              | Not so significant if compared with the national total workforce engaged in large-scale industries |
| 2. Cost of labour                                                               | Comparatively lower                      | Labour cost is higher                 |
| 3. Skill of worker                                                              | Not so skilled                           | High skilled labour                   |

| **E. Industry-related Statistics and Features**                                 |                                           |                                       |
| 1. Nature of trade                                                              | Export-oriented                          | Domestic market-oriented              |
| 2. Supply of raw jute fibres                                                    | Regular and sufficient                   | Irregular and not sufficient          |
| 3. Quantity of raw-jute consumption in mills                                    | About 5 lakh bales                       | About 77 lakh bales                   |
| 4. Quantity of yearly production of jute products                                | About 5 lakh tonnes                      | About 13 lakh tonnes                  |
| 5. Share in national annual export earnings                                      | 40 per cent                              | 2.9 per cent                          |
| 6. Position of industry in terms of national industrial sector                  | Single largest and most important industry | Jute industry one of the many industries |
| 7. Rate of mortality                                                            | Comparatively low                        | Higher rate of closure and winding-up |
| 8. Machinery and Technology used                                                | Modern and sophisticated                 | Old machineries                       |
| 9. Research and development activities                                          | Advancing minimally; not so not so experienced | More advanced having a wider scope of R & D |
| 10. Prospect of industry                                                        | Prospective in terms of variety of jute fibres and quality of products | Prospective in terms of ensured market policy and diversification programmes sponsored by Government as well as concerned industrial units. |
5.2.1 The Phases of Growth

**Similarities**: There are no basic similarities in phase of growth and development between the two industries.

**Dissimilarities**: The first jute mills in India went into production in 1855 while the first jute mill in Bangladesh started production in 1951. Hence Indian jute industry, has passed through several phases like introduction (1855) growth (1855-1950), maturity (1951-65), decline (1966-1980) and fade out (1980 onward).

Bangladesh jute industry is at the stage of growth because even now new jute units are being set up. For example, in the mid-1980s two jute mills were established under private ownership. Almost all member units of Bangladesh jute industry are functioning. There is no report of mortality, winding up, closure of industrial unit which are a common feature in Indian jute industry. Rising competition, dipping profits, assertive labour, growing sickness, mismanagement and fraud, declining prices of jute goods, rising inventories of some items, increasing output costs on the one hand and shrinking demand on the other, are the several causes responsible for the decline or closure of Indian jute mills.
It is noticeable that most of the jute mills of India were set up before 1960s. It is, therefore, said that Bangladesh had started building jute industry when Indian jute industry had reached saturation.

5.2.2 Current Position of Jute Industry

Similarities:

At present both the countries' industries are in a decaying condition, incurring heavy losses frequently. Their contribution towards equity as well as economy is dwindling. Their earnings of foreign exchange have become meagre. Both the industries are trying to get rid of all these critical problems by adopting new policies for modernisation of industry, product diversification, research and development and the like. Labour unrest is also a common attribute with respect to the industries under study.

Dissimilarities:

Of the total 83 jute mills in Bangladesh, 70 units are working of which 33 are in public sector and the rest in private sector. These units are utilising over 90 per cent of the production capacity (installed). Whereas, in
India out of 112 mills, only 67 mills are functioning although the number fluctuates off and on owing to several reasons as mentioned earlier.

Some of Indian jute mills added new lines of production with their jute mills to survive in the face of ensuring distressed condition of jute products market. They have subsidiaries units like cement, cable, calcium carbide and linoleum, nylon, staple fibres and spinning, stealwire ropes and caustic soda producing plants. But, Bangladesh jute mills are producing only jute goods. Of course, there are three non-jute manufacturing units. They produce jute blended with other synthetics.

5.3 MARKET CHARACTERISTICS OF INDUSTRY

Similarities:

Market components such as customers, products, competitors, and market segments are all the same with respect to both the industries in export-trade. Moreover, marketing problems encountered by both the industries are alike so far as competition from synthetic packaging substitutes are concerned.
Dissimilarities:

As mentioned earlier, Bangladesh jute industry is export-oriented. It has to sell (Export) out almost 90 per cent of its total production in the world market. India sells only 30 per cent in the export market; the domestic market consumes the rest of the produce. Its cement, sugar, fertilizer, and food grains are packed by jute packaging materials compulsorily as per Jute Packaging Materials Act, 1987. Indian local market is wider than that of Bangladesh as its industrial and agricultural sectors are producing huge quantity of different categories of products which requires jute bags for protection, storage, and distribution.

5.3.1 Market Segmentation

Similarities:

Basically there is no difference in the mode of segmenting the markets. Both the industries classify the market on basis, like quantity of the products, geographical location of the market, application, use and nature of the products.
Dissimilarities:

Bangladesh jute industry's market is classified as raw jute market and jute goods market. Whereas, Indian jute industry's market is characterised only as jute products market.

Bangladesh jute industry consumes 50 per cent of total production of jute fibre produced in the country and rest of the quantity is sold in overseas market. Whereas, Indian jute industry consumes entire quantity of the fibre produced in the country and it does not have surplus to be sold in overseas market segment.

5.3.2 Users and Their Characteristics

Similarities:

Jute goods produced in both the industries under study are being used by the same group of users, particularly, in the global market. Major users are the developed and industrialised countries producing bulk of products of various categories. USA, Australia, Western Europe, USSR and Japan are the principal users common to both the industry.
Dissimilarities:

Indian local users are using a large quantity of jute goods. About 85 per cent of the total demand for packaging goods by the domestic users are met by Indian jute industry. Directorate General of Supplies and Disposal (DGS & D) of the Government of India uses 25 per cent of the total jute bags produced. Indian jute industry has therefore a significant captive market. The industries of cement, fertilizer, sugar, and foodgrains of agricultural sector are using jute bags for packaging of 70, 50, 100, and 100 per cent of the respective production quantity. Bangladesh jute industry does not have any such kind of mandatory users.

In the global market, USSR is the major user of Indian jute products buying 50 per cent of the total Indian jute exports. On the other hand, underdeveloped countries of Africa and Middle-East are the major users of Bangladesh jute goods buying 50 per cent of its total exports.

5.3.3 Production and Demand Pattern

Similarities:

Traditional jute products - like hessian, sacking and carpet backing cloth are being produced by the
industries concerned. They also produce carpet and the demand for all these products is mainly concerned with packing, warapping and covering floors.

The rapid growth and development of synthetic industries in industrially developed countries resulted in the downswing of demand for the jute products of both Bangladesh and India. The demand for jute carpet is still existing and competing with synthetic substitutes in those developed economies as well as other markets.

**Dissimilarities:**

Presently product-wise total demand of Bangladesh jute goods in the overseas market is; hessian 40 per cent, sacking 40 per cent, carpet backing 19 per cent and others 1 per cent. Indian products demand analysis shows that out of the total, hessian accounts for 55 per cent, sacking 10.2 per cent, carpet backing 27 per cent and other 7.8 per cent. It is obvious that Indian sacking market is not so prominent in overseas market. The reason is that after promulgation of mandatory Jute Packaging Materials Act, 1987 domestic market has started consuming maximum quantity of sacking category of jute and hence only a little quantity of saleable surplus was left for export. On the contrary, Bangladesh jute industry is enjoying an extra advantage in the sacking
market as Indian industry has partly withdrawn from the sacking export market.

Bangladesh jute industry projected demand for jute goods for 1989-90 amounts to 5 lakh tonnes whereas Indian project is at 16.25 lakh tonnes, of which 13.55 lakh tonnes is for domestic market and 2.7 lakh tonnes for overseas market. Infact, Bangladesh's projected demand is entirely for overseas market.

Bangladesh jute products are more preferable because of their better quality and fineness. Hence, the products are demanded more by the prospective buyer/consumer. For example, Bangladesh produces the same quality of carpet backing as India. But the USA and European consumers purchase very little from India. They have been importing substantial quantities from Bangladesh over the years.

5.3.4 Distribution Facilities

Similarities:

There are no similarities found in the case of distribution facilities for both respective industries.
Dissimilarities:

Industries under study are following distinctly different process and system for the purpose of distributing jute goods from the centres of production to its place/person of consumption. This difference arises mainly from the nature of the markets served.

In the case of Bangladesh jute industry, products are distributed to the export markets by both private and public sector. Private jute mills either export their own initiative or they sell it to shippers/exporters. BJMC, which comes under public sector, makes necessary arrangement to sell its products in the global market.

Indian jute goods are being distributed both in domestic and international markets through different channels. Various government agencies like, DGS & D; a supply department of the Ministry of Commerce, collect the required quantity of jute bags from different jute mills. But for selling jute goods selling jute goods in the export market separate distribution channels are followed by both private and public sector. Indian Public Sector may sell directly or take the help of shippers or Government agencies. On the other hand, public sector's distribution in the export market is
vested in the hand of National Jute Mills Corporation (NJMC) and State Trading Corporation (STC) jointly. A consortium of the mills, led by STC, often executes the jute goods orders received from overseas market jointly with other relevant authorities like NJMC, Private sector jute mills, and members of Calcutta Jute Fabric Shippers Association, etc.

5.3.5 Pricing of Jute Goods

Similarities:

Cost-plus formula is practised by both the industries in fixing prices of jute goods. Raw jute cost being the major ingredient in the cost structure influences the price of jute goods to a great extent. Hence both the countries consider the price of raw jute as significant while formulating the price of jute products.

Dissimilarities:

In Bangladesh raw jute is priced by adding a margin to the previous years average price in the market. It has abolished the Statutory Minimum Prices (SMP) at growers level. But India is still providing Minimum
Support Price (MSP) for raw jute fibre with a view to ensure farmers a remunerative price.

In pricing jute goods, to be sold in the domestic market, Bangladesh jute industry follows same cost-plus policy as jute fibre at the growers level. But Indian jute goods prices are quoted by the Gunny Trade Association (GTA). All Government agencies, NJMC and private sector jute mills follow this price policy. The formula followed by GTA is the average price of previous months or the date of actual placing of orders by concerned parties or agencies plus 5 per cent of the average price.

Bangladesh jute industry has abolished its previous Export Price Check (EPC) system in formulating jute goods' price for export market. At present, a more flexible pricing policy is being adopted to facilitate market forces to play a greater role in price determination. A Price Review Committee meets frequently to agree on a minimum price. But for India, a Minimum Export Price (MEP) is declared by the Central Government in each fiscal year. Factors like market demand, price of the competing products, price level prevailing in domestic market etc., are being considered by the Government authorities while formulating MEP policy.
Bangladesh enjoys a comparative benefit in price policy of jute goods because of lower costs of raw materials and labour, and better shipment facilities, Indian mills pay more for raw materials and labour. Freight hike is not as distressing in Bangladesh as it is in India because port charges, stevedoring and other handing costs are lower in Bangladesh as compared to that in India.

5.3.6 Promotional Activities

Similarities:

This study reveals no similarities with regard to promotional policies adopted by the jute industries in Bangladesh and India.

Dissimilarities:

As a marketing device, different promotional measures are undertaken by the concerned industries. But there are some dissimilarities in terms of strength, feasibility and applicability of these measures/policies.

Bangladesh's policies of promotion are limited in the case of overseas market whereas Indian market promotion policies cover both internal and International market. The authorities such as BJMC, BJEC and Bangladesh Export Promotion Bureau are responsible for the formulation of
effective market promotion policies. India has a number of agencies like Trade Development Authority (TDA), the Trade Fair Authority, IIFT, IJMC, JMDC, IJMA etc., which are engaged in promotional activities. Each of these organisations is doing nearly the same job in an independent manner and sometimes even at cross-purposes. It is worth noting that for market promotion, JMDC has set up an office in New York, which has a market intelligence system.\(^5\)

India can afford to send joint government-industrial delegation visiting different jute importing countries, for studying market conditions and demand patterns in those countries and recommending measures for improvement in marketing. For assessing marketing feasibility, they are conducting research in most of the developing and developed importing countries of the world. Apparently, Bangladesh cannot afford any kind of expenses incurred on promotional activities and so its promotional efforts are mostly traditional in nature.

As a promotional device, Bangladesh jute industry offers more credit to the importers. A study recently found that, while Indian jute goods shippers/exporters offers credit at an average rate of 12.5 per cent, exporter of Bangladesh offers 8.5 per cent.\(^6\)
5.4 STATE OF COMPETITION

Similarities:

As producers and exporters of jute goods mostly used for packing commodities, both the industries were in dominant position in the world jute market till mid-1960s. Thereafter came the severe competition from substitutes like synthetics, paper, and cotton-made packaging materials that affected the jute industries under study more or less equally. Especially, competition from synthetic products emerged as a fierce threat to end uses of all categories of jute products excepting jute carpet backing. Besides, both the countries are also experiencing the effect of competition from the new jute producing and exporting countries like China, Nepal, Thailand and Malaysia.

Bangladesh and Indian jute industry are the two traditional and major competitors. The global jute goods markets' maximum share was shared by these two competitors more or less equally with a slight shifting dominance of one over the other from time to time.

Dissimilarities:

Currently Indian jute industry is suffering from higher cost of production as compared to that in Bangladesh.
In the world jute goods market, Bangladesh has followed a policy of keeping the prices of its jute goods lower than that of India. During the period 1955-56 and 1979-80 for instance, the prices generally remained lower than that of India by 20 per cent despite the increase in its export price. The quality of Bangladesh jute fibre is also superior to that of India. Hence Bangladesh jute and jute goods are preferred by the importing countries.

Bangladesh's terms and conditions in export-trade are more relaxed than that of India. Because of this, India had to lose a number of international bulk sacking tenders. Bangladesh dominates in African and other markets because the freight rates from Calcutta (India) to these countries are higher than that from Bangladesh.

To save the industry from keen and disastrous competition India changed its marketing policy and presently it sells bulk of its production in the domestic market while Bangladesh still confronts overseas market competition. Moreover, Indian jute industry has a permanent importer like USSR which imports about 50 per cent of India's hessian and sacking items. Bangladesh has nothing but better quality and price competition to its credit.
5.4.1 The Major Players

Similarities:

Bangladesh and Indian jute industries are the two main players in the world jute market. Besides, China, Nepal, Thailand, Malaysia, and other European countries are other participants in jute export-market.

Dissimilarities:

In the case of India, in both domestic and international markets, synthetic substitutes are the main replacements of jute-made packaging materials. Indian synthetic industry, currently having its 400 HDPE/PP manufacturing units, is a competitive threat in domestic market. But Bangladesh synthetic industry is not so expanded and competitive in internal market.

5.4.2 Market Share

Similarities:

There is no similarity found regarding market share of both the country's jute industries.
Dissimilarities:

At present Bangladesh occupies about 48 per cent share of world jute market which was 19 per cent during mid-1960s. India's present share in the same market is 26 per cent which was 66 per cent during the same period.

In the domestic market, Indian jute industry controls about 85 per cent of the total requirements of packaging materials. Whereas, Bangladesh's domestic market consumes a little quantity of jute goods which constitutes an insignificant market share.

5.4.3 The Major Suppliers

Similarities:

Both the industries are getting supplies from their own agricultural sector.

Dissimilarities:

Bangladesh's jute industry receives supply of necessary quantity of raw jute produced by farmers, in 13 odd district areas. Bangladesh can export 50 per cent of its raw materials after satisfying the demand of its own industrial units. That is, Bangladesh jute industry does not have to go to other sources for its needed
quantity of raw jute. On the other hand, Indian local supply of raw jute very often fails to satisfy the requirements of its jute manufacturing units which require more than double the quantity required by Bangladesh jute manufacturing units. That is why, sometimes, Indian jute industry imports raw jute from Bangladesh.

5.4.4. The Major Buyers

Similarities:

Major buyers who mark their purchase in the world jute market are almost alike. USA, USSR, Australia, European countries, Japan, Africa, West Asian countries are the major buyers of jute products of Bangladesh and Indian jute industry.

Dissimilarities:

Bangladesh's major buyers in the domestic market are food grain producers and traders, government agencies, sugar and fertiliser industry. But these buyers buy only 10 per cent of the total production of the industry. Whereas, major Indian buyers in the domestic market are the cement, sugar and fertilizer industries, food grain producers and traders, government agencies and other private sector business enterprises. They take the significant portion of industry's total production.
Majors buyers in the export market, though common to both the industries, are purchasing different quantity of jute products. Bangladesh treats African and Middle East countries as its important buyers while USSR has been treated by Indian industry as its principal buyer in consideration of the volume of purchase made by these buyers.

5.4.5 The Competitive Situation

Similarities:

The present day competitive situation of both Bangladesh and Indian jute industry are deteriorating. They are losing their respective erstwhile competitive positions to synthetic substitute products. These products are a threat to every possible end-use market of jute products.

So far as competition between the two major producer-exporter of jute goods, Bangladesh and Indian jute industry, is concerned no one country can claim absolute success over a long period of time. They are seen alternatively securing better competitive position in the global export-market.

Dissimilarities:

For the last few years Bangladesh is leading India
in the world jute market because in a cut-throat price war situation, Indian products have to face the disadvantage of being totally dependent on the price of raw jute.

Bangladesh industry has the advantages of low cost of production so it can sell at a price lower than that of official price fixed by the international marketing forum. It is found from this study that private shippers in Bangladesh have been undercutting prices of CBC in the USA market. They offer CBC at a price far below the official minimum price. Bangladesh private shippers are selling CBC at 45 per cents per lineal yard of 5.50 oz cloth compared to the official price of 47.5 cents. They may have to cut the price further to meet the challenge from synthetic substitutes.\(^9\)

From another study on the cost structure of jute products of Bangladesh and India, it is revealed that from 1982-83 Bangladesh is enjoying comparative cost advantages in all the three major products i.e. hessian, sacking and CBC.\(^{10}\)

To face competition from synthetic products Indian jute industry has undertaken modernisation and diversification programme to manufacture light-weight
jute bags and sacks, jute blended products etc. Whereas the efforts of Bangladesh's jute industry in this regard are not so significant.

5.4.6 Export Market

Similarities:

Export markets for jute products manufactured in Bangladesh and Indian jute industry are the same. USA, USSR, Japan, European countries, Australia, Africa and West Asian countries, are the common export markets for both the industries. The said industries are the major supplier of jute products in all the importing countries.

Dissimilarities:

Bangladesh export both jute and jute goods, whereas India exports jute goods only. India shares 38 per cent, while Bangladesh shares 25 per cent of the total world jute production, which amounts to about 14 lakh and 9 lakh tonnes respectively. Out of these quantities of raw jute, Bangladesh exports about 4.5 lakh tonnes of its total production, that constitutes, 83 per cent of total world export of raw jute, whereas Indian industry consumes the whole quantity of raw jute produced.
FIGURE - 5.1
COMPARISON BETWEEN EXPORT MARKET SHARES OF BANGLADESH AND INDIAN JUTE INDUSTRY

BANGLADESH SHARE IN EXPORT MARKET

AFRICA 23%
USSR 8%
MIDDLE EAST 23%
ROA 3%
ROW 5.61%
ROE 0.39%
Pakistan 2%
EEC 15%
ROSC 21%
USA 14%
AUSTRALIA 41%
JAPAN 3%

INDIAN SHARE IN EXPORT MARKET

USSR 46%
AFRICA 5%
AUSTRALIA 2%
USA 12%
CANADA 2%
EUROPE 21%
FAR EAST 31%
MIDDLE EAST 9%
in India. Moreover, during poor harvest season Indian industry has to import raw jute from its industrial counterpart, Bangladesh.

Bangladesh jute industry's export shows an upswing trend from 1960s till date, while in the case of Indian industry the export trend is almost reverse. At present Bangladesh is holding 48 per cent whereas India caters to 26 per cent of the total quantity of world export market of jute goods.

Bangladesh is exporting 5 lakh tonnes of jute goods values at Taka 930 crores (US$ 3.1 bn). But India is exporting 2.8 lakh tonnes values, about Rs. 230 crores (US$ 1.6 bn).

Bangladesh's export jute goods to USA (14 per cent), Australia (4 per cent), Japan (3 per cent), Africa (23 per cent), Middle-East (23 per cent), EEC (15 per cent), USSR (5 per cent), the rest of America (3 per cent), socialist (centrally planned) countries (2 per cent), Pakistan (2 per cent), the rest of the Europe (0.39) per cent and the rest of the world (5.61 per cent). On the other hand, India exports jute goods to the USA (12 per cent), Australia (2 per cent), Canada (2 per cent), USSR (46 per cent), European countries (21 per cent), Africa (5 per cent), Far East (2 per
cent) and the rest of the quantities to Middle-East and other countries.

Indian export market in the centrally planned economy is more expanded whereas Bangladesh jute industry has wider market in African and Middle-East countries.

5.5 TECHNOLOGICAL DEVELOPMENT

Similarities:

There is no similarities between the industries under study regarding technological development.

Dissimilarities:

Bangladesh jute industry is using technology which is modern and sophisticated as compared to Indian industry. But of late Government of India have declared a package of Rs. 100 crores for the modernisation and development of jute industry for updating operational aspects of the concerned industrial units. Moreover, at the spinning level Indian Industry has a fairly updated technology. Its weaving technology has also been upgraded for product development. The circular looms developed by the indigenous machinery manufacturers, is another achievement of Indian jute industry.
Bangladesh, though using modern technology has not undertaken any programme for developing its technology and machinery according to the present needs of producing new items for the market. It has to import even spare parts from the countries including India. But Indian jute industry is good enough to procedure its necessary spare parts based on its own efforts.

5.5.1 Research and Development

Similarities:

Both the industries have Research and Development (R & D) institutions conduction studies on different aspects both at agricultural as well as manufacturing level. For this purpose, they have created specialised (R & D) institutions.

Dissimilarities:

There are some differences between various aspects of (R & D) in both the industries concerned.

Bangladesh jute Research Institutes (BJRI) performance and activities are not superior than that of Indian Jute Industry's Research Association (IJIRA) and its allied institutions. IJIRA has so far developed
jute products like geo-jute, union-bags, jute chest etc. It has also developed quality control, standardisation and testing instruments which are widely used in all jute mills.

Though BJRI has developed diversified products like Jutton, Patwool and jute fabric it has no significant development to its credit. With regard to technology and operational aspects, Government and concerned manufacturing units are not showing interest as much as that of Indian Government and jute manufacturing units.

Scientists and researchers engaged in different R & D institutions of Indian jute industry are trying hard to develop new product, production technology, high-yielding variety of jute plants and jute-blended fibre since a long time. But these institutions are not so much successful if compared with R & D divisions working in other textile yarn manufacturing industry such as cotton, synthetic yarn, etc.

Bangladesh jute industry's R & D institutions have the same objectives as that of Indian jute industry's R & D institutions. But due to financial constraints, R & D efforts of Bangladesh jute industry face troubles frequently. Therefore, its objectives are yet to be achieved.
Indian Government have been sponsoring some research studies at Indian Institutes of Management at Ahmedabad and Calcutta to assess the feasibility of marketing jute chests and to setup a nodal agency for the production and marketing of diversified and non-traditional jute products. Whereas Bangladesh Government have not taken such type of initiative in the field of R & D.

5.6 PROSPECTS OF JUTE INDUSTRY

Similarities:

The prospect of both the industry seems to be gloomy owing to sickness. The countless problems which are the causes of such sickness are more or less same as discussed in the concerned chapters (Chapter III and IV). But after analysing the last few years' activities, present situations, and some policy measures taken by the proposed industries, it is to be said that the respective industries have been showing improvement with respect to their future prospects.

Dissimilarities:

The reasons for projecting the prospects are not alike in both the cases but are quite natural, scientific and logical in terms of present perspective.
In order to face competition from world export market of jute goods, Bangladesh can utilize its comparative advantages as to cost and price, and superior quality against other competitors. Indian industry has the advantage and scope of diverting its hessian and sacking categories towards its domestic market.

Bangladesh has a dependable market in Africa and Middle East where synthetic manufacturing industry has not yet been developed. Indian market in USSR is also near permanent and consumes about 50 per cent of its total exports.

Bangladesh is already using modern and sophisticated plants and machinery whereas Government of India have sanctioned Rs. 100 crores for the modernisation programme and deregulated terms and conditions of import of necessary plants and machineries from abroad.

The above six sections in this chapter have been devoted to a comparative analysis of the jute industry profiles in Bangladesh and India. Further, the last section draws upon the analysis in the previous sections and attempts to present the major significant findings and conclusions.
5.7 FINDINGS AND CONCLUSIONS

Certain propositions, framed on the basis of a literature survey, have been stated in chapter 2 on research methodology. These propositions - general and specific - have been instrumental in the design of the industry profiles of Bangladesh (chapter 3) and India (chapter 4) jute industries. Further, these propositions have also been helpful in guiding the comparative analysis done in this chapter. On the basis of inferences drawn from the different aspects of the industry profiles and their comparison these propositions have been subjected to an examination. This has led to some findings and conclusions which are presented below. The order of presentation follows the sequence in which the propositions have been stated. The analytical approach to either accepting or discarding the proposition is primarily descriptive with some statistical analysis of export and production figures wherever applicable.

1. It has been found from the study that most of the jute goods producing countries, especially pioneer western countries, have been closing down their jute industries and switching over to some other packing materials manufacturing industries.

   Same is the case with the Indian jute industry. The industry had 112 mills in the mid-fifties but
now it has only 67 mills in working condition. The rest of the units are either closed or wound up.

Since several decades, Indian jute industry has had a positive image in business world, and it could provide a handsome amount of foreign currency to the public exchequer through exporting 80 per cent of its total production. At present this percentage has come down to 30 per cent and its contribution toward valuable foreign exchange earnings has accordingly, been reduced.

The jute industry of Bangladesh was and still is, the single largest foreign exchange earner, and the best sector for labour employment. But, its profit margin has fallen from 80 per cent in the early 1960s to 35 per cent in current decade.

From the above findings it can be concluded that the jute industry in global perspective as at present, is an ailing industry and thus losing its primacy over other industries. This finding supports the first general proposition of the study.

2. The second general proposition "jute industry is essentially an export-oriented industry but the world export of jute product is showing gradual decline" succeeded in getting only partial support from the data. It is found that of the two major jute producing
countries Bangladesh jute industry is still export-oriented as it exports 90 per cent of its total production while Indian jute industry has given more emphasis on domestic market. The world trade of jute products is in downswing trend which supports the later part of the proposition.

3. It is found that Bangladesh and Indian jute industry are facing competition in selling their products to some common major buyers like USA, U.K., USSR, Japan, Middle East, EEC and Africa. As the markets are same, both the industries try to capture market share even selling their products at a rate below the production cost. Some promotional measures destructive to the interest of the competing countries are also found in the study. For example, in the study it is found that Bangladesh jute industry offers more credit to the importers than India does. On the other hand, India is spending a huge amount of money for its market promotion in USA market.

The above findings supports the general proposition No. 3 and thus it can be concluded that both the major jute producing industries are facing competition in overseas market which is severe, wasteful and harmful to the said industries.
4. The fourth general proposition of this study is that the demand for jute and jute goods in the traditional markets of developed countries is decreasing. The study upholds that developed countries like USA, UK, Canada, Japan, Australia and other EEC countries are preferring synthetic, paper and cotton made packaging materials in place of traditional jute-packaging materials like hessian, sacking and CBC. Most of these countries have developed synthetic packaging materials producing industry to meet their own demand. As a result they are purchasing lesser quantity of jute goods as compared to their previous purchase. This findings supports the related proposition.

5. The next finding is that both the jute industries of Bangladesh and India are still producing more traditional items such as hessian, sacking and CBC as compared to non-traditional items. Although some non-traditional items like wall coverings, jute carpets, jute blankets, school bags, shopping bags etc., have prospective market demand but they are not produced in bulk quantity. Major jute goods producing countries have undertaken several programmes to produce, develop and diversify their jute products instead of the traditional items. This finding is quite supportive of the fifth general proposition.
6. It is found that, since mid-sixties, jute industry's setback started with the emergence of synthetic products as substitute packaging materials to jute products. Data shows that synthetic industry has got all categories of products similar to that of jute industry. Synthetic products are competing in each and every end use of all categories of jute products excepting jute carpet backing. As a result, jute industry has been losing its market shares to synthetics gradually. Therefore, this finding supports the sixth general proposition of the study.

7. The study reveals that Bangladesh exports 90 per cent of its total production while India exports only 30 per cent of its total production. Bangladesh produces 5 lakh tonnes of jute products which is half of the total production of Indian jute industry. But Bangladesh domestic market has the capacity to consume only 10 per cent of its products whereas Indian domestic market is large enough to consume its total production of the industry. Moreover, Bangladesh jute industry is the only industry which can earn foreign exchange through exporting goods in the overseas market whereas India has several other industries which can earn foreign exchange. Bangladesh jute industry's orientation towards overseas business can be due to both compulsion
Therefore, it is evident that this finding supports the first specific proposition that jute and jute goods industry of Bangladesh is more export-oriented as compared to that of India.

8. It is found that jute industry of Bangladesh maintains separate but distinct distribution policies in both public and private sector jute mills. Moreover, BJMC plays a vital role in distributing the goods produced by both public and private sector jute mills especially in the overseas market. But Indian jute industry's channel of distribution in export market is not so distinct as that of Bangladesh. Its channels of distribution in domestic markets is well established. Hence, it can be concluded that Bangladesh jute industry's channel of distribution especially in export market is better than that of India.

9. Next set of finding reveals that Bangladesh enjoys some comparative advantages over India regarding some physical and economical factors essential for jute and jute goods production. The soil and climatic conditions of Bangladesh is suitable for the cultivation and growth of superior fine varieties of fibres. Cost of agriculture labour in Bangladesh is also cheaper than that of India. All these factors help growing cheaper and better quality of fibre in
Bangladesh. The finding supports and defends the specific proposition No. 3.

10. Another finding of the study profiles analysis is that in the face of severe competition from substitute products as well as competing jute producing countries, Indian jute industry managed to solve its problem by diverting its orientation from overseas to domestic market because, its domestic market is widely dispersed and can consume even its entire production. Moreover, most of the jute mills of India have other production lines along with the jute products, can save the original jute manufacturing units. But Bangladesh does not enjoy such a flexibility. Therefore, data supports the fourth specific proposition of the study and it is clear that marketing is not as problematic for Indian as it is for Bangladesh jute industry.

11. Indian jute industry has undertaken many effective promotional measures and sufficient funds have been allocated in this regard. At present, Indian Government has declared some schemes like Cash Compendatory Support (CCS), Minimum Support Price (MSP) and External Market Assistance programmes to boost export volumes in overseas market. On the other hand, Bangladesh jute industry's promotional measures are not adequately
financed. The above finding lends support to fifth specific proposition and it can be concluded that qualitatively the promotional measures adopted by Indian jute industry are better than those of Bangladesh.

12. It is evident from the data collected and analysed that presently Indian jute industry has a more diversified product range to offer to the market. Besides traditional items some diversification programmes have been launched to manufacture non-traditional products such as geo-jute, union bags, jute chest etc. On the other hand, Bangladesh jute industry - probably due to its heavy export commitments of jute and traditional jute products to its assured markets has not yet taken significant measures to diversify its product range.

13. Another finding of the study reveals that, with the overall development in industrial and technological sector, Indian jute industry's technology has also been developed during the last two decades. Indian jute industry does not have to import spare parts and even large machineries and equipments from outside. Whereas, Bangladesh jute industry is fully dependent on countries for all kinds of machineries and
equipments for the industry. It imports spare parts and machineries even from its competitor India. Bangladesh jute industry does not seem to have taken concrete steps towards such technological development. Hence, the data is supporting the seventh specific proposition of the study.

14. The last finding of the study is that Government's active role, modernisation and diversification programmes, technological development, established research and development institutions, incentive measures for growers and traders etc., are some positive indicators that may make Indian jute industry's future more prospective than that of Bangladesh jute industry. The future prospects for Bangladesh jute industry seem to depend on factors such as continuation of its dominance in export markets as it does not have the advantage of relying on the domestic market which offers practically no scope for absorbing its jute and jute goods production.

It is worthwhile to analyse the emerging international political and economic scenario for the purpose of projecting the future prospects of jute industry. Countries such as China, Thailand, Nepal and Malaysia can be expected to emerge as formidable
rivals in the international jute markets and use their political clout to expand export of jute and jute products. In this regard, it can be surmised that since India exports 50 per cent of its total exported quantity to USSR where significant political and economic changes are underway, one major fall out could be increased demand for several items of which jute constitutes an important part. Therefore, India with its traditional friendly ties with USSR may reap the benefits. Bangladesh, on the other hand, exports to Middle East and African countries which may shift their procurement to the emerging competitors creating problems for Bangladesh. Seem in the context of such a scenario, the future prospects of Indian jute industry are likely to better than that for Bangladesh jute industry.
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