STRATEGIC MARKETING PLAN FOR JUTE AND JUTE GOODS IN THE EC

January 1993

Agricultural Economics Research Institute (LEI-DLO)
ABSTRACT

STRATEGIC MARKETING PLAN FOR JUTE AND JUTE GOODS IN THE EC
Koster, A.C. and A.F. van Gaasbeek
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A strategic marketing plan for jute and jute goods in the EC has been developed by the LEI-DLO for the International Jute Organization. Portfolio analysis of the market position of the various jute goods in the EC, based on a description of the jute sector in the EC, has been used for the development of this strategic marketing plan. Special emphasis was given to market promotion, including a number of essential prerequisites for generic and country-wise market promotion activities.

Portfolio analysis/Marketing plan/Market promotion/Jute/International jute organization/European communities

CIP-GEGEVENS KONINKLIJKE BIBLIOTHEEK, DEN HAAG

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On the sixteenth session of the International Jute Organization - Committee On Projects (IJO-COP), New Delhi 1991, the committee recommended to start the development of a strategic marketing plan (SMP) for jute and jute products on the Western European market, as a pre-project activity. The purpose of this plan is to provide a framework for promotional activities by the IJO on the Western European markets. The International Jute Council has approved this proposal in her 16th session.

The IJO authorized the LEI-DLO to develop this marketing plan, to be presented at the eighteenth session of the International Jute Organization in the autumn of 1992 in Beijing, China. During the seventeenth session in April 1992, the first part of the study has been presented to the IJO-COP, by which both producing and consumer countries were given the possibility to give their vision on the progress of the SMP and to comment on the further development of the strategic marketing plan.

The first part of this report gives an overview of the most important West European markets in terms of import, export and consumption of jute-product and of the market structure, followed by a description of the position of the jute products on the various markets in a portfolio analysis.

The second part of the study, which has started after the discussion on the IJO-COP meeting in April 1992, deals with the strategic and promotional aspects of jute on the Western European market.

The study ends in chapter five with conclusions and recommendations for promotional activities.

The final report was presented to and acknowledged by the 18th session of IJO-COP at Beijing, China, november 3rd-5th 1992.

Disclaimer: the views expressed in this report do not necessary reflect the views of the International Jute Organization and its member countries.

The Hague, January 1993

L.C. Zachariasse
The development of a strategic marketing plan for the promotion of jute and jute goods in the European Communities is subject of this study by the LEI-DLO research institute. The description of the conversion chain in the EC and a sector level portfolio analysis of the various jute products is used as a basis for the strategic planning, with special emphasis on market promotion.

Market description

1. The intra EC trade of jute and jute goods is rather high in the statistics. Also the imported and exported quantities do not match completely. The reason for this is that much intra EC trade is just a matter of 'paper'-trade.  
2. The number of companies connected to the trade in jute goods is large. Only a small amount of companies (about 45) have a larger interest in the jute trade. Most traders are specialized in one or two jute products.

Figure 1  Diagram of the EC jute sector
3. The UK is the main basis for brokers, who in general also handle goods for destinations outside of the EC.

4. The manufacturing of jute goods in the EC is limited to three spinning mills and a small amount of jute weaving companies. The weaving companies main activity is the weaving of hessian linoleum backing.

5. The EC accounts for nearly 22% of total import of jute goods, which is almost twice the import of the USA and also, contrary to the situation in the USA, is still growing, albeit only with 4.5% per annum for the period 1973-1988 (Worldbank).

6. India is by far the largest producer of jute good in the world, whereas Bangladesh is by far the largest exporter of jute goods.

**Portfolio position jute goods**

Based on the dimensions of selection Market Attractiveness and Competitive Position, the portfolio position of the major jute product-market combinations (PMC) is as follows:

7. The PMC raw jute for fine or coarse yarns is as follows: a low market attractiveness and low competitive position due to the small scale of operations, the low degree of technological advances and a strong competition from synthetic fibre production.

8. The position of jute yarns for the woven carpets industry is strong. The competition from synthetic yarns is heavy but the preference for jute over synthetics in a considerable part of total production is evident. The position of yarns for the weaving of linoleum backing is somewhat weaker, given the market structure of the linoleum industry (monopolistic position) and the market position for linoleum.

9. Carpet Backing Cloth (CBC) is by volume and value of total sales an important market for jute. The competitive position is medium strong, given the strong competition from synthetic carpet backing. Market attractiveness is negatively influenced by market structure, prices and the expectations for the tufted carpet industry.

10. Transport packaging material (bags) has proven its value for the jute business. Despite a fall in total sales over the last years, jute bags are still an important market.

11. For explanation of the portfolio position of felt and nonwovens, see point 7.

12. Geotextiles undergo strong competition from synthetic materials. The advantages of using natural materials for specific applications where the natural biodegradability is an advantage instead of a disadvantage, are limited. The awareness under the potential users of jute geotextiles is also very limited.

**Strategic Framework**

13. The elements of product (quality) and place (logistics) are the most important elements of the marketing mix for jute yarns, considering the
market position of jute carpet yarns in the EC. As far as promotion is concerned, product and place have to incorporated into any promotional activity.

14. Notwithstanding the strong price competition and general cost-awareness of European tufters, quality of the CBC is as important as the pricing. Promotion for the back of a carpet has to be in line with promotional activities for carpets as such.

15. The image of jute as an environmental friendly product may be illustrated by the success of linoleum as an environmental friendly floor-covering product.

16. EC regulations on packaging materials but first of all the current discussions concerning the contamination of all goods (but especially bags) determine strongly the market position of jute packaging material. Product quality is the dominant element of the marketing mix for sacks and bags.

17. Further product and market development is essential for all 'new' jute goods. A chain of distribution for these products has yet to be developed. Cooperation with European designers, stylists and department stores is very important.

18. Promotional activities will only be successful if a number of conditions are met: better and more constant quality, accurate delivery according to contract and a definite solution for the contamination problems.

**Market development and market promotion**

19. The environmental friendliness of jute can only be used when there are no doubts what so ever about the validity of these arguments. Only then the 'natural' character of jute goods may be used for generic market promotion.

20. A Marketing Intelligence System (MIS) has to be developed. A customer orientated MIS should be able to provide governments, (inter)national organizations as well as individual companies, both in the producer as well as in the consumer countries, with relevant information. The MIS should be preceded by a feasibility-study on the various possibilities for implementation.

21. A jute bulletin should, in conjunction with the MIS, be used as a vehicle for extension of present relations and the establishment of new (semi-commercial) relations.

22. Political lobby is desirable regarding the position of jute goods in light on new regulations on reduction of packaging waste materials and the allowable environmental impact of durable consumer goods.

23. For carpets, the prejudice regarding the quality of jute yarns should be taken away by the enhancement of the intrinsic product pluses. The consumer awareness of the quality of jute as a component of carpets should be increased and the 'green' character of jute should be more elaborated.
24. Trade fairs where IJO-staffed stands are more in accordance with those of the other fair-participants are (potentially) more successful if product innovations can be shown.

25. By addressing the final consumers in the EC a demand-pull effect for jute products can be achieved, through cooperation with large retail-chains or through editorials in interior-decorating magazines.

26. Specific actions in individual countries will be used for the further establishment of a sound market position of jute in the EC markets.
PART ONE   EC MARKETS AND PORTFOLIO ANALYSIS
1. INTRODUCTION

1.1 Objective

The objective of the jute strategic marketing plan (SMP) is to develop a strategic framework for jute marketing with special attention to promotion in order to allocate the promotional budget in an efficient and goal-oriented way. This is in accordance with the recommendations of the review 'JUTE MARKET PROMOTION: REPORT OF THE EVALUATION MISSION' by mr. Koster, 1991, which has been presented to the IJO/COP to the autumn meeting in New Delhi, 1991.

A strategic plan consists of a detailed analysis of the market, a selective choice of interesting market segments, medium and long term goals on those markets and a description of the way to achieve those goals. This means that for the different applications of jute an analysis has to be made of their market status and future possibilities.

The strengths and weaknesses of the jute-applications, combined with opportunities and threats on the markets, give an overview of the attractiveness of all the possible product-market combinations (portfolio analysis).

On the most attractive markets a strategy has to be developed for marketing jute. In this strategy a description has to be made of the input of all resources, complementing each other, to assure a maximum effect in positioning jute on the markets, given the characteristics of the product itself, of the market structure and the modest possibilities to control a marketing policy on sector level.

The first part of the report deals with the market analysis in terms of quantities and structure and with the portfolio analysis. The aim of part one of the report is to describe the different product-market combinations for jute in order to make a choice of the market segments that are to be analyzed in more detail and for which a strategic marketing plan has to be developed. This choice has been made after the presentation of the report to the participants at the seventeenth meeting of the IJO-COP, april 1992.

The development of the strategic marketing plan is the objective of the second part of this report.
1.2 Procedure

Several papers on jute have been published in Europe. The most complete studies are: The World demand prospects for jute and the Bangladesh Restructuring Options for the jute manufacturing industry by the World bank, The integrated model of market for jute and jute goods by Burger and Wansink and the study by the FAO: The impact of changing technological and economic factor on the market for natural industrial fibres. These studies contain valuable information for the jute sector but mostly deal with the European market as a homogeneous entity. Although general trends do also apply for individual countries in Europe there are differences between countries. It is therefore difficult to derive specific marketing efforts from these studies to simulate jute consumption. Several other studies focus on only small parts of the market (one country/one application) and do not cover the interactions between products and countries. These studies have been used for the identification of general trends. The report from the Worldbank that came available in february of this year, gives additional information on the structure and prospects of the Bangladesh jute sector.

On country-level the statistical data used in this study are mainly from Eurostat. With this data a direct relation can be made with the past study of Burger, who uses the same data source. Information on the market structure and characteristics of markets and products is gathered through interviews with sector members. For part one, interviews were held with traders, spinners and weavers, and research institutes. The ‘end users’ (e.g., the carpet industry) were contacted in the second phase, when more in depth the strategic and promotional aspects were discussed. A complete list of interviewed persons, companies etc. is given in annex five.

The export structure in the producing countries will only be briefly discussed in this report. Besides information from the Worldbank/JUMS report, information from interviews in Calcutta and Dhaka was used to compile this study.

1.3 Outline of the report

After the introduction a market description of the European jute industry follows in chapter two. In this chapter the market structure for jute in the eight most important countries of the EC will be described, followed by a complete picture of the total-EC. In these paragraphs figures will be presented on import, export and apparent consumption of jute. A description will be given of the market structure (type, function and number of companies connected with jute), the product flow through the conversion chain and a brief description of endmarkets.

Chapter three addresses the portfolio analysis. After a short introduction of the methodology, the six product groups will be analyzed in terms of strength & weaknesses and opportunities & threats on the dimensions of strategic importance and degree of managing difficulties. This analysis is
done on EC-level, with a further specification to countries where necessary. This part will be completed with an overview of all the possible product-market combinations in terms of market attractiveness and competitive position of jute.

In the second part of the report, the strategic framework and the marketing mix will be further elaborated, followed by a description of the marketing mix 'tools' for the major product-market combinations (chapter four). In chapter five, an overview is given of potential market promotion activities per product-market combination and per region, including project-documents (outlines).
2. MARKET DESCRIPTION

2.1 Introduction

In this part the markets for jute and jute goods will be described countrywise, with an overview of the EC market as a whole and a short description of the origin countries at the end. The apparent consumption in the import-export-consumption table is the balance of import and export of that specific product. Domestic production is described in the text. The figures of import and export are based on the analytical tables of Eurostat of the year 1990. The figures and estimates about market structure and product flows are based on the interviews, unless otherwise specified. The chapter is concluded with a short description of the origin countries.

2.2 Belgium

The apparent consumption of raw jute in Belgium in 1990 is negative. The average consumption over the past five years is about 1200 tons. Apparent consumption can be negative due to carry-over stocks, indicating that the volume of the stocks exceeds the yearly consumption.

There are two spinning-mills for jute in Belgium. One uses jute-cuttings for a low quality yarn for telephone and electricity-cables. The other one produces fine yarn. Both have a very small production of yarns. For the first company spinning is only a minor activity (10%). The main activity is trade in yarns, which also includes rewinding and relabelling of imported yarns (small quantities, other spindles etc.).

There are no jute weaving companies left in Belgium. The carpet industry consumes all yarns. The carpet industry buys the yarn through traders, no direct import from the origin countries occurs. CBC-imports are mainly done by traders of which there are about 10 big ones active in Belgium. There are many opportunity traders who sometimes deal in carpet-yarns or CBC. All traders deal in different yarns, both natural fibres (jute) and synthetics.

In the carpet industry there are more than 110 companies active of which 74 produce tufted carpet and 38 woven carpets. Figures from Intercontuft show a use of 47.4 million m2 jute CBC (market share 21%) and 25 million kg. jute carpet yarn. The figure for CBC corresponds with the Eurostat statistics but the consumption of yarn is about half the apparent consumption.
Table 2.1 Import, export and apparent consumption of jute and jute products in Belgium in tons (1990)

<table>
<thead>
<tr>
<th>IMPORTS by countries of origin and type of product</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>5509</td>
<td>15503</td>
<td>11815</td>
<td>9776</td>
</tr>
<tr>
<td>India</td>
<td>-</td>
<td>5897</td>
<td>3707</td>
<td>1378</td>
</tr>
<tr>
<td>China</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>15322</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>37010</td>
<td>52</td>
<td>2672</td>
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<tr>
<td>Netherlands</td>
<td>1021</td>
<td>77</td>
<td>970</td>
<td>2193</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>259</td>
<td>25</td>
<td>268</td>
<td>1173</td>
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<tr>
<td>United Kingdom</td>
<td>47</td>
<td>796</td>
<td>24</td>
<td>60</td>
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<tr>
<td>Other EC</td>
<td>-</td>
<td>20</td>
<td>95</td>
<td>839</td>
</tr>
<tr>
<td>Other world</td>
<td>40</td>
<td>327</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>Total imports</td>
<td>6972</td>
<td>59822</td>
<td>16940</td>
<td>33433</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPORTS by countries of destination and type of product</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>209</td>
<td>1536</td>
<td>639</td>
<td>5438</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>3213</td>
<td>565</td>
<td>595</td>
<td>1647</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1089</td>
<td>83</td>
<td>4</td>
<td>279</td>
</tr>
<tr>
<td>France</td>
<td>1822</td>
<td>1657</td>
<td>144</td>
<td>10797</td>
</tr>
<tr>
<td>Other EC</td>
<td>800</td>
<td>1106</td>
<td>125</td>
<td>498</td>
</tr>
<tr>
<td>Other World</td>
<td>232</td>
<td>2132</td>
<td>306</td>
<td>6643</td>
</tr>
<tr>
<td>Total exports</td>
<td>7364</td>
<td>7078</td>
<td>1813</td>
<td>25575</td>
</tr>
</tbody>
</table>

| APPARENT CONSUMPTION | -392 | 54054 | 15127 | 7858 |

from the import/export statistics. From the interviews there is an indication the Eurostat figures are more accurate but this point remains somewhat unclear.

2.3 United Kingdom

The UK has the largest import of raw jute of all the EC-countries. The import is through brokers which buy the jute from shippers in the producing countries. There are two spinning mills left in Dundee area. The spinning capacity has decreased sharply in the last years. One of the two remaining mills is considered by many purchasing managers of UK carpet manufacturers to be of non-british standard.

The UK-spun yarn is now only used by the woven-carpet industry, no UK-yarn is woven for CBC or hessian linoleum backing. The total production of the UK spinning mills is about 10,000 tons.
The one weaving company in the UK uses imported yarns from both Bangladesh and India. The main product is hessian cloth, used by the linoleum industry. An other product is roof-scrims but the market for this product is small due to the recession in the building industry. Weaving is only a minor activity of this company. The most important activity is trade.

Table 2.2 Import, export and apparent consumption of jute and jute products in the United Kingdom in tons (1990)

<table>
<thead>
<tr>
<th>IMPORTS by countries of origin and type of product</th>
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<tbody>
<tr>
<td>Countries</td>
</tr>
<tr>
<td>Bangladesh</td>
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<tr>
<td>India</td>
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<tr>
<td>China</td>
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<tr>
<td>Thailand</td>
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<tr>
<td>Netherlands</td>
</tr>
<tr>
<td>Belgium</td>
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<tr>
<td>W.-Germany</td>
</tr>
<tr>
<td>Other EC</td>
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<tr>
<td>Other world</td>
</tr>
<tr>
<td>Total imports</td>
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<th>EXPORTS by countries of destination and type of product</th>
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<tr>
<td>Countries</td>
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<td>Netherlands</td>
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<td>France</td>
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<tr>
<td>Other EC</td>
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<tr>
<td>Other World</td>
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<tr>
<td>Total exports</td>
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</tbody>
</table>

| APPARENT CONSUMPTION | 16150 | 5904 | 28204 | 3787 |

Almost all jute-products are imported through brokers. Brokers do not keep stocks but buy and sell in commission. They sell to 'stockist' whom on their turn sell from stock to both wholesalers and direct to the carpet industry. There are about 12 major stockist in the UK: they keep an average stock for 3 to 6 months.

The UK is the centre for import of CBC in the EC. There are about 10 important traders of CBC of which the three biggest have together a market share of 80%.

The UK has a large carpet industry, partially concentrated in the Kidderminster area. There are 85 companies of which 49 manufacture tufted carpet
and 36 woven carpets. According to Intercontuft figures the tufting branch in the UK uses 51.5 million m2 jute CBC (market share 47%) and the woven carpets branch uses 10 million Kg jute yarn.

There are five 'converters' left in the UK, who convert hessian cloth to sacks. They deal in special sacks, e.g. sacks with special sizes or with a special (high quality) print and/or small quantities. The cloth is imported, mainly from Bangladesh and India.

There are about 3 to 4 important traders of sacks in the UK. Much of the UK-based trade in sacks by UK traders goes directly from the origin countries through UK-brokers to other destinations (Africa, S-America) and does not enter the UK market.

2.4 The Netherlands

In the Netherlands there are no jute spinners. Most of the imports of raw jute are reexported again, mainly to other EC-countries. The very low consumption of raw jute consists mainly of jute-cuttings for the production of

Table 2.3 Import, export and apparent consumption of jute and jute products in the Netherlands in tons (1990)

<table>
<thead>
<tr>
<th>IMPORTS by countries of origin and type of product</th>
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<td>Belgium/Lux</td>
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<td>W.-Germany</td>
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<td>United Kingdom</td>
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<td>Other EC</td>
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<td>Other world</td>
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<td>Total imports</td>
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<td>France</td>
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<tr>
<td>Other EC</td>
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<td>Other World</td>
</tr>
<tr>
<td>Total exports</td>
</tr>
</tbody>
</table>

| APPARENT CONSUMPTION                                    | 298      | 5768 | 4510          | 9263            |
felt. Felt is used in small quantities on traditional markets. Small scale experiments take place in finding new applications for felt. The most important applications are vinyl-felt, geotextiles (still experimental), the automotive industry and felt as a growing-medium for horticultural production (also experimental).

The (carpet) weaving industry uses most of the imports of yarn in the EC. There are two weaving companies in The Netherlands. Both import their yarn directly from India and Bangladesh. They have longstanding contacts with a few mills that are yearly or half-yearly visited and screened on quality of production by staff-members of the Dutch industry. One weaver specializes on hessian-cloth for linoleum, the other on packaging material. Hardly any CBC is weft in the Netherlands only incidently for special (heavy) quality carpets. Other products are a large variety of cloth, weft in small quantities for different applications as camouflage cloth, decoration wefts, thermal screens for glass-house horticulture and other cloth for horticultural applications. A limited quantity of carpet-yarns is imported from Belgium.

A part of the woven fabrics, imported in the Netherlands, is hessian cloth for linoleum, the other part is CBC. The Netherlands have a relative small carpet industry with 25 companies manufacturing tufted carpets and 7 producing woven carpets. The consumption of jute CBC is 12 million m2 (market share: 16%) and of jute carpet yarns is 1 million Kg.

Made up articles are mostly jute-bags. Import and trade is in the hands of a few (3) specialized bag-traders, who also deal in PP-bags. The export to other EC-countries is mainly to Greece and Spain, the other world is mostly Ivory Coast and the USA.

2.5 West-Germany

In Germany there are no spinning mills of jute left. The production of felt is the major reason for the consumption of raw jute in Germany. The most important applications for felt is the automotive industry and vinyl-felt.

There are 3 weaving companies in West-Germany. The main part of the cloth weft in Germany is used as backing for linoleum.

CBC consumption is low in Germany. There are only a few carpet-industries that use jute-CBC. The 40 tufted carpet manufactures only use 500,000 m2 jute CBC. The imported woven fabrics are mainly for the linoleum industry. The 26 woven carpet manufacturers hardly use jute yarn (only 200 tons).

For sacks and bags there is only one big trader in Germany although also a Dutch firm has an important office in Germany. Both holdings trade in a large variety of sacks of synthetics and natural fibres (cotton and jute).
### Table 2.4 Import, export and apparent consumption of jute and jute products in West Germany in tons (1990)

#### IMPORTS by countries of origin and type of product

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1857</td>
<td>5598</td>
<td>1224</td>
<td>5907</td>
</tr>
<tr>
<td>India</td>
<td>44</td>
<td>1266</td>
<td>728</td>
<td>235</td>
</tr>
<tr>
<td>China</td>
<td>200</td>
<td>-</td>
<td>-</td>
<td>2328</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>892</td>
<td>94</td>
<td>11</td>
</tr>
<tr>
<td>Netherlands</td>
<td>221</td>
<td>123</td>
<td>1780</td>
<td>1693</td>
</tr>
<tr>
<td>Belgium</td>
<td>3039</td>
<td>662</td>
<td>451</td>
<td>705</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-</td>
<td>321</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Other EC</td>
<td>102</td>
<td>8</td>
<td>286</td>
<td>286</td>
</tr>
<tr>
<td>Other world</td>
<td>58</td>
<td>47</td>
<td>197</td>
<td>115</td>
</tr>
<tr>
<td>Total imports</td>
<td>5521</td>
<td>8917</td>
<td>4794</td>
<td>11311</td>
</tr>
</tbody>
</table>

#### EXPORTS by countries of destination and type of product

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>105</td>
<td>-</td>
<td>1728</td>
<td>1658</td>
</tr>
<tr>
<td>Belgium</td>
<td>91</td>
<td>94</td>
<td>176</td>
<td>873</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-</td>
<td>10</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>France</td>
<td>2</td>
<td>8</td>
<td>11</td>
<td>70</td>
</tr>
<tr>
<td>Other EC</td>
<td>15</td>
<td>-</td>
<td>254</td>
<td>884</td>
</tr>
<tr>
<td>Other World</td>
<td>137</td>
<td>51</td>
<td>168</td>
<td>943</td>
</tr>
<tr>
<td>Total exports</td>
<td>349</td>
<td>163</td>
<td>2345</td>
<td>4430</td>
</tr>
</tbody>
</table>

#### APPARENT CONSUMPTION

|                  | 5172 | 8754 | 2449 | 6881 |

#### 2.6 France

The French market is only a small market for jute. In May of this year a market description was planned by the French Centre for Less Developed Countries (Promex-PMA). The evaluation of the Promex-PMA activities showed that they not so much conducted a market research, but instead focused their jute related activities on geotextiles. The French market for other jute goods was considered of no importance. Also for geotextiles, results were very meagre.

The carpet yarns are mainly imported through Belgium. In France there is only one weaving company. There are 18 carpet manufacturers of which 12 produce woven carpets and 6 produce tufted carpets. The consumption of jute CBC is 6.5 million m^2^ (market share 16%) and of jute yarn 4 million kg. For bags and sacks there are 3 companies of which one is an annex of a Dutch firm. There is only one major French firm trading in both jute and PP sacks and bags.
Table 2.5 Import, export and apparent consumption of jute and jute products in France in tons (1990)

**IMPORTS** by countries of origin and type of product

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>966</td>
<td>1146</td>
<td>168</td>
<td>3134</td>
</tr>
<tr>
<td>India</td>
<td>-</td>
<td>104</td>
<td>451</td>
<td>315</td>
</tr>
<tr>
<td>China</td>
<td>197</td>
<td>12</td>
<td>-</td>
<td>3005</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>580</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Netherlands</td>
<td>71</td>
<td>-</td>
<td>31</td>
<td>296</td>
</tr>
<tr>
<td>Belgium</td>
<td>1842</td>
<td>3999</td>
<td>954</td>
<td>658</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>26</td>
<td>-</td>
<td>11</td>
<td>63</td>
</tr>
<tr>
<td>Other EC</td>
<td>225</td>
<td>274</td>
<td>34</td>
<td>53</td>
</tr>
<tr>
<td>Other world</td>
<td>87</td>
<td>-</td>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td>Total imports</td>
<td>3414</td>
<td>6115</td>
<td>1676</td>
<td>7552</td>
</tr>
</tbody>
</table>

**EXPORTS** by countries of destination and type of product

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>21</td>
<td>4</td>
<td>329</td>
<td>598</td>
</tr>
<tr>
<td>Belgium</td>
<td>145</td>
<td>215</td>
<td>46</td>
<td>509</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>65</td>
<td>-</td>
<td>155</td>
<td>215</td>
</tr>
<tr>
<td>Other EC</td>
<td>64</td>
<td>-</td>
<td>516</td>
<td>330</td>
</tr>
<tr>
<td>Other World</td>
<td>69</td>
<td>53</td>
<td>28</td>
<td>341</td>
</tr>
<tr>
<td>Total exports</td>
<td>356</td>
<td>272</td>
<td>1073</td>
<td>1993</td>
</tr>
</tbody>
</table>

**APPARENT CONSUMPTION**

<table>
<thead>
<tr>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>3058</td>
<td>5843</td>
<td>603</td>
<td>5559</td>
</tr>
</tbody>
</table>

### 2.7 Italy

The tufted carpet industry (22 companies) account for most of the consumption of woven fabrics in Italy. Jute CBC has a market share of only 7%. According to the Intercontuft estimates, the 12 woven carpet manufacturers consume about 300 tons of yarn, which is very little compared to the 4.6 million kg of the import/export statistics. Most of the import is folded or cabled yarn from Thailand so it will probably be kenaf yarn and maybe for that reason not included in the Intercontuft figures. Italy is a big importer of jute sacks, most of it for domestic use and exports of hazelnuts.
Table 2.6 Import, export and apparent consumption of jute and jute products in Italy in tons. (1990)

**IMPORTS by countries of origin and type of product**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>58</td>
<td>1509</td>
<td>761</td>
<td>2733</td>
</tr>
<tr>
<td>India</td>
<td>-</td>
<td>205</td>
<td>438</td>
<td>229</td>
</tr>
<tr>
<td>China</td>
<td>-</td>
<td>-</td>
<td>33</td>
<td>6117</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>2476</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>-</td>
<td>220</td>
<td>911</td>
</tr>
<tr>
<td>Belgium</td>
<td>95</td>
<td>320</td>
<td>43</td>
<td>804</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>1</td>
<td>11</td>
<td>124</td>
<td>205</td>
</tr>
<tr>
<td>Other EC</td>
<td>-</td>
<td>103</td>
<td>68</td>
<td>168</td>
</tr>
<tr>
<td>Other world</td>
<td>141</td>
<td>1</td>
<td>107</td>
<td>2343</td>
</tr>
<tr>
<td>Total imports</td>
<td>327</td>
<td>4624</td>
<td>1812</td>
<td>13511</td>
</tr>
</tbody>
</table>

**EXPORTS by countries of destination and type of product**

<table>
<thead>
<tr>
<th>Countries</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>58</td>
</tr>
<tr>
<td>Belgium</td>
<td>8</td>
<td>-</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>137</td>
</tr>
<tr>
<td>Other EC</td>
<td>218</td>
<td>22</td>
<td>44</td>
<td>260</td>
</tr>
<tr>
<td>Other World</td>
<td>5</td>
<td>2</td>
<td>39</td>
<td>296</td>
</tr>
<tr>
<td>Total exports</td>
<td>239</td>
<td>25</td>
<td>87</td>
<td>779</td>
</tr>
</tbody>
</table>

**APPARENT CONSUMPTION**

|                | 88     | 4599 | 1725 | 12732 |

2.8 Spain

Spain has a relatively small carpet industry. There are 14 woven carpet manufacturers. The market share of jute CBC can be estimated to about 20%. The 25 woven carpet manufacturers produce 4.1 million Kg woven carpets. How much jute is used is not known. An other application of jute yarn is in espadrilles, linen shoes with a jute sole.
Table 2.7 Import, export and apparent consumption of jute and jute products in Spain in tons (1990)

<table>
<thead>
<tr>
<th>IMPORTS by countries of origin and type of product</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>42</td>
<td>4671</td>
<td>161</td>
<td>957</td>
</tr>
<tr>
<td>India</td>
<td>-</td>
<td>1257</td>
<td>13</td>
<td>90</td>
</tr>
<tr>
<td>China</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>420</td>
</tr>
<tr>
<td>Thailand</td>
<td>-</td>
<td>1112</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>66</td>
<td>-</td>
<td>187</td>
</tr>
<tr>
<td>Belgium</td>
<td>1</td>
<td>437</td>
<td>24</td>
<td>112</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>2</td>
<td>-</td>
<td>11</td>
<td>-</td>
</tr>
<tr>
<td>Other EC</td>
<td>1</td>
<td>74</td>
<td>148</td>
<td>127</td>
</tr>
<tr>
<td>Other world</td>
<td>-</td>
<td>5</td>
<td>26</td>
<td>41</td>
</tr>
<tr>
<td>Total imports</td>
<td>46</td>
<td>7623</td>
<td>382</td>
<td>1934</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPORTS by countries of destination and type of product</th>
<th>Raw jute</th>
<th>Yarn</th>
<th>Fabrics/Woven</th>
<th>Made up articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Netherlands</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>227</td>
</tr>
<tr>
<td>Belgium</td>
<td>-</td>
<td>8</td>
<td>-</td>
<td>449</td>
</tr>
<tr>
<td>W.-Germany</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Other EC</td>
<td>16</td>
<td>-</td>
<td>1</td>
<td>52</td>
</tr>
<tr>
<td>Other World</td>
<td>1</td>
<td>14</td>
<td>5</td>
<td>1422</td>
</tr>
<tr>
<td>Total exports</td>
<td>17</td>
<td>23</td>
<td>6</td>
<td>2160</td>
</tr>
</tbody>
</table>

APPARENT CONSUMPTION 29 7600 376 -226

2.9 Portugal

Although Portugal had a relatively high consumption of raw jute, total consumption is very low. The raw jute and yarn was mainly used to produce CBC, which was exported to the United Kingdom. Portugal was just a production area for CBC because of the low wages, used by the UK industry to spread risks in supply. The spinning-industry has closed down in 1991 and at least some equipment has exported to the producing countries.
government's policy in those two countries. Data from the Indian government, IJMA, Bangladeshi government, BJMC, BJMA and FAO are used to compile the tables in which the relations between the production countries and the EC-consumer markets are described. Additional information comes from the interviews, which were held in Calcutta and Dhaka prior to the spring session of IJO-COP and from the JUMS/Worldbank studies.

In table 2.9 an overview is given of the areas under cultivation and the production of jute and jute like fibres per region/country.

In table 2.10 an overview is given of the division of jute production in India and Bangladesh in production of hessian, sacking, CBC and others (mainly yarns, wall covering etc.). Table 2.11 gives an overview of the major exporting countries.

India is by far the largest producer of jute goods in the world with 41% share of total jute production, whereas Bangladesh only produces 15% of total world production. Export-wise these figures are different: Bangladesh is the largest exporter of jute goods to developing and developed countries with a total market share of 57%. India has a market share of 29% of world jute goods exports in 1990. India naturally has a very large domestic market, contrary to the situation in Bangladesh. Of total indian production in 1990-91, 1,234,700 ton is consumed on the domestic markets (88% of total production). In Bangladesh, 51,946 ton was internally consumed (only 10% of total production).

Table 2.10 Production of jute goods in India (I) and Bangladesh (BD) in 1000 Mt. in the period 1978/79-1990/91

<table>
<thead>
<tr>
<th>Years/product</th>
<th>Hessian I</th>
<th>BD</th>
<th>CBC *) I</th>
<th>BD</th>
<th>Sacking I</th>
<th>BD</th>
<th>Other I</th>
<th>BD</th>
<th>Total I</th>
<th>BD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978-79</td>
<td>279</td>
<td>178</td>
<td>113</td>
<td>77</td>
<td>511</td>
<td>235</td>
<td>144</td>
<td>18</td>
<td>1047</td>
<td>509</td>
</tr>
<tr>
<td>1979-80</td>
<td>366</td>
<td>193</td>
<td>145</td>
<td>78</td>
<td>655</td>
<td>251</td>
<td>172</td>
<td>8</td>
<td>1337</td>
<td>531</td>
</tr>
<tr>
<td>1980-81</td>
<td>402</td>
<td>205</td>
<td>67</td>
<td>71</td>
<td>732</td>
<td>310</td>
<td>191</td>
<td>3</td>
<td>1392</td>
<td>590</td>
</tr>
<tr>
<td>1981-82</td>
<td>349</td>
<td>197</td>
<td>84</td>
<td>56</td>
<td>725</td>
<td>329</td>
<td>176</td>
<td>3</td>
<td>1334</td>
<td>587</td>
</tr>
<tr>
<td>1982-83</td>
<td>323</td>
<td>228</td>
<td>56</td>
<td>94</td>
<td>783</td>
<td>241</td>
<td>175</td>
<td>6</td>
<td>1338</td>
<td>570</td>
</tr>
<tr>
<td>1983-84</td>
<td>228</td>
<td>242</td>
<td>30</td>
<td>97</td>
<td>658</td>
<td>197</td>
<td>173</td>
<td>8</td>
<td>1089</td>
<td>544</td>
</tr>
<tr>
<td>1984-85</td>
<td>326</td>
<td>206</td>
<td>47</td>
<td>85</td>
<td>806</td>
<td>219</td>
<td>192</td>
<td>6</td>
<td>1370</td>
<td>516</td>
</tr>
<tr>
<td>1985-86</td>
<td>311</td>
<td>163</td>
<td>31</td>
<td>67</td>
<td>823</td>
<td>226</td>
<td>189</td>
<td>1</td>
<td>1351</td>
<td>458</td>
</tr>
<tr>
<td>1986-87</td>
<td>385</td>
<td>204</td>
<td>54</td>
<td>80</td>
<td>831</td>
<td>247</td>
<td>161</td>
<td>4</td>
<td>1394</td>
<td>537</td>
</tr>
<tr>
<td>1987-88</td>
<td>316</td>
<td>223</td>
<td>41</td>
<td>60</td>
<td>679</td>
<td>226</td>
<td>156</td>
<td>12</td>
<td>1192</td>
<td>523</td>
</tr>
<tr>
<td>1988-89</td>
<td>314</td>
<td>185</td>
<td>36</td>
<td>68</td>
<td>793</td>
<td>238</td>
<td>247</td>
<td>10</td>
<td>1387</td>
<td>503</td>
</tr>
<tr>
<td>1989-90</td>
<td>347</td>
<td>178</td>
<td>34</td>
<td>67</td>
<td>671</td>
<td>268</td>
<td>253</td>
<td>15</td>
<td>1304</td>
<td>529</td>
</tr>
<tr>
<td>1990-91</td>
<td>331</td>
<td>156</td>
<td>20</td>
<td>59</td>
<td>808</td>
<td>202</td>
<td>271</td>
<td>1430</td>
<td>417</td>
<td></td>
</tr>
</tbody>
</table>

*) Carpet Backing Cloth.
Source: BJMC, JMDC India, FAO.

30
FAO data from the FAO quarterly statistics show that the production of yarn in Bangladesh (not included in ‘other products’) increased from 55,000 ton in 1986/87 to 98,000 ton in 1990/91. Data from India indicate that the amount of yarn produced for export in India is considerably less than in Bangladesh.

Table 2.11 Market shares (in % of total) of world jute goods exports by selected major exporting countries in the period 1980-1990

<table>
<thead>
<tr>
<th>Years</th>
<th>Bangladesh</th>
<th>India</th>
<th>Thailand</th>
<th>Nepal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>46</td>
<td>45</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>1981</td>
<td>53</td>
<td>37</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>1982</td>
<td>54</td>
<td>35</td>
<td>9</td>
<td>2</td>
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<tr>
<td>1983</td>
<td>61</td>
<td>24</td>
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<td>1984</td>
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<td>58</td>
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<tr>
<td>1986</td>
<td>58</td>
<td>29</td>
<td>12</td>
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<td>1987</td>
<td>55</td>
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<td>-</td>
</tr>
<tr>
<td>1990</td>
<td>57</td>
<td>29</td>
<td>12</td>
<td>2</td>
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</tbody>
</table>


The EC accounts for nearly 22% of total imports of jute goods, which is almost twice the import of the USA and also, contrary to the situation in the USA, is still growing, albeit only with 4.5% per annum for the period 1973-1988 (Worldbank).

Production structure in India and Bangladesh

In India, 10% of total production is produced by government-owned mills whereas in Bangladesh the government owned mills (BJMC) account for nearly 60% of total production. The number of jute mills in India is 73; in Bangladesh 53 mills are producing jute goods. The yearly production of jute goods in India in 1990-91 is 1,400,000 ton; 529,106 ton/year in Bangladesh (1989-90).

In India only two (or three) mills are exclusively producing for the export. These so called export orientated mills are planning to increase their exports to the EC, USA, Middle East, Africa, Australia and New-Zealand and Japan strongly in the near future.

The distribution of jute goods to the export markets goes mainly through the shippers/exporters or agents of foreign trading companies. Only a limited amount of Indian and BJMA-mills exports directly to their markets, in most cases under their own trade-marks whereas the bulk of the export
through shippers is without a trade-mark. A major Bangladeshi trading company exports its products to European traders instead of direct exports to the end-customers because of the quantity of the shipments (small quantities per customer) and the requirements set by EC based end-users (technical standards, e.g. on regularity and strength).

The overall picture of the jute industry in the production countries is not very hopeful, mainly caused by a decrease in the demand for jute goods in the major consuming countries and the inability of the sectors to react to changes in demand structures. Studies by the Worldbank and the JUMS study have reduction of excess capacity as the main recommendation for the re-vitalizing of the jute sector in Bangladesh. This probably also applies for India, where also a large percentage of present capacity stands idle or runs at low to negative rates of efficiency. Only the export oriented mills are able to invest in new or modernized machines and technical know how to serve successfully the consumer market.

The projects in both countries for the introduction of hydro-carbon free batching oils (castor oil, palm oil etc.) are examples of the new, more market oriented approach by the jute mills.

Government policy in both exporting countries is besides liberalization and privatization also aimed at the development of 'diversified products'. Diversified products are for example household products and products with non-standard size, weight and shapes. Also blended yarns and union blends are considered 'diversified products'. Blends are made with cotton, polyester, polypropylene, linen and viscose. Up to now, only India has succeeded in implementing this diversification programme. The products are mainly designed for the domestic market.
3. JUTE PRODUCTS PORTFOLIO ANALYSIS ON EC MARKETS

3.1 Introduction: model of portfolio analysis

A Portfolio Analysis contains a detailed analysis of jute product-market combinations. Strong and weak points, combined with opportunities and threats determine the competitive position of jute and jute products on various markets. A balanced portfolio consists of a combination of products and markets by growth, profits and cashflow. A portfolio analysis will state the markets in which the products will compete, their performance and price characteristics, the way in which they will be produced and distributed, and cash flow. A distinction can be made to short term and long term analyzing. Portfolio analysis leads to the following activities:

1. Determination of the level and scale of analysis and the determination of mutual relations. During phase one, all product market combinations will be divided into strategic business units. In a sector level portfolio analysis strategic business units will be determined for groups of jute products and not for individual countries or companies. The criteria for the determination of different Product-Market Combinations (PMC's) will be discussed later.

2. Identification of relevant dimensions and the relative importance of the distinction between product-market combinations.

3. Development of a matrix of product-market combinations, based on the relevant dimensions.

4. The allocation of products (businesses) to the matrix.

5. Selection of optimal strategies for individual products (or groups of products) considering the general position and the allocation of means to the different parts of the matrix.

The position of the product groups in quadrants of the matrix is decisive for the strategic marketing implementations. Low market shares of a market segment with low growth calls for a different strategy compared to low market shares in a high growth market segment. Special attention will be paid to the fact that on all of the relevant markets for jute products, jute has a limited market share. Low share business can only compete effectively in the segments where their own strengths will be highly valued. The use of unique selling propositions is essential.
For the formulation of an industrial marketing strategy it is also essential that factors in the industrial end-use markets as derived (indirect) demand, sales concentration, structure and distribution of the power in the market, buyer/seller relationships are identified.

In most cases the strategic importance of a business/product group can be determined by the following factors:

- Strategic importance
  - Volume or dollar value of purchases.
  - Potential of the account.
  - Prestige of the account.
  - Customer market leadership.
  - Overall account desirability:
    - business diversification;
    - open new markets;
    - improve technological strength;
    - improve/spoil other relations.

The factors from which the difficulty in managing (amount of difficulties) the business/product groups depends are summarized below:

- Degree of Managing difficulties
  - Product characteristics.
  - Market characteristics.
    - market needs and requirements;
    - market buying behaviour;
    - market technical and commercial competence.
  - Competition for the business.
    - number of competitors.
  - Strengths and weaknesses of competitors.
    - competitors position in the same market.

These two variables, strategic importance and difficulty in dealing with product and market conditions of business/product groups also can be further developed by combination in a two dimensional matrix (figure 3.1).

The ultimate position of the product-market combination in this box depends therefore on the 'score' of the pmc on the two variables. PMC's with a medium to high strategic importance are considered to be key-businesses. Those key-businesses are first in line for further portfolio analysis, which is done with the help of a nine-cell matrix.

The following variables are considered in those matrixes:

- Market attractiveness (low-medium-high).
- Relative stage of competitive position (low-medium-high).

There are three basic strategies that the jute sector can pursue:

1. Improving the strength of the relationship (cell nr's 1, 2, 4 and 5),
2. Holding of positions (cell nr's 3, 6 and 9) and
3. Withdrawal (cell nr's 7 and 8).
Each strategy requires a different set of instruments of the marketing mix. This will be discussed in more detail in the second part of the report, chapter 3.3.

*Note: The commodity character of jute and jute goods makes it sometimes difficult to cling to the classification as given before. Some divisions will not be discussed when the intermediate products raw jute/jute fibres and jute yarns are analyzed.*
In general a division is found between the position of different pmc's in the portfolio matrix reflecting their place on the product-life cycle. The product-life cycle reflects the degree of maturity of a product. New product are in most cases underdeveloped in a sense that their market shares and profit per unit are not yet maximalized.

There is a close connection between the place of a product on it's life-cycle and the use of the marketing tools. In the case of a new product, further technical development of the product and the standardization of the production process is emphasized. Depending on market structure and type of products (industrial markets or consumer markets etc.), promotion through media advertisements gets priority once the company is confident that the product is ready for the market and able to compete with established products. Also the aim of the market promotion changes over time and is also depending on market structure. In mature industrial markets, market promotion is considered ineffective. In mature consumer markets, promotion is often aimed at the stabilisation of consumer preferences for their product based on good service etc.

In order to give a better explanation of the portfolio matrix, an example will be given based on the position of a new developed washing powder with enzymes as active component on the market for household detergents where at present all washing powders are bases on synthetic components.

**Example**

**Introduction**

The new washing powder 'Enzymtex' will be positioned after introduction to the market, in cell one or four of the portfolio matrix. The competitive position is still low since consumers are not yet made aware of the advantages of natural enzymes over the old formulations that still use synthetic ingredients. Market attractiveness is considered medium to high by the manufacturer since otherwise no company would invest in the introduction of a new concept of washing powders.

**Growth**

After the original introduction Enzymtex will move from cell one or four to cell two or three, as consumers are made aware by intensive market promotion of the advantages of Enzymtex. The competitive position is strong and market share and overall profits grow thus attracting competitors.

**Maturity**

Depending on a number of constraining factors (barriers to entry) like market structure (do you have monopolistic powers and technological barriers like patents) competing companies will enter the market with their washing powders based on natural enzymes. The ultimate result for your
company is that both the market attractiveness and the competitive position will decrease and the pmc Enzymtex will shift to cell five, six or nine.

**Saturation and decline**

Ultimately, the product will lose its competitive advantage and new and or even superior products will enter the market. In the case the original innovator did not use his innovators profits to invest in product-market innovation, the product will end up in cell seven or eight and the manufacturer will lose his market share with his product. New products have to start their product-life cycle all over again.

### 3.2 Product groups

Various ITC documents identify the following endmarkets for jute products: carpet backing, yarn, hessian backing, bags and geotextiles. For the determination of product groups for the portfolio analysis, a distinctive division of products has to be made. The description of the jute conversion chain in part 1 will be used as the basis for the portfolio analysis. Besides statistical data, information from the interviews held with representatives of the European companies that were visited will be used also to complete the picture.

#### 3.2.1 Product group one: Raw jute/jute fibres

**Strategic importance**

The demand for raw jute is an example of related demand, since the demand for raw jute is based on the demand for the derived products as jute yarns and jute nonwoven materials like felt.

**Volume or dollar value of purchases**

The import of raw jute, kenaf and allied fibres in the European Communities (EC) declined from 56,600 ton in 1984-86 (average) to 42,700 ton in 1990. Import prices for BWD (a standard quality) vary between US $ 328.1 in the 1986/87 season, to US $ 486.9 in 1989/90 and US $ 457.4 in 1990/91, C&F Antwerp (FAO, 1991). The prices of raw jute, yarns, CBC, hessian and sacking should move in the same direction, as raw jute is a major cost item in all derived products. Table 3.1 shows the correlation coefficients between the prices of raw jute and the prices of the various products:

Obviously prices for jute goods are strongly related to each other. The price for CBC is the least correlated with the price of raw jute, meaning that for the production of CBC fluctuations of the price of raw jute only account for 68% of the price fluctuation of jute CBC. One might conclude from this that other cost-items as depreciation, marketing costs etc. are only for a
Table 3.1 Correlation coefficients between prices of raw jute and the prices of the various jute products (Bangladesh)

<table>
<thead>
<tr>
<th></th>
<th>Yarn</th>
<th>Sacking</th>
<th>Hessian</th>
<th>CBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw jute</td>
<td>0.80</td>
<td>0.86</td>
<td>0.86</td>
<td>0.68</td>
</tr>
<tr>
<td>Yarn</td>
<td>0.91</td>
<td>0.93</td>
<td>0.92</td>
<td>0.95</td>
</tr>
<tr>
<td>Sacking</td>
<td></td>
<td>0.92</td>
<td></td>
<td>0.86</td>
</tr>
<tr>
<td>Hessian</td>
<td></td>
<td></td>
<td></td>
<td>0.92</td>
</tr>
</tbody>
</table>


small part accountable for the overall cost of the various products. The figures from table 3.1 do not give any information regarding the level of jute prices.

**Potential of the account**

The export of raw jute to the EC (see also part 1 of this report) depends solely on the presence of jute spinners in the EC. Eurostat data shows that the UK and Belgium are the largest importers of raw jute, kenaf and allied fibres.

The relative demand for raw jute is depending on the demand for European spun jute yarns from the weaving and end user industry (e.g., the carpet industry).

The potential of the raw jute market in the European Communities is declining; the amount of raw jute imported for yarn spinning has decreased. A factor that strongly influences the potential for raw jute on the European markets is the technical difference between yarns spun (and dyed) in the EC (Dundee area) and yarns produced in the origin countries.

If the origin countries succeed in producing yarn of a similar quality, the export of raw jute to the EC will further decline. It is at present very difficult to give any statement regarding the capabilities of the major exporting countries to invest in modernization of their spinning capacities on sector level. Some of the major exporting companies sell their product in Western Europe at prices comparable to Dundee-spun yarns, so obviously the quality of that product matches the requirement of the European markets.

The potential for raw jute to be used in nonwoven materials (a product group theoretical ranging from medical disposables to moulded materials) is a different story. The fast growing concern for the environment and the use of disposables and packaging materials in particular makes a partial shift from synthetic materials to natural materials far from unrealistic. The use of raw jute for needle punched, spunbonded and meltbonded nonwovens can only be analyzed through discussions with industry representatives, since statistical data and technical publications are absent.
Prestige of the account

The origin countries have in common that they prefer to process the raw jute within their own industry instead of exporting it to (potential) competing companies in their consumer markets. The domestic industry often operates at capacities far below full utilization. Obviously, export of raw jute is attractive to the jute growers and jute trading companies. The companies that import the raw jute depend heavily on the availability of raw jute for their processing. Besides buffer stocking, European spinners require an extensive network of relations with all traders of raw jute.

Customer market leadership

The yarns from European spinners are more regular and consistent than yarns from the origin countries. Dundee yarns have on average 200 defects/ton, whereas Bangladeshi yarns have 1400 defects/ton product (on average).

Nevertheless, it is unrealistic to speak of customer market leadership by European companies, since they only services a small part of the total European market for jute yarns. Particularly UK based carpet manufacturers seem to have a preference for UK spun yarns.

Overall account desirability

The overall account desirability is derived from factors mentioned in section 3.1. For raw jute, diversification on EC markets consists mainly of new applications for the raw jute. The already mentioned nonwoven application for jute fibre is a strong factor for the strategic importance of exporting raw jute, for two reasons.

First, the manufacturing of nonwoven materials is still in an infant stage of development in most origin countries. Product and process innovation is done on their consumer markets. Especially the R&D work requires close contacts between manufacturers and their markets.

Secondly, the strive for vertical integration in the origin countries and subsequently an increasing use of raw jute for domestic spinning purposes, creates an atmosphere in which export of raw jute to the EC for spinning purposes is less favoured from a government point of view. At least, such an attitude may be expected from the point of view of economical development. The opening of new markets like the nonwoven markets requires a joint marketing approach from all origin countries. Apart from factors discussed in section 3.2.2 (e.g., market needs and requirements), the use of raw jute for nonwoven products has to be stimulated by a generic scientific/technical marketing approach by which the technical suitability of jute fibres is determined for different types of nonwoven production.

The use of jute fibre for nonwoven will be more discussed in more detail in section 3.5 (product group felt and nonwovens).
3.2.1.2 Degree of managing difficulties

Product characteristics

The place of jute in the farming system is to serve as a cash crop between two rice crops (aman or aus rice). The sowing date of jute differs from region to region and is also different for Tossa and White jute or kenaf. The optimal sowing period for West Bengal and Bangladesh is march-april, the harvesting period is july-august. Jute is also grown in flooded areas, where no other crops can be grown. The harvesting time for jute does not coincide with other major crops. The value of the jute crop to the farmer is not necessary equal to the market price. The market price may refer to a later stage in the marketing of jute than the farmgate price. Also, deductions from the farmgate price to account for previous loans are unknown (Burger, 1990).

The different origin countries have their own quality systems. In Bangladesh, quality differs to regions and to variety of jute. The highest quality is Special, followed by grade A to E. Reference quality is BWD. In India, difference is made to the various jute producing regions with eight different quality grades. Reference quality for White jute is White-5. For Tossa jute, qualities vary between TD1 and TD8. For sacking, B-twills (for the packaging of grain) is the reference quality.

A system in which the quality of the jute fibre refers to a standard fibre quality does not exist yet. Jute cuttings (by-product) are also sold to spinning and felt manufacturing companies.

Market characteristics

The number of importers of raw jute in Europe is limited due to the limited number of jute spinning mills or jute felt manufacturing companies. Spinning companies in the UK use brokers for the import of their raw jut, whereas continental spinners buy directly from the origin countries. The import of raw jute for the UK is mainly used for the spinning companies in the Dundee area. The raw jute for the continent is to a large extent cuttings for the cable industry and felt industry.

Buying behaviour

The Export Price Control (EPC) on raw jute in Bangladesh has been cancelled in an attempt of the Bangladesh government to break the monopoly of a few exporters of raw jute and render competitive prices.

This EPC was first imposed in 1950, abolished since 1970 but reinstated in 1979. The government owned Bangladesh Jute Corporation (recently abolished) could not sell below this price. In India, a system of Export Replenishment Permits exists.

The prices for raw jute are mainly determined by local supply conditions last year's prices and the outlook for the jute manufacturing industry at the start of the season. Predetermined production and price-responsive con-
assumption do not match and stock changes accommodate the balance (Burger, 1990). The export prices for cuttings and raw jute are indirectly strongly influenced by prices for polypropylene. If the prices for cuttings or lower quality fibre exceed those of polypropylene, the use of the jute materials is bound to decrease.

**Competition for the business and strengths and weaknesses of competitors**

The competition on the markets for raw jute in the EC consists mainly of synthetical materials, especially polypropylene. The number of companies that manufacture polyprop and other synthetic materials is enormous. The major advantages of polyprop materials to jute are summarized below:

- Deliveries of polyprop any time in any required amount is no problem at all.
- The quality of the materials is standardized.
- Research and Technical Development work by the manufacturing companies makes continuous adaptation to newer standards and requirements possible.

For jute (cuttings) for the production of felt, polyprop is not such a big competitor. For the production of (carpet) yarns, polyprop is the biggest competitor of jute. The competition between jute and polyprop will be discussed in more detail when the competitive position of the jute product groups, yarns and CBC is analyzed.

Conclusion: the overall position of raw jute is as in figure 3.3:

<table>
<thead>
<tr>
<th>degree of managing difficulties</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

Low       High

strategic importance

**Figure 3.3** Overall position of raw jute
3.2.2 Product group two: jute yarns

3.2.2.1 Strategic importance

*Volume or dollar value of purchases*

Data from the FAO quarterly statistics show that the amount of jute yarns imported in the EC has increased since 1975 to 90,000 ton in 1990. The amount of yarns produced in the four largest yarns producing countries in the EC has declined from 70,000 ton in 1976 to less than 15,000 ton in 1990 (Burger, 1990). The correlation coefficient for the price of jute yarns and sacking, hessian and CBC varies between 0.91 to 0.95 (Burger, 1990).

The price for jute yarns is mainly determined by the quality of the yarn. Coarse yarns (C, S, CHW, Tossa etc) are used in the rope and cable industry (nm 0.3-nm 3.6 yarns), finer yarns are used for sacking, hessian (linoleum backing) and CBC. 1992 prices for coarse yarns are about US $ 800/ton, CF Antwerp. Fine yarns are on average twice the price of coarse yarns. Yarns produced in Europe are on average two to three times as expensive as yarns from the origin countries.

*Potential of the account*

The amount of jute yarns imported in the EC has increased over the last years. This does not mean that the amount of jute yarns used for the carpet industry (woven carpets or woven fabrics) has increased with the same amount as well. Besides the expansion of the EC (Greece, Spain and Portugal became member countries), the decline in the number of spinning mills in the EC is partially accountable for the increasing imports of jute yarns. The use of yarns for end uses as cables, ropes and twine is strongly declining since many customers prefer polyprop or other synthetic yarns. The potential for jute yarns for high value end uses as CBC, woven carpets, linoleum backing, wallcoverings and furniture cloths, depends strongly on the price/ performance ratio of the yarns. It has already been mentioned that the yarns produced in Europe are considered to be technically superior to the average yarns from the origin countries. One also can say that yarns from the origin countries lack sufficient standard quality. Jute yarns also have a strong disadvantage to other natural fibres since the jute has a lower tensile strength then other natural bast fibres and deteriorates more rapidly (low water and UV resistance).

*Prestige of the account*

As mentioned before, the production of quality yarns is essential for the whole jute manufacturing industry and the European end using industry. Data from Burger shows that the amount of jute yarns imported from the origin countries has strongly increased since 1975.
The reorganization of the jute manufacturing sector in Western-Europe has led to a strong decline in the number of spindles and looms.

Customer market leadership

Sidlaw Yarns in the Dundee area is considered the most technically advanced jute spinning mill. It produces, among others, yarns with a special adhesive coating, which give the yarn special characteristics for carpet manufacturing (increased tuft retention).

Woven carpets, the single most important end use for fine jute yarns, is dominated by companies in the UK and Belgium. These companies use both European yarns and yarns from origin countries, especially yarns from Bangladesh and Thailand. The 1988 production of woven carpets in the EC was approximately 75 million sq. m. (Burger, 1990). Intercontuft figures show a consumption of 97 million sq. mtr. in 1990.

The production of the Belgium companies is mainly (nearly 90% of total production) exported to other European countries or to countries in the Middle East. One Belgium company has a market share of about 30% of total European woven carpet production. The British companies are more oriented on their domestic markets.

The number of linoleum producing companies is limited: in the EC the Forbo Group of Switzerland and the VLW are the two major European producers of linoleum. The requirements of the linoleum industry, a fast growing branch of industry in the EC, are very special. It is for this reason that the linoleum industry does not want to rely exclusive on imported hessian cloth.

Overall account desirability

The use of pre-treated coarse yarns in the rope and cable industry is strongly declining. Besides competition with synthetic materials (polyprop) the contamination with hydro-carbons and penta-chloor phenols for European legislators is unacceptable. The amount of yarn for the carpet industry, especially the woven carpet industry, is stabilizing.

3.2.2.2 Degree of managing difficulties

Product characteristics

Since woven carpets are the main end use for yarns, the technical data of jute yarns in this section is directly related to the use of the yarns in woven carpets. Most of the information is derived from Burger/Textile Outlook International, 1990.

The material of the pile yarn determines the quality of the carpet and the weight of the jute yarns used to a large extend. Piles vary from all types of fibre material.

The amount of jute yarn used per square meter is positively related to the weight of the pile material and of the length of the pile. Jute yarns also may
be used as weft, warp or stuffer yarn. Although jute used as weft yarn is high (almost 80%), jute warp use has declined in favour of cotton and polypropylene and is negligible now as is the use of stuffer yarns (due to higher loom downtime because less jute can be wound on a beam). The count of the jute yarns used varies to a considerable degree.

A carpet manufacturer has to optimize the positive effect of lower kilogram costs with finer yarns and the breakage of lighter type of yarns.

Also, the more rows of pile per meter, the count is adjusted downward. With a double insertion of the weft, jute weft yarns used per square meter comes at 220 grams for medium type constructions. The yarns used in Belgium for woven carpets are around 50% heavier than those used in the UK (lower value products). Reference quality for jute yarns is 36% W4, 37% TD4 and 27% Mesta (Burger, 1990).

Market characteristics

In addition to the information on the EC jute products market structure in part 1 of this report, the following developments are important for the market characteristics of jute yarns. The number of jute spinning mills in the EC has declined strongly for the last two decades. Jute spinning mills may only be found in the UK, Belgium and Greece. The total production of yarns in the EC does not exceed the 15,000 tons. Sidlaw Yarns is the largest spinning mill with a yearly production of about 6000 ton. The total consumption of jute yarns in the EC varies between 50,000-70,000 ton/year (industry sources).

The market for jute ropes and wires is strongly declining, except for the small market for garden-twines. Competition from polypropylene is the major reason for the overall decline. The number of jute-based felt manufacturing companies is also limited.

Spinners buy directly from brokers or agencies in the origin countries and keep buffer stocks up to one year in advance. Most European spinning companies are also involved in the trading of yarns (incl. rewinding of yarns), sacks, hessian or CBC. For some application the domestically produced yarns compete with imported yarns from the origin countries.

The price - performance ratio for domestically produced yarns is different from the imported yarns. It has been mentioned that European spinners, especially in the Dundee area, produce more regular yarns. Yarns from Dundee are on an average two to three times more expensive than imported yarns. Domestically produced yarns are sometimes blended with imported yarns, to meet their customers' price requirements.

Belgium is by far the largest market for carpet yarns. About 90% of total Belgium carpet production is exported to other EC countries, especially Germany. The number of carpet manufacturers in the EC has declined over the last years. Decisive for the further concentration in the carpet manufacturing industry is the (remaining) period of recession in the EC. The sales of carpets is strongly related to the number of houses that are being build, which is
strongly related to the overall growth of the economy and the economic prospects.

As mentioned before, the market for hessian backing for linoleum is a steady market. The production process for linoleum and the strong environmental friendly image of the product (heavily promoted by the manufacturers), make it unlikely that the linoleum manufacturers will switch to a synthetical backing. The use of jute yarns for the production of woven geojute will be discussed in section 3.2.6, jute geotextiles.

**Competition for the business**

Jute yarns are an intermediate product. Competition with other natural and synthetic/man-made fibres is indirect through the use of the yarns for secondary carpet backing, woven carpet yarns or other applications. Nevertheless, the competitive position of jute yarns is strongly influenced by the availability, quality, service and price of the yarns themselves.

In the EC, competition exists between domestically produced yarns and import yarns from Bangladesh, India and Thailand. The higher priced European yarns are preferred by some customers over imported yarns owing to their better performance and services but also for their packaging label that states that the product is produced in the UK. It is therefore that some traders/spinners blend their yarns with imported yarns or that imported yarns are rewinded and provided with an European label. FAO quarterly statistics show that in the UK, prices of jute yarns have been lower than prices for competing polypropylene yarns for quit some years now. Obviously, price is not the sole determining factor for the major customers, the carpet industry.

Finally, a newcomer to the spinning branch is the Filtisac spinning mill in Ivory Coast, Africa. Their yarns are mainly used for woven carpets. It is unknown what level of production is projected for this spinning mill. With European machinery and sound management and low labour cost, this enterprise may become a new competitor to both the European spinners and the spinning mills in the origin countries.

**Strengths and weaknesses of competitors**

The production of synthetic fibres, continuous filaments or staple fibres, is a cost effective and technically clean process. Yarns can directly be converted into a broad range of products, thus giving the producer a strong competitive position over producers of jute fibres and jute yarns. The only threat to the position of synthetic fibres in technical applications is that sometimes (market niches) natural fibre materials will be preferred to synthetics. It is unlikely that the overall position of synthetical materials will be affected in the short run by new environmental legislation or consumers preferences.

Recent developments in the EC with new packaging laws or with re-usable parts in motor-cars in the motor-car industry show that the flexibility
of the polymer-industry is strong. Natural materials will have to find and earn their place in the market.

Conclusion: the overall position of jute yarns is as in figure 3.4.

<table>
<thead>
<tr>
<th>degree of managing difficulties</th>
<th>High</th>
<th>x</th>
<th>Low</th>
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<tbody>
<tr>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.4 Overall position jute yarns**

3.2.3 Product group three: Fabrics

3.2.3.1 Strategic importance

Now, CBC is by value the most important type of jute cloth. The use of cloth for bags ('converting', as still is done in Scotland) will be discussed in section 3.2.4, sacks and bags. The other end-uses for jute fabrics, including hessian cloth for linoleum backing, furniture, re-upholstery trade, building trade and packaging, roofing scrims and other, will be discussed whenever appropriate.

**Volume or dollar value of the account**

The total exports of carpet backing from Bangladesh and India have decreased from 72,600 ton in 1986/87 to 57,300 ton in 1990/91 (FAO, 1991).

The import in the EC of jute fabrics (hessian cloth and CBC) nevertheless increased the last few years to 62,000 ton in 1990 (Eurostat). However, the FAO suggests that crop year export data show a pronounced reduction in imports in the latter part of 1990. Bangladesh export prices have declined from US $ 747/ton in 1986/87 to US $ 672/ton in 1990/91 and a further price reduction is to be expected. Industry sources have claimed that the use of jute CBC in the EC has increased by (in decreasing order of priority):

- the competitive price of jute vis a vis polypropylene;
- the increasing demand from carpet retailers for jute backings;
- the installers' preference for jute;
- the consumers' preferences for jute.
Potential of the account

The current recession in the EC and especially in the UK, is a negative factor for jute CBC for tufted carpets. It has been mentioned before that a strong correlation exists between economic growth, building of houses and demand for carpets. For 1992, most EC countries expect a moderate growth of their economy. In the UK growth figures for 1992 vary between -0.5% to 2.5%.

It is uncertain to what degree the jute sector will profit from a moderate growing economy in the EC in 1992. A further increase in market penetration depends on the attitude of carpet manufacturers towards the jute backing. Notwithstanding price difference with synthetics, the following may influence the demand for jute secondary carpet backing: end-consumers’ preferences, retailers preferences, installers’ preferences and environmental issues.

Prestige of the account

The market for jute CBC is considered by many in the jute sector as a key market for jute. The carpet industry is concentrated in the UK and Belgium. In contrast with the market for CBC in the USA, the European market for CBC has stabilized or even increased.

Customer market leadership

The European carpet manufacturing industry is currently undergoing a process of further concentration. The smaller the amount of carpet manufacturers will be, the higher the possibilities that their increased market power will negatively influence margins in the jute business resulting from their monopolistic market power. With prices for jute CBC being structurally lower than prices for competing polypropylene, European carpet manufacturers will stress more the importance of a smooth logistical system for jute CBC.

For linoleum backing, only two industrial groups manufacture linoleum. The Forbo group is the largest user of hessian backings.

Other applications for jute cloth as in the (re-)upholstery trade is a more consumer oriented trade or, as in the case of roofing scrims, a small scale market.

Overall account desirability

The export of CBC to Europe has a high priority with the jute exporting countries. Maintaining present market shares is considered essential for the jute business. The promotional activities in the past have therefore always been strongly focused on CBC.

The possibilities for diversification for CBC are non-existent. The volume of the present market may only be increased with a higher penetration of existing markets. This can only be reached by a better performance of the
underlying jute conversion chain: from raw jute to CBC and by stressing the technical advantages of using jute as a carpet backing.

Future legislation on the environmental character of carpets and the possible obligation for the manufacturers to take back their products after they have been used, may have a positive effect on the degree of market penetration for jute.

3.2.3.2 Degree of managing difficulties

Product characteristics

Jute CBC is used for the secondary backing of tufted carpets, where it is glued to the tufted primary backing and the pile in order to anchor the file. The manufacturing process for tufted carpets involves much higher speeds (up to 3-40 times as high) than for the production of woven carpets. Jute is considered too heavy and too weak to be used as a primary backing.

By a reduction in weight of the cloths per square meter the jute secondary backing has maintained it's market share. Major competitors are foam and woven polypropylene cloth. Backings may be also made from a jute/polypropylene blend. Kenaf CBC has according to some industry sources a better appearance on CBC.

The following criteria are decisive for the use of jute as a secondary backing (from Whitefoot, Burger 1990):
1. Properties of the carpet backing material in the process of backing the carpets.
2. Properties of the carpet backings in the use as a floorcovering, both for the institutional market as for the consumer market, including flammability and smoke toxicity.
3. Aesthetics, including the environmental character.

The following (normative) requirements apply for CBC (warp and weft): 10% W2, 20% W3, 10% TD2 and 60% TD3. The costs for CBC in relation to the average price for quality white jute (W5) is on average 1.321 (for sacking 0.928).

The required width for CBC for EC markets and US markets differs: the US market requires a width of 150 inch, whereas the European markets ask for a width of 163.5 inch (industry sources). Other decisive factors for the acceptance of jute CBC by carpet manufacturers are those factors related to the technical aspects of processing jute CBC for tufted carpets and market structure (carpet manufacturer operating his own polyprop plant).

Market characteristics

About 15 companies trade in CBC in the EC. Total volume for CBC is about 120 million sq. mtr/year (trade estimates). Since UK trading firms are dominant in the business, fluctuations in the dollar-pound sterling exchange rate are influencing prices for CBC on the European markets.
The two major carpet producing areas in the EC are the UK and Belgium (see chapter 2: description of the product column). Especially the Belgium industry is export oriented. A large part of their production is exported to Germany and the Scandinavian countries.

Tufted carpet manufacturers are considered by the trade to be 'demanding' customers. They in general have a strong price consciousness. In the UK, tenths of penny's can decide in purchase decisions (due to the high volume character of transactions). The tufted carpet manufacturers keep low stocks since they generally use JIT (Just In Time) manufacturing systems. The traders/stockist keep average stocks of 3 to 4 months: a value of Pound Sterling £ 250,000. Trade patterns between the tufted carpet industry and jute traders are very well established. Traders estimates that the understanding/knowledge of the European tufters of jute CBC is about a 100%. Tufted and woven carpets are sold to carpet wholesalers and or smaller carpet retailing shops.

The end market can be divided into an institutional market (office buildings etc.) and a consumer market, having their own market characteristics. The differences between the institutional market and the consumer markets will be discussed when the promotion is subject of analysis. Estimates of the current market share of jute CBC fluctuate around 18% of the secondary carpet backing market in the EC (ITC estimate). Information gathered by large retail stores indicate a larger market share of jute CBC than this 18% (25-30%).

**Competition of the business**

The competition with polypropylene and other types of primary and secondary backing is by many considered to be the determining factor for the competitive position of jute carpet backings. FAO data on relative prices for jute show that for the period 1988-1991 jute prices have been lower than polypropylene. Obviously, price is not the only factor determining the competitive position of jute CBC. The same applies for other types of jute cloths. Especially the logistical element plays an important role. An adequate supply of CBC with guaranteed deliveries plays a crucial part in the whole logistical chain. The almost failure of Bangladesh to meet CBC contracts in 1991, can have a devastating effect on market positions.

Another important factor in determining the competitive position of jute CBC is the process of vertical integration by major carpet manufacturers. Similar to the USA, European manufacturers are integrating the production of polyprop yarns from granulates within their own concern, thus creating a strong basis for the synthetic yarns.

**Strengths and weaknesses of competitors**

Similar to what has been said on the strengths and weaknesses of the competing materials in sections 3.2.1 and 3.2.2, the major threats to the market position of synthetic materials are environmental aspects and con-
sumers preference towards synthetic materials. Notwithstanding efforts by producers of synthetic carpet backing (e.g., manufacturing of jute-look a like materials) the possibility exists that similar to the use of synthetics in garments, the use of synthetics in carpets etc. will decline due to changing attitudes and preferences towards natural materials.

Conclusion: the overall position of jute fabrics is as in figure 3.5:

<table>
<thead>
<tr>
<th>degree of managing difficulties</th>
<th>High</th>
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<td>X</td>
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</table>

strategic importance

Figure 3.5 Overall position jute fabrics

3.2.4 Product group four: sacks and bags

3.2.4.1 Strategic importance

Volume or dollar value of purchases

With the exception of a small amount of jute bags still converted in the Dundee area, all bags consumed on the EC markets are imported from Bangladesh, China or India. The 1990 import of new and used bags in the EC was about 80,000 ton, with an apparent consumption of 50,000 ton (Eurostat). There are nearly 20 different types of jute bags on the EC markets. A standard 12 lb bag has a price of $ 32/100 bags (1992 trade estimate).

Potential for the account

Jute bags are used for the packaging of agricultural commodities like cereals, (seed-) potatoes, nuts, coffee, cocoa, sugar and other commodity products. Jute bagging is preponderant in the exports of sugar to developing countries (Burger, 1990). Jute bags are also frequently used for the packaging of food-aid. The competition between polyprop bags, jute bags and bulk transport is intense and is not much helped by the latest discussion on the contamination of jute by hydrocarbons from the batching oils. It is also still uncertain to what extent the new EC legislation on packaging will negatively influence the market position of jute bags.
Prestige of the account

By volume the trade and consumption of jute bags is still important. Despite a gradual decline in the number of bags used on the EC markets, jute bags are still to a large extend used for packing agricultural commodities, but it did not catch up with the rising trend in agricultural production.

Customer market leadership and overall account desirability

The food industry is one of the biggest end users of jute bags. Their requirements don not differ very much from one another. The printing of the bags is done in the origin countries or in the EC, depending on the preferences of the customer. For some of the agricultural commodities packed in jute bags, like hazelnuts, only a small number of companies control the European business.

The use of jute for other types of packaging is limited. Almost all of the potential applications for jute, like intermediate bulk containers, are supplied by synthetic materials. Competition also will arise from spunbonded nonwoven materials.

3.2.4.2 Degree of managing difficulties

Product characteristics

For sacking, B-Twills is the reference quality. B-Twills are used for the packing of cereals. The following requirements apply for sacking:

- warp: 25% W5, 40% TD5 and 35% mesta-mid;
- weft: throw-out of hessian and sacking warp and cuttings.

The costs of sacking per ton, relative to the price of W5 are on average 0.928 times the price of W5. Labour requirements are about 40.7 mandays per ton (Burger, 1990). Sacking/bags from China have fewer wrinkles due to lower pressing conditions. Bags (hessian or sacking) in the EC are sold with or without synthetic liners. A major European bag trader distinguishes 19 types of jute bags, varying from nine types of hessian bags to two types of W-bags.

Market characteristics

About 15 companies trade in jute sacking and bags. Some of these trading companies deal in seed-potato bags, which is considered a much speculative market then the markets for other types of agricultural commodities. Most trading companies deal with local shippers. The average stock is 3-4 months: potato-bag traders keep stock up to 6 months (in some cases up to one year). Average time between closing of the contract and the arrival of the goods in the port of destiny is 7 months. Standard contracts from the Indian Jute Ass. or the Bangladesh Jute Association are most commonly used.
An organization called the ‘Society General de Surveillance’ renders services for quality control at mill gate. Traders may use this organization to keep their losses to the lowest possible percentage. About 5 companies in the Dundee area still convert cloth into bags. They can produce on a small scale for special deliveries. The European trade has its own association, called Eurojute. The number of active brokers/trading firms is strongly declining, mainly due to the overall decline in the jute business and the subsequently pressure on the margins.

**Competition for the business**

The competition between jute sacking and bags and other (synthetic) materials is three ways: price, performance (strength, printability and durability) and environmental. Prices for polypropylene (as major synthetic packaging fibre) are structural lower than prices for jute. Given the developments in the EC towards bulk transport it may not be expected that jute will regain its position on those markets. Other competing materials are paper and non-woven materials. On the UK market, jute bags still have a special position.

**Strengths and weaknesses of competitors**

The market position of the competing materials in the EC is strong. The only concern the producers of those packaging materials may have is the new environmental legislation, forcing them to develop recycling systems and systems to take back their used packaging materials. The specific environmental friendly character of non-contaminated natural fibres may create a special position for them since their disposal has no environmental side-effects.

Conclusion: the overall position of jute sacking and bags is as in figure 3.6:

<table>
<thead>
<tr>
<th>degree of managing difficulties</th>
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<th>Low</th>
</tr>
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<tr>
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<td>X</td>
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</tr>
<tr>
<td>High</td>
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</tbody>
</table>

*Figure 3.6 Overall position jute fabrics*
3.2.5 Product group five: felt and nonwovens

3.2.5.1 Strategic importance and degree of managing difficulties

For this portfolio analysis, the very limited information on potential applications in the nonwoven area makes it difficult to deal with this product group in the same manner as the previous product groups.

Volume or dollar value of purchases

The Eurostat 1990 data shows that the amount of felt traded in the EC of 7586 ton mainly consists of intra-EC trade. A small amount of the imported raw jute is used for the production of felt and subsequently exported to other EC countries. This amount cannot be quantified, but production will be less then 15,000 ton/year.

Potential and prestige of the account and overall account desirability

The use of felt for certain applications is well established (like the use of felt as a carpet-underlay or as a backing for vinyl). However, the field of nonwoven products is so enormous that it is very difficult to say anything on the use of jute fibres for all sorts of nonoven materials.

Product and market characteristics

The number of felt-producing companies in the EC is limited. Only four or five companies are active in this field. Felt is a mature product with established markets. Related felt-related products as e.g. nonwoven product for the automotive industry or the horticultural sector, are on the other hand products at the start of their Research and Development route.

Competition for the business and strengths and weaknesses of the competitors

The position of felt in the market and the low market share make felt a stable but marginal market segment. The low price for the raw material, jute cuttings, make it unlikely that other raw materials can compete successfully. The competing materials have to face a strong price disadvantage.

Conclusion: the overall position of felt is as in figure 3.7:
3.2.6 Product group six: Geotextiles

3.2.6.1 Strategic importance and degree of managing difficulties

For this portfolio analysis, the very limited information on potential applications in the nonwoven area makes it difficult to deal with this product group in the same manner as the previous product groups.

Volume or dollar value of purchases

Trade estimates for the consumption of geotextiles in the EC vary somewhat but the total consumption will not exceed the 7000 ton/year. Most of these soil savers are made of jute-cuttings. In the Netherlands, soil savers are sold between Dfl 0.90 - Dfl 2.50/sq.mtr, depending on the quality of the material (Koster, 1991).

Potential and prestige of the account and overall account desirability

The use of jute as a geotextile has drawn quit some attention over the last years. Jute geotextiles originate from the USA, where soil stabilization jute-netting fabrics were used in forestry and landscaping uses.

At present, geotextiles made from natural fibres (jute, coir, sisal, cane and straw) are being tested for use as soil savers (erosion control). The natural, biodegradable materials are used in the period after the construction of a slope and before the natural vegetation is full grown. Other (potential) applications for natural geotextiles are filter cloth, temporary application during the construction of an artificial work and for drainage systems.

There are two major problems concerning the introduction of a geotextile made from natural fibre materials. First, standard quality control systems have to be adopted for the natural fibre materials. Secondly, all parties concerned have to be informed and made aware of some of the unique properties of the new materials. This requires the building up of a new network of contacts in the contractors sphere, product development sphere and the
governmental sphere. Field tests should be used for the introduction of the geotextiles in each of the different market segments. The possibilities for an environmental friendly anti-rot treatment, so more applications (where durability is an issue) may be found, should be investigated.

Product and market characteristics

Two recent document prepared for the ITC, 'Jute Geotextiles, a survey of marketing and distribution systems in selected European countries' and 'Jute market development in selected European countries', give information on the technical aspects of jute used for erosion control and the marketing/distribution systems in a number of EC countries.

The documents have in common that they only give brief information on jute geotextiles and its potential markets. This portfolio analysis is not the place for a detailed technical description of geotextiles and the distinction between woven geotextiles and nonwoven geotextiles and the properties of natural fibres as opposed to synthetical ones, so for product characteristics we refer to technical studies and a LEI-DLO study. This study on the use of natural fibres for geotextiles showed that the German speaking countries and the UK are leading countries as far as the use of natural fibres are concerned. The 1991 consumption in Germany, Austria and Switzerland of natural soil savers (jute, coir, sisal and straw) totalled up to 3 million sq. mtr. (Koster, 1991). The same study also showed that the lack of information on the properties of natural materials is a major barrier to entry.

Competition for the business and strengths and weaknesses of the competitors

The market share of natural geotextiles is probably below the 1% of total market in the EC. The competition is overwhelming. The number of synthetic geotextiles producers is not really high, but the manufacturers are almost all large companies ( Exxon, Amoco, AKZO etc.), with large R&D and marketing intensity of their products.

Conclusion: the overall position of geotextiles is as in figure 3.8:

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</thead>
<tbody>
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<td>Strategic Importance</td>
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<td>High</td>
</tr>
</tbody>
</table>

Figure 3.8 Overall position of geotextiles
### 3.3 The end tableau of the portfolio analysis

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<thead>
<tr>
<th>MARKET ATTRACTION</th>
<th>COMPETITIVE POSITION</th>
</tr>
</thead>
<tbody>
<tr>
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<td>R4 FL2</td>
</tr>
<tr>
<td>Medium Y2 F1 F2 S1</td>
<td>Y3 Y5 S2 G1</td>
</tr>
<tr>
<td>Low R3 F3 FL1</td>
<td>R1 R2 Y4 F4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MARKET ATTRACTION</th>
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</tr>
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<tbody>
<tr>
<td>High</td>
<td></td>
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<tr>
<td>Medium</td>
<td></td>
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<td>Low</td>
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</tr>
</tbody>
</table>

**Figure 3.9 Portfolio matrix of market attractiveness and competitive position**

The different product market combinations (PMC's) are:

- **R1** raw jute for fine yarns
- **R2** raw jute for coarse yarns
- **R3** raw jute for felt
- **R4** raw jute for new applications
- **Y1** fine yarns for woven carpets
- **Y2** fine yarns for hessian backing
- **Y3** fine yarns for new applications
- **Y4** coarse yarns for cables
- **Y5** coarse yarns for new applications

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tr>
<td>F1</td>
<td>CBC</td>
</tr>
<tr>
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<td>hessian backing</td>
</tr>
<tr>
<td>FL1</td>
<td>felt</td>
</tr>
<tr>
<td>FL2</td>
<td>nonwovens</td>
</tr>
<tr>
<td>CBC</td>
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</tr>
<tr>
<td>G1</td>
<td>geotextiles</td>
</tr>
<tr>
<td>G2</td>
<td>sacks and bags</td>
</tr>
<tr>
<td>S1</td>
<td>new packaging applications</td>
</tr>
</tbody>
</table>

**The codes refer to the type of jute good, like Y1 is Yarn, fine and F1 is fabrics, CBC.**
3.3.1 The portfolio matrix explained

The information given in chapter two and three of this report is the basis for the division of the different product market combinations in the market attractiveness and competitive position matrix (figure 3.9). The strategic importance and managing differences of the six product groups strongly influences the place of the various product market combinations in one of the nine cells of the matrix. The three basic strategies that can be distinguished (improving the strength, hold positions and withdrawal) are based on the natural product-life cycle. In figure 3.10, the natural product life of a product is visualized as it is going through the matrix.

![Portfolio Matrix Diagram](image)

Figure 3.10 Natural product-life cycle

The three basic strategies - improving the strength, hold positions and withdrawal - will be elaborated in the next subsections.
**Improving the strength**

Part one of the matrix, cell nr.'s one, two and four, can be divided into product-market combinations in the beginning phase of their product-life cycle (R4, FL2, Y3, Y5 and G1) and product-market combinations that already reached a more stable or mature phase in their life-cycle (F1, F2 and S1).

![Matrix diagram](image)

**Figure 3.11** Improving the strength

In this part of the matrix products require an intensive market approach. Although the market attractiveness is estimated medium or high, markets still need further developing through active marketing (penetration strategy). The products have to be diversified in close relation with potential customers in order to create broader market perspectives and a better competitive position. For the established products in cell five the accent lies more on product development and the search for new markets (market differentiation).

**It may be regarded as characteristic for the jute sector that the number of PMC’s is limited in the upper right hand corner of the matrix, whereas the bulk of production may be found in the bottom right hand corner of the**
matrix. Especially in order to create new prospects for the future, new PMC’s are needed.

**Hold positions**

The established products with a strong competitive position are in this block (Y1 and Y2). The high competitive position has to be defended. A strict quality control is essential. As all markets change over time, a constant adaptation of product properties to the market requirements is essential.

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<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Medium</td>
<td>6</td>
<td>5</td>
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</tr>
<tr>
<td>Low</td>
<td>9</td>
<td>8</td>
<td>7</td>
</tr>
</tbody>
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**Figure 3.12 Hold positions**

**Withdrawal**

Established products on saturated markets are found in this block, that consists of the cells seven and eight. Whereas for the products in cell eight (R3, F3 and FL1), the possibilities to find new markets through diversification still exist, the products in cell seven have no future at all. In the matrix, already some new or potential new product-market combinations are mentioned, like e.g. raw jute for nonwoven applications.
<table>
<thead>
<tr>
<th>MARKET ATTRACTION</th>
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<th>Medium</th>
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<td>Low</td>
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</tr>
</tbody>
</table>

**Cell 8**
- Established products
- Saturated markets
- Product diversification

**Cell 7**
- Established products
- Declining markets

**Figure 3.13 Withdrawal**

Not all 'new' products have been discussed in the previous sections. Diversified products have not yet been positioned in the matrix, due to insufficient information. Nevertheless, diversified products could be of major importance to the jute sector. In part two, chapter five of this report, new and diversified products will be elaborated in conjunction with the outline for a market promotion programme.

### 3.3.1.1 Portfolio position of raw jute product market combinations

Importing raw jute to the EC is a relative cost-intensive action. The portion of transport costs in the total costs for the raw jute/jute fibres in the EC is substantial. The number of raw jute consuming economic entities in the EC is small: their technical advantage in production (spinning and felt producing) is limited.

The PMC's R1 and R2 are therefore placed in the lower right hand corner of the matrix: a low market attractiveness and low competitive position due to the small scale of operations, the low degree of technological advances and a strong competition from synthetic fibre production.
PMC R3, felt, has a medium competitive position due to its traditional character of the product, an established market with limited interests from competing branches.

The PMC R4 has at the moment a low competitive position but a high market attractiveness since promising potentials exist for jute fibres in non-woven products. The market attractiveness is strongly influenced by the fact that the potential users, the nonwoven industry, has a strong presence on the European markets.

3.3.1.2 Portfolio position of yarn product market combinations

PMC Y1 has a strong position. The position of jute yarns for the woven carpets industry is strong. The competition from synthetic yarns is heavy, but the preference for jute over synthetics in a considerable part of the total production is evident.

The position of PMC Y2 is different to PMC Y1 since the main end user of hessian backing in the EC, the linoleum industry, possesses potential monopoly powers. Furthermore, the growth in sales of linoleum in the EC may last only a certain period of time, given the fashion character of linoleum on the consumer markets and potential market saturation.

Also, for the European manufacturers of hessian backing, the competition with hessian backing from the origin countries is a continuous uncertainty for their business.

PMC Y3 is placed in cell nr. 4, due to the fact that new applications, either in geotextiles, nonwovens, or blended yarns, are medium attractive but also very uncertain. This argument also applies for PMC Y5, whereas PMC Y4 is without hope of finding new outlets.

3.3.1.3 Portfolio position of fabric product market combinations

PMC F1, CBC, is by volume and value of total sales an important market for jute. The competitive position is medium strong, given the strong competition from synthetic carpet backing. Market attractiveness is negatively influenced by market structure, prices, and the expectations for the tufted carpet industry.

PMC F2 corresponds of course with PMC Y2, notwithstanding the fact that the competitive position of hessian cloth is somewhat weaker than for the yarns due to the market structure (trade channels) for fabrics in general. PMC F3 has for some specialized applications a competitive advantage over the bulk of bags from the origin countries.

3.3.1.4 Portfolio position of sacks and bags product market combinations

PMC S1 (transport packaging material) has proven its value for the jute business. Despite a fall in total sales over the last years, jute bags are still an important market.
The possibilities for PMC S2 in the field of e.g., retail packing materials, have to be further developed.

3.3.1.5 Portfolio position of felt/nonwoven product market combinations

For explanation of the portfolio position of PMC's felt and nonwovens, refer to paragraph 3.3.1.1, portfolio position of raw jute.

3.3.1.6 Portfolio position of geotextiles product market combinations

PMC G1 undergoes strong competition from synthetic materials. The advantages of using natural materials for specific applications where the natural biodegradability is an advantage instead of a disadvantage, are limited. The awareness under the potential users of jute geotextiles is also very limited. Furthermore, the products from used are up to now restricted to jute soil savers, a course yarn plain mesh cloth. More sophisticated application as filter cloth have not yet been researched.

3.3.2 Choices

As has been clarified in paragraph 3.3.1, the product-market combinations in cell seven and eight do not have much future any more. The strategic marketing plan (and especially for market promotion) will therefore not deal with those pmc's.
PART TWO     MARKET PROMOTION
4. STRATEGIC FRAMEWORK

4.1 General framework for strategic planning

It has already been mentioned in the introduction to the portfolio analysis that the low market share of most jute products is a decisive factor for the strategic planning process. The combination of commodity production, strong competition from man-made materials and structural problems concerning the sustainability of the jute sector in the major production countries, make it difficult to have an optimal relation to the European end markets.

Most strategic planning models have a growth model as their basis. Only a limited amount of literature deals with declining businesses. An analysis of Porter in his classical book 'Competitive Strategy' deals with declining business. His theoretical framework for strategic planning will be used as a basis for this strategic framework, combined with the model of portfolio analysis, described in chapter three of this report. The portfolio analysis includes the concept of the product-life cycle, in which the phase of saturation and decline is the last stage of the product life cycle.

Porter's theoretical framework has been developed for individual companies, not for a whole sector of production, so in a way the model is 'twisted' in order to use it for the purposes of this report (i.a. on sector level).

The following general statements that can be made about a declining sector of production are broadly valid for the jute sector:

- Little product differentiation.
- Spotty product quality.
- Low advertising/sales and other marketing.
- Substantial overcapacity.
- Mass production.
- Specialty channels.
- Overall cost control strategy.
- Low prices and margins.
- Falling prices.
- Prices may rise in late decline.

Results from the portfolio analysis show that most PMC's are in the middle/lower right hand corner of the portfolio matrix, indicating the status of the different market segments with medium to low attractiveness and...
medium to low competitive positions. There is a staggering lack of new products, reflected in the small amount of PNCs in the upper left hand side of the matrix. The new diversified products, as household articles and clothing, are not mentioned in the portfolio matrix as they are not yet available on the EC markets.

For an optimal portfolio, many 'wild cats' (new innovative but high-risk products) are needed in order to create new 'star' products (products with a high profit-potential). One might say that the overall balance of the jute portfolio is not as optimal as required for successful portfolio management. The main point of attention within the jute manufacturing companies lies on the production of traditional, standardized products. Only a few companies are known for their activities towards the development of new products. Product diversification, with exemption of the new household and clothing articles is not considered a real strategic alternative by the jute manufacturers. The combination of mass production, overcapacity and a focus on cost control in stead of quality control creates an environment in which prices strongly dominates the marketing mix. The potential cash flow from new innovative products could play an essential role in the restructuring process of the jute sector in the major exporting countries.

Overproduction and an over-emphasised cost control strategy plays a key-role in declining businesses. One of the essential elements in the declining jute sector is the manner in which (excess) production capacity leaves the market. Major exit barriers for excess capacity are in general:
- Amount of durable and specialized assets: is equipment specialized to the manufacturing of jute goods.
- Fixed costs of exit (i.a. social costs).
- The allocating of the excess capacity to individual manufacturers.

JUMS and the Worldbank studies on Bangladesh clearly state that excess capacity is one of the major barriers to a sustainable jute sector. The reports came up with recommendations on how to reduce the capacity of the jute sector in Bangladesh, where approximately 18% of all installed looms were kept idle en where productivity is exceptional low, even lower then in India. An estimated 30% of total capacity in Bangladesh should be eliminated, according to the Worldbank study on the Bangladesh jute sector. In India, 20-30% of total capacity is of so called 'sick' mills.

The Worldbank/JUMS studies give recommendations involving badly run down equipment, excess capacity, excess employment, excess production and large outstanding debts. The main objective of the reform programme would be the rationalization and deregulating of the industry and the establishment of a market mechanism through which financial discipline and accountability are attained and sustained.

Other strategic barriers to exit are: interrelatedness, access to financial markets, vertical integration, information barriers, management/ emotional barriers, government/social barriers (legislation), asset disposition and volatility of rivalry. The above-mentioned studies give more detailed information
on the possibilities for restructuring of the Bangladesh jute sector. This information is not as such available for the Indian jute sector.

The range of strategies for dealing with declining businesses can be divided into four alternatives (according to Porter):

4.1.1 Strategic alternatives

1. Leadership : seek a leadership position in terms of market share.
2. Niche : create or defend a strong position in a particular segment.
3. Harvest : manage a controlled disinvestment, taking advantage of strengths.
4. Divest quickly : liquidate the investment as early in the decline phase as possible.

The range of alternatives is rather limited and a more realistic division of strategies on company level would include a number of alternatives in between of leadership and niche vs. harvest and divestment. There is an enormous difference in the way an individual company is equipped to deal with its environments (both internal as well as external environments) and the way a whole sector of production is able to deal with certain situations. Between companies (private or stated-owned) differences in 'management-style' and available resources are crucial for the adaption of strategic policies.

Leadership strategy

Price control and market control are central elements of a market leadership strategy and they form an essential difference between a leadership strategy and a niche strategy. To adapt a market leadership strategy means that a continuous contact with the market is required.

The competitive position vs. the major competing products has to be held intact through product or process innovations. The advantages of a market leadership strategy are clear: (potential) profit per unit product is higher than in cases where the product does not have a market leadership's position. A leadership strategy also offers a certain degree of stability to the manufacturers and customers, since the market leader's are obliged to follow all the trends in manufacturing and in changing consumers' attitudes.

Niche strategy

This strategy requires close contacts with special segments of the market and customers. Special products for special customers requires flexible production processes and flexible management. Market niches are also very volatile: as soon as the niche expands beyond a certain point, mass production takes over and the 'niche' is lost. If niches become too attractive (high profits) other competing manufacturers may step into the niche also. It is therefore essential to be alert for new niches. Especially on sector level, niche
strategy is subject to the 'allocation' problem: niches are per definition only within the range of a very limited amount of (private) companies.

The range of strategic alternatives is sufficient for the purposes of this report. Especially since jute is a minor product on almost all of its end-markets. For an optimal selection of strategies for the different product-market combinations (portfolio matrix; chapter three) the following is decisive for the marketing implementations:

4.1.2 Marketing implementations of strategic alternatives

1. Raw jute
   The use of raw jute for new applications and the pmc 'nonwovens' are closely related. New applications in an attractive but highly competitive market have to be developed through intensive contacts with potential customers. An exact match between requirements and specifications is essential. A niche strategy is therefore obvious, requiring a good definition of those market niches attractive to jute.

2. Yarns and CBC/Hessian backing
   The established pmc's as jute carpet yarns and jute CBC/hessian backing above all require a further improvement of their market position. An improvement of their competitive position should be first of all based on better product specifications (regularity, strength etc.) and secondly specialized technical market promotion. A leadership strategy is required considering the current market position of jute yarns, emphasizing the overall market position of jute yarns in the woven carpet industry. For CBC, stabilisation of present market share through technical market promotion is essential. Improvement of logistics and quality of product will enhance the market position of jute CBC towards a market leadership' position.

3. Sacks and bags
   Regarding sacks and bags the strongly fluctuating market owing to EC food-aid to African countries and lately also to the former Yugoslavia, makes it clear that a niche strategy as far as the packaging of food-aid is concerned is essential (especially lobbying for the position of jute in new packaging materials regulations). Outside the official food-aid channels a slowly but inevitable decrease of market share is occurring. Through product-innovation consolidation of market share should be the main objective for this segment. The case of the development of new clean bags for the packing of hazelnuts shows that jute bags will be more tailor-made, depending of the type of agricultural commodity packed.

4. New and diversified products
   New pmc's like the household articles and clothing, which are not yet positioned in the portfolio matrix due to insufficient product information, are likely to follow a niche-strategy. The required network of interrelated contacts with trade, wholesalers and retailers has to be build up with a low
market profile. One of the first objectives of any market-promotion cam­
paign should be the establishment and potential fulfilment of European
standards on clothing and interior decorating.

For all other PMC's the strategic alternatives three and four apply, regard­
ing disinvestments, since one of the overall 'weakening' factors for the jute
sector in Bangladesh and India (probably also China) is the low productivity
and the average age and appalling state of maintenance of the totally
deprecated equipment. On sector level and between producing countries,
agreements have to be made to come to a more realistic level of production
with a satisfactory level of quality. One of the first requirements for this
scheme is the creation of a marketing- intelligence system (MIS), with a
strong accent on the consumer markets. This MIS will be discussed in chapter
five, as one of the limiting conditions for effective market promotion.

4.2 Introduction: the marketing mix

The marketing of products consists of four major elements: product, price,
place and promotion (the four 'P's). These four elements together form the
so-called marketing-mix. Each of the four elements of the market mix will be
shortly discussed in this paragraph and further elaborated for yarns, CBC,
hessian, sacking and new applications. The specific promotional aspects will
be discussed in chapter five, where per region, the product market combina­
tions from the portfolio matrix will be further elaborated. An overview of
the portfolio-matrix is given for a better understanding of the following
text. The identified product-market combinations will be divided into three
blocks, each block representing a specific marketing approach.

4.2.1 Product: intrinsic product attributes

This instrument deals with product quality in terms of fitness for use. In
the first block of our portfolio matrix the product policy is directed to a
further development of the product, by tuning of the product towards cus­
tomer's wishes.

A high level of quality control is especially important in the second block
of the portfolio matrix. A close following of the market is essential to trace
new developments and to adapt the product accordingly, in order to main­
tain the competitive advantages. Cost-effectiveness in the production
process is besides quality control, a major item in order to remain price com­
petitive.

The objective in the last block of the portfolio matrix is to maximize prof­
ts and minimize costs. When profits become negative and there are no
possibilities to reduce costs, the time has come to withdraw from the market.
4.2.2 Place: allocation and distribution

Place stands for the element of distribution: where to deliver the goods, in what quantities/qualities, at which time and through which channels. Service is in general also included in this instrument, even though service can also be seen as part of the promotion.

What facilities should be offered to both trade and end-users in order to keep them committed to the product? In general for new products a selective distribution strategy is chosen. The further development of new products require a close and intensive relation with the market and therefore involvement and commitment of the distribution chains. A high service level is essential, new customers have to be convinced of the fitness for use of the new product so the customer is really king in this phase.

In the second block of the portfolio matrix a broad distribution is needed. The product has to be made widely available to all possible customers. Distribution costs (costs for keeping stock included) have to be minimized so a good service in terms of exact delivery of the required quantity and quality at the requested time is essential.

4.2.3 Price

Especially for commodities price is an important marketing instrument. The more the products are converted towards (consumers) end-products or specialties, the less important price becomes (although always important). In general for new product price is a critical factor but as long as the product has some specific advantages over competitive products, pricing is of minor importance to quality, service etc.

For the more established products price stability is an important issue. The price level has to be in balance which competitive products. Special product pluses justify higher prices. In the production a continuous effort is directed towards rationalization of production, in order to bring down production costs and improve quality.

4.2.4 Promotion

Promotion is the last marketing element, not only in this description but also in strategic terms. If the other elements are not well tuned, promotion can have a short term positive effect but will be contra productive in the long run: ‘You can fool the market for some time but never for ever’. Promotion is basically communication with potential customers. It can vary from an end of year relation present for business partners to mass media advertisements towards consumers.

Promotion can only be effective if the target groups are known. Getting the message across means you have to know who is the receiver, what arguments are important, what type of information the customer needs and how they can be reached. In general for new products, promotion is limited to direct interaction with customers. To expand the market after the first intro-
duction promotion on a broader scale is needed. Dependent on the nature of the product (commodity or consumer product) a promotion strategy has to be developed.

In industrial markets technical information is important. Advertisements are not very effective, editorials or articles about test project in high qualified magazines are in general more effective. Direct contact with the customers as far as possible stays important. For raw or intermediate product, only when some important product attributes are recognizable by consumers in the end products, consumer oriented promotion is possible. Promotion is often used to communicate non physical/non visible product attributes to customers, like e.g. socio/psychological values. Especially for this type of promotion a profound knowledge of the target group is necessary in order to know what arguments/values are appealing.

Promotion: the case of promotion of flax and linen goods in the EC.

Notwithstanding the fact that linen goods are more upmarket clothing articles, market promotion for natural materials as linen made of flax has many similarities with market promotion for jute goods.
The European Flax and Hemp Association (CIH) directs the market promotion for linen goods strongly at influencing designers, stylists and other influential persons in the clothing industry. In 1987, the EC authorized a market study on the effect of the linen promotion. The following results can be obtained from this study:
- Fairs and exhibitions are regarded as important by the respondents, however there was a lack of the necessary broad effect which could be reached by: making the fairs accessible to end-consumers, supply of more practical information and more of a challenge character to the fairs.
- Trade journals lack technical information on the materials qualities and difficulties in processing, data on e.g. target groups, buying habits etc. should be provided.
- The linen bureaus should be made more well known and above all should provide customers with technical information.

4.2.5 The marketing mix for jute goods: general conclusions

The position of a group of products on the market and the phase of it's life cycle are closely interrelated. Most jute goods have well established but somewhat declining market positions. New products still have to earn their share of the market. It is therefore difficult to give overall conclusions regarding the importance of any of the four elements of the marketing mix for any jute good. The relations between the widely-accepted cost-saving strategies and the status of the jute goods markets make that currently price is the prevailing element of the marketing mix. Product quality, place (logistics) and also promotion are certainly underrated. In paragraph 4.3 an overview is given of the marketing mix for the major product-market combinations.
4.3 The marketing mix for the major product/market combinations

4.3.1 Carpet yarn

Woven carpets are an established application of jute yarn. There is a strong competition with synthetic yarns although it is generally acknowledged that jute yarns have some intrinsic product pluses. These qualities are well known by the carpet manufacturers. The main reasons for using synthetic yarns are:

- security of supply;
- shorter time between ordering and delivery;
- more constant quality;
- quicker response to new market wishes and
- higher speeds in weaving.

At this moment price competition is in favour of jute yarn. There is a general feeling jute yarn can go up in price with 5 to 10% without losing its share of the market (one major Belgium carpet manufacturers even would accept a considerable price increase of his jute yarns). Especially for the top-end of the market, cost for jute yarn (in relation to the total added value of those carpets) is relative unimportant. Quality is in these cases the predominant factor. Quality and better logistics are the main grounds of existence of the Dundee-based spinning mills.

Notwithstanding competitive prices, there has been no shift from synthetics to jute yarn since producers of weft carpets who have adapted their production and logistic processes to synthetics will only change when both quality and distribution of jute are improved substantially. They will only consider to shift their operations when the jute sector has proved to be able to maintain a higher level of quality and distribution without losing price competitiveness.

In terms of the Marketing Mix this means price is a minor instrument in a sense that price competitiveness of jute yarn is good and is therefore not a leading factor in the choice of carpet manufacturers between jute and synthetic yarn. The price developments of competitive product should be followed closely however in order to react on changing price ratios.

Promotion in terms of generic promotion is also a minor issue as far as carpet manufacturers are concerned. They are aware of the specific properties of jute and in general industrial buyers are not very sensitive to generic promotion. In this market segment promotion is more a matter of personal contact between producer and user. Especially here the best promotion is to guarantee that the other elements of the Marketing Mix are well taken care of to get an image of a reliable supplier of a good quality product, willing and able to respond quickly to changing demands in the market.

Product is therefore an important element of the marketing Mix. A continuous attention for new developments in for example weaving technique is essential in order to follow the needs of the market closely and keep jute yarn competitive and innovative. Together with the European carpet manu-
facturers technical problems related to their use of jute yarns should be solved. New regulations on anti-flammability of carpets require attention of the yarn manufacturers to the anti-flammability treatment of their yarns. Upmarket carpets require yarns that meet the highest standards. The use of manufacturers labels or trade marks can enhance the position of speciality yarns.

Distribution (place) is an important element for yarn. Keeping stocks of yarn is costly so carpet manufacturers will try to minimize stock. In fact this is one of the major competitive advantages of the synthetics industry, who already adopted just in time deliveries.

The long distance between production and consumption units requires an ordering time (and so a planning horizon of users) of tree months at this time, which is rather long. The indirect distribution through two or three middle man makes communication and logistics difficult.

Short conclusion

The element of product (quality) and place (logistics) are the most important elements of the marketing mix considering the market position of jute yarns in the EC. The major UK consumer of yarns buys directly from a 'controlled' Bangladesh spinning mill and a Dundee-based mill since the company consider that to be the only way to have the product meet their requirements. As far as promotion is concerned, product and place have to incorporated into any promotional activity.

4.3.2 Carpet Backing Cloth and Hessian Backing

4.3.2.1 Carpet Backing Cloth

CBC is also an established product with a stabilized European market over the last number of years. Recently however, the amount of jute CBC used by the carpet industry in the EC increased (industry sources).

There is a severe competition with foam and synthetics ('Actionback'). Besides price, synthetics are preferred because they are lighter in weight, have a higher roll-length and a better Just In Time supply manufacturing system (see also RBI report on market position of jute CBC in the USA). Consumers, however, do not have any specific preference for jute as a backing material. Installers may have a certain preference for jute, e.g. since jute has a natural overstretch resistance.

Changing environmental laws in Europe set new requirements to the product specifications of both woven and tufted carpets. Recycling or re-use of carpets (compulsory take back of used carpets by the manufacturers) will stimulate the use of monomaterials or materials with similar properties. In light of this developments, European carpet manufacturers are currently working on the possibilities of re-use of synthetic carpets and the use of the old carpets for non-woven products. Also future legislation on fire-resistance is important for the use of jute CBC.
Price is a leading factor in the buying behaviour of carpet tufters. Part of the strong price competition is due to the trade structure and the bulk character of CBC. CBC is not at all sold under company label, quality is of minor importance and therefore tufters change easily from supplier. As there were more suppliers (trader/stockist) in Europe than big carpet tufters a strong price competition among the importers emerged, stimulated by the low prices of synthetics. Due to innovative actions by the synthetic industry the position of jute CBC worsened. The stiff competition has led to a withdrawal of some jute CBC traders because trade margins were too low while risks of claims were high.

A continuous product diversification (lighter but stronger cloths) and innovation is necessary to compete with synthetics. The aggressive marketing policy of the synthetic industry and the aphetic reaction of the jute industry have not really enhanced the market position of jute CBC. More attention and promotion is needed to increase the customers awareness of the advantages of jute backing. New developments in carpet tufting should be closely watched. The best way to meet the new anti-flammability-requirements is probably by treating the yarn before weaving. The position of jute carpet backing versus re-usable or recyclable carpets should be analyzed.

Distribution is a weak point in terms of reliability. Trader/stockist keep stocks for tree months to half a year, which means an investment of one to two million US $ for a moderate stockist. The capital intensive carpet tufting industry can't afford idle time due to a lack of CBC. The interests on stocks however decreases the price competitiveness of jute CBC.

4.3.2.2 Hessian Backing

Hessian Backing for the production of linoleum has a much more stable market position than CBC for tufted carpets. The production process for linoleum is mature and standardized on jute as carrier for the cork, pigments and the lin-oil.

The price of hessian cloth for the linoleum industry is not as such much influencing the actual use of hessian backing, since real alternatives made from natural materials (with the exception of linen) do not exist. Synthetics are out of the question since the linoleum industry emphasizes strongly the natural character of their products. Indirectly, price competition between imported hessian and locally manufactured hessian is a strong influence on the buying behaviour of the linoleum industry. The market trend on consumer markets for linoleum is very positive: a steady growth is expected to continue into the nearby future. Hard floor coverings like linoleum and parquet floors but also coir and sisal mattings are very popular in the EC at the moment.

The uncertainty and the irregularities in supplies legitimate the existence of an extra link in the conversion chain to reduce risks for the manufacturers of the linoleum products. Almost all weaving of jute in the EC is for the manufacturing of hessian backing for linoleum.
Short conclusion

Notwithstanding the strong price competition and general cost-based strategies of the European tufted carpet's industry, price is not the only important element of the marketing mix. Quality and the ability to meet technical requirements on weight, cleanliness and fire-resistance are determining factors for the market position of jute CBC. Since promotion of the back of a carpet as such is undesired, promotional activities are always to be in line with future promotional activities for the whole carpets.

Regarding hessian backing, the emphasises on linoleum being a 'green' product makes it plausible that not much promotion is needed for this pmc. The image of jute as an environmental friendly product may be illustrated by the success of linoleum.

4.3.3 Sacks and Bags

Packaging materials are traditionally the most important group of jute goods (qua volume). Most European consumers associate jute with bags. Besides agricultural commodities (including food-aid) jute packaging materials is used for packing cement, sand and other bulk materials. Major competition for the business comes from bulk-transport systems and containerisation, synthetical packaging materials like polypropylene and paper. The decline of the market is much more the result of a structural change in the handling of commodities, both on a bulk scale as on the scale of 50 kg, 100 LB, 25 kg and 10 kg bags.

Clean bags, with no fluffy fibres are required by the end-users, like food-companies and wholesale firms. Standards for packaging of agricultural commodities are commonly set by the requirements of the manufacturers of sugar. Recent developments regarding the contamination of jute bags by the mineral batching oils have led to the establishment of new standards for the packing of nuts, coffee and cacao. The new standards that are now being developed will include the mandatory use of natural batching oils. These new standards are set by all major food companies throughout the world, like Philip Morris and Nestlé.

Price seems to be of minor importance for the market position of jute packaging material. Prices for polypropylene are structurally lower than prices for jute (about 30%) and have been lower for the last number of years. Prices for jute bags are now considered by the trade to be on an acceptable level. The average price level of jute is naturally influenced by the structural decline in demand for jute bags and the problems regarding the contamination of the bags. The average stock of three to six months at the jute bag traders is sufficient for a steady supply of the market. Only in cases of strikes in the production areas (with the exemption of the Chinese jute bag production) problems may arise for a steady flow of bags to the markets.

Promotion should be aimed at major end-users of bags that have specific requirements for their packaging materials and should include the message.
that 'new' jute bags are as clean as the cleanest paper bag. The current problems with the detecting of contamination of jute bags with hydrocarbons is probably an effective method of anti-promotion of all jute goods, but especially for jute bags.

**Short conclusion**

The current market position of jute bags is influenced by the EC-regulations on the use of jute for the packing of food-aid. Contamination is strongly negatively influencing market positions. Product innovation (lighter but still strong bags, different stitching etc.) is needed to maintain current market position. Pricing and promotion are obviously less important then product and distribution.

4.3.4 New Applications

New applications for jute consist of jute geotextiles, jute nonwovens, new packaging applications and diversified products. This section however, deals only with geotextiles, nonwovens and the diversified products. For all the new applications applies that product is the major element of the marketing mix. Price and place (distribution) are relative minor elements of the marketing mix.

**Geotextiles**

With the exception of the almost classical jute soil saver, potential end users of jute geotextiles (polder authorities, constructors etc.) lack sufficient information on jute geo-textile products. In the Netherlands, a jute/cotton soil saver is used for temporary shore protection (in combination with twigs) as an experiment.

Only after the suitability of the new geotextile materials has been proven by field test, other marketing elements (including promotion) become more prominent. Market promotion, in conjunction with industrial research and development, should be focused at identifying and interesting the potential customers in the major consuming countries (Netherlands, Germany and the UK). For the classical soil saver, institutional users of building materials (governmental organizations like the Netherlands Rijkswaterstaat) should be approached. The ITC document on jute geotextiles, 'A survey of marketing and distribution systems in selected European countries' does not give enough information for a well designed market-approach.

The study by BTTG on jute nonwovens should give a survey of potential new applications for jute fibres. The range of nonwoven materials is enormous and the number of manufacturers is also large. First of all, jute product specifications should be matched with product requirements. The competitive position of jute vs. other natural fibres like coir should be analyzed. Price, distribution and possible market promotion are therefore currently minor elements of the marketing mix.
Diversified products

The range of diversified products as specified in the FAO report ‘Problems and prospects for diversified jute products’, 1990, is:
- jute geotextiles;
- all jute pile carpets and tapestries;
- paper and paper pulp;
- decorative fabrics including wall coverings;
- garments and apparel cloth;
- blankets and bed linen made of jute yarn and blends;
- coloured/printed shopping bags;
- rigid luggage;
- soft luggage;
- handicrafts;
- shoes and shoe uppers;
- non-woven products including automobile panels;
- jute composites.

The forgoing list of diversified products does not included the traditional products like CBC with different sizes, weights or colours that are commonly included by the producing countries in the list of diversified products. We also consider this to be service-related product modifications and no diversifications. Therefore, diversified products do include household articles, clothing, carpets but not CBC, hessian etc. with non-traditional specifications. Paper and paper pulp may be labelled as non-export potentials and are therefore outside of the scope of this report. Geotextiles and nonwoven-applications are already discussed previously in this section.

Notwithstanding the fact that in the production countries and especially in India programmes for jute diversification exist, household articles, all jute pile carpets and tapestries and certainly clothing articles and accessories are completely new to the Western consumer markets. This has the following implications:
- The products are designed for the domestic markets and therefore lack the specific appeal to European consumers.
- The products are not-known to the buyers of major retail outlets/department-stores.

The obvious lack of product-information and feed-back from consumer preferences is a major barrier to entry for the diversification programme. In terms of marketing, product development and simultaneous market introduction is the first bridge to cross. Only in the case of a successful market penetration, pricing (i.a. a recognition of the image of the product) and distribution become more important. Promotion plays an important role in both phases:
- In the introduction and product development phase, since through promotion (fairs etc) the necessary contacts can be made with the European counterparts.
The diversified products consists of both fast moving consumer goods as well as more durable consumer goods. Promotion can be directly aimed at the end customer for the establishment of a stable market position.

**Short conclusion**

The position of diversified products is without doubt important for the of the jute sector. The emphasis lies strongly on further product and market development. A new chain of distribution for these products has to be developed yet, in cooperation with designers, stylists, wholesalers and retailers. In chapter five, section 5.6.3, an outline will be given of a market promotion programme for jute household products, all jute pile carpets and jute clothing.
5. MARKET DEVELOPMENT AND MARKET PROMOTION

5.1 Introduction

This chapter deals exclusively with market promotion for the identified PMC’s on the relevant European markets. In annex 3 a number of additional graphs are given, showing dollar value of net imports by product group and import/export prices. The previous chapters already stated the framework in which promotion can take place. The following PMC’s will be discussed for their possibilities for promotion (see 3.3: the portfolio matrix market attractiveness and competitive position):

- Yarns for carpets and linoleum backings and yarns for new applications.
- CBC.
- Hessian backing.
- Sacks and bags; including new packaging applications.
- Geotextiles and nonwoven-applications.
- Diversified products, as defined in chapter 4.3.4.

As the target groups for carpet yarn and CBC are more or less the same and both are used in the same kind of end-product, they will be grouped together in the promotional projects. Each of the different sections of this chapter consists of objectives for promotion, a working out per region (if relevant) and an outline for IJO promotion project(s). Each project-outline will have provisions for review and readjustments. Both generic and more specific promotional activities in its broadest way will be discussed. The description of the promotional activities per PMC per country will be preceded by a number of general/generic promotional activities for all jute goods on European markets and a short introduction to a Marketing Information System.

* Once again it is stressed that promotional activities will only be successful if a number of conditions as mentioned in the previous chapters are met. The most important are:
  * better and more constant quality;
  * accurate delivery according to contract with respect to quality, quantity and time;
  * definite solution for the contamination problem.
5.2 Generic promotion for all jute goods

5.2.1 General promotion for jute as the environmental friendly alternative

5.2.1.1 Strength and weakness of environmental arguments

For all the relevant applications jute has to face competition from synthetics. The fact that jute is a renewable, bio-degradable raw material can be an important argument in the promotion of jute in general. In Western-Europe the concern about pollution of air and soil and the exhaustion of natural resources is growing rapidly. Previous research has shown an increasing awareness among consumers about environmental issues, although they also clearly indicate that most consumers are in general not willing to pay for the higher costs of more environmental friendly products. If consumers have a choice between a slightly more expensive environmental friendly product and a 'traditional' alternative, the traditional alternative is chosen unless the cheaper alternative has only the slightest suspicion of being harmful for the health. Especially in Northern and Central Europe health aspects are very strong promotional instruments. A healthy and/or environmental friendly image is on the other hand also very fragile. Very regularly new harmful, carcinogenic components are found in previously considered completely harmless products. Consumers are therefore very suspicious about health and/or environmental arguments in promotional activities. Only a vague rumour about possible harmful components can destroy a carefully build up image of a product, especially when food products are concerned. This means the argument of environmental friendliness can be used only when there are no doubts what so ever about the validity of these arguments.

5.2.1.2 The contamination problem in food packaging

The contamination problem of jute has now reached a critical status in the case of jute bags for hazelnuts. It has however a far larger impact and is a severe threat for the jute sector all over the world. All the major chocolate/coffee/cacao-manufacturers in Europe have already formed a task force to develop, on very short notice, a set of compulsory requirements for jute sacks. These will be imposed on the suppliers of nuts at first, but will on short term also apply for cacao and coffee.

The European coffee federation has also already officially notified producing countries and international organizations in the jute sector of a set of conditions which has to be fulfilled in order to maintain jute bags as an appropriate packaging material for coffee (see annex 3). The contamination is first of all a problem for food packaging. No firm in the world can risk a claim of carcinogenic components in end-products, due to transport of raw material in jute bags. Health authorities in Switzerland and Germany have already a zero-tolerance for suspected components, other countries are expected to follow.
Besides breaking the law, the firms that keep on using contaminated raw material will have to face a storm of negative publicity that will probably lead to an inevitable closing down of activities. Also governments will not take the risk of being accused of giving carcinogenic food aid by imposing on jute sacks as packaging material. This means the whole market, world wide, for jute bags and sacks will vanish on short term if the contamination problem is not properly solved.

5.2.1.3 Bio-degradability

The second problem of contaminated jute is related to the bio-degradability. Although jute bags can be re-used (they have to be 'clean' as well off course) both jute bags as well as carpets have to be disposed off at the end of their functional life. Contaminated jute, by legislation, will be treated as chemical waste, which means excessive high costs of disposal. For all kinds of products (from empty bottles to carpets and washing machines) legislation is in preparation in which manufacturers are obliged to take back their product after use. They have to re-use, recycle or properly dispose of the waste. Composting jute waste is only possible if it is not contaminated with low quality batching oils and has no residuals of herbicides or pesticides. Only then jute can presents itself as a bio-degradable raw material for sacks and for carpets.

5.2.1.4 Environmental aspects of processing jute

The third problem with contaminated jute occurs in the tufted carpet production. The backing is glued to the carpet under high temperatures. The smoke emission of the jute CBC due to the residuals of the batching oils contains harmful components. Due to strict legislation on labour conditions, tufters have to invest in air cleaning installations. Furthermore this problem will not support an environmental friendly image of jute.

5.2.1.5 Conclusion

The foregoing means that all jute products have to be free from any sort of contamination before the argument of environmental friendliness can be used in a promotional action. In fact any promotional activity is doubtful if this problem is not completely solved. All efforts and research should be directed to avoid negative publicity and to solve the problem of contamination as soon as possible and for the jute-sector as a whole.

5.2.2 Marketing intelligence and information as promotional instruments

In our contacts with all parties in the jute sector both in Europe as in the producing countries a serious lack of information became very evident. There is no regular information flow from end-users to producers and vice versa. Producers are not aware of specific wishes from end-users and end-
users are not aware of the possibilities of producers to produce specialties. Also temporarily shortages for some jute products occur due to insufficient information about market developments in Europe. As has been said before promotion is communication, passing on information to specific target groups. Informing participants about actual and strategic market and product developments is therefore an excellent form of promotion. Two projects are suggested to realize better and structural information flows throughout the conversion chain:

1. The development of a marketing intelligence system to analyze structural changes on the various market, to forecast future demand, to identify major users of jute and jute goods and to provide a solid base for strategic management in the jute sector.
2. In conjunction with the development of a marketing intelligence system, IJO should in cooperation with the FAO and the European jute manufacturers, increase the scope of the jute bulletins. It should provide producers, traders, manufacturers and end-users an up-to date overview of relevant developments regarding jute goods.

5.2.2.1 Marketing Intelligence System

For a better understanding of market developments and to forecasts future demands a MIS plays an essential role for market intelligence on sector level as well as on company-level. A MIS consists broadly of the following elements:

- statistical data on market structure, market actors, product flows through the conversion chain and the demand by end-users;
- qualitative information about legislation, consumer preferences concerning jute-based end-products, product quality, new processing developments, competitive position of jute etc. etc.;
- an analytical framework for analyzing the statistical and qualitative data in conjunction with each other and an identification of critical elements which determine future market developments;
- a model for strategic analysis of the jute markets and forecasting of future demands for the relevant product categories (qualitative as well as quantitative).

On all kind of places statistical and qualitative information about the jute sector is gathered; FAO (quarterly statistics), Eurostat (analytical tables European trade), ITC, IJO and associations of jute trade/manufacturers. These data sets are either not detailed enough, deal only with a part of the market or are not regularly updated to give a good insight in marketing developments (not enough customer orientated).

Setting

The development of a Marketing Intelligence System is a large project. The suggestion is to start with a feasibility study on how exactly the MIS
should be structured, what output it should produce, which data sources can be used and what will be the cost of implementing and maintaining the system.

Target group

The target group for the feasibility study is the IJO itself in order to have a balanced decision on implementing a MIS. The MIS itself should be able to provide Governments, International and national jute organizations as well as individual companies in both producing and consuming countries with relevant information.

Objective and working out

The design of the MIS can be based on existing reports as the FAO Quarterly Statistics and this report. The jute goods database can be used as well, although a lot of corrections, updating and amendments are necessary. More research is needed about specific information needs of the target groups. The MIS should provide the target groups with strategic important information and needs to be more than for instance the ITC Market News Service.

Review and readjustment

Given the available information it should be possible to complete a feasibility study within one year after approval of the project. The evaluation of the MIS must be a regular item on every IJO meeting.

5.2.2.2 Jute Bulletin

Setting

There is a strong demand among the purchasing managers of major European carpets manufacturers for information on the actual situation of growth, production, stocks in the origin countries. Information through the trade channels is considered insufficient. The FAO quarterly and yearly statistics on jute, kenaf and allied fibres obviously do not provide them with relevant information or these publications are not detailed enough for their purposes. The present IJO information bulletin does not have European manufacturers as a target group. Also its information is rather limited to IJO related developments.

Target groups

The European trade, all manufacturers and end-users of yarn and CBC are the major target group for the IJO bulletin on carpet jute affairs. Other re-
lated bulletins might be developed for the (potential) end-users of household articles, clothing and all-jute carpets.

Objectives and working out

Bulletins for different target groups are a good vehicle for extension of present relations and establishment of new (semi-commercial) relations. Especially in the case of the new diversified products, market information can take place through bulletins in which manufacturers associations and (groups of) individual companies advertise and in which IJO (and its executing office/agency/institute for market promotion) commit generic promotion for jute goods. The frequency of the bulletin should be adjusted to the data of the availability of new FAO statistics, available budget and 'recollection' time of the target groups.

Review and readjustments

Professional assistance in the design and editorial work is needed in order to avoid a false start. Market research should provide an overview of information required by the target groups. After the introduction phase, regular enquiries should be held so that feedback from the readers is translated into the design and day-to-day routine of the bulletin.

5.2.2.3 Political lobby to prevent legislational barriers against the use of jute

Setting

New environmental legislation concerning packaging materials and durable consumer goods (carpets) is strongly focused on re-usability and recycling. The position of natural materials, either bags or carpets is very unclear. Promotion of the environmental character and benefits of jute will give jute goods their rightful place in the market's environment.

Target Groups

EC representatives responsible for the new guidelines on allowable environmental impacts of durable and non-durable (consumer) goods. Also representatives of manufacturers association who take part in the various CEN-committees.

Objectives and working out

With the use of the report prepared by the German Environment Protection Encouragement Agency EPEA Hamburg, the target group has to be convinced that biodegradable jute materials deserve a special place. Support from environmental pressure groups which have to be informed about the
position of jute goods, may be received through mailings, personal contacts etc. Contacts and cooperation with individual jute using companies or associations in Europe is essential in order to avoid double work or spreading contradictive information.

Review and readjustments

During the biannual IJO-Council meetings, progress reports have to be made on the position of jute goods in light of the changes in the environmental legislation in the EC.

5.3 Market promotion for jute carpet yarn and carpet backing

5.3.1 Introduction

The United Kingdom and Belgium have by far the largest carpet industries and are the largest consuming counties of yarn and CBC as shown in the next graphs.

Figure 5.1 Net import of yarns

Figure 5.2 Net import of CBC

The UK is unmentioned in figure 5.1 since the UK is a major importer of raw jute and the major part of the domestic produced yarns are consumed within the UK itself. The yarns used in Germany are mainly for the German production of hessian backing for linoleum. The objectives for promotional projects for jute used in carpets are:

1. Taking away prejudice regarding the quality of jute yarns by enhancing the intrinsic product pluses.
2. Increase consumer's awareness of quality of jute as a component of carpets and the green character of jute.
5.3.2.1 Trade fairs

Settings

International fairs like the Birmingham fair and Domotex in Hannover are international meeting places for industry to see what competition is doing, to present their own line of products and to renew existing contact and establish new ones. The Domotex is more international oriented, the Birmingham fair is more oriented on the domestic UK market.

Target group

The fairs are visited by as well carpet manufactures as carpet retailers. Both can be reached with a IO stand but the message to bring across is different. This means a choice has to be made or a double stand is required. The choice can also be each year another target group.

Objective and working out

The most glossy stand with the most aggressive salespersons draws the most attention. This means an IO stand has to be in accordance with those of other participants. An external designer with ample experience is required. The stand should offer enough space (and refreshments) to have a good conversation with more persons at a time. The stand must be manned with at least tree persons, during the whole day. This ‘sales staff’ should be able to give potential customers information about the specific properties of jute yarn and CBC, current prices, names and addresses of traders and/or producers, they should be able to understand and interpret specific wishes/questions from customers regarding the use of jute in carpets and should also be recognizable to visitors as being a salesman from the IO-stand.

The impact of fair attendance can be greatly enlarged if some new product innovations can be shown. The policy should be to present at least one new item each year. In general the possibilities of really stimulating jute consumption by fair attendance is limited.

Review and adjustment

Each fair attendance should be followed by a detailed report in which the remarks/wishes of customers regarding product quality and desired product diversification are published and spread among producers. Names and addresses should be added to the jute good data base.
5.3.2.2 Consumer oriented promotion in cooperation with retail chains

Setting 1

Most larger carpet retail chains have a regular leaflet or magazine with a house to house distribution in which they present their self and announce special promotional actions. Special carpet retail chains are present on almost all European markets. Most of them are organized country-wise although international relations exists. They sell advertising space to carpet manufacturers. Occasionally advertising space is bought by the International Wool Secretariate IWS to promote wool as a superior pile material and by 3M for promotion of Scotch-Gard treated carpets. Advertisements for jute are also welcome.

Target group

Due to the distribution all household within the region of the retail outlets receive a copy. Because the leaflets give an overview of a broad assortment of carpets in quality and prices, they are well read by all who are thinking of buying a carpet in the near future. The penetration of possible consumers is therefore high.

Objective and working out

By addressing the consumers directly a 'demand pull' effect can be achieved. Carpet manufactures are sensitive to consumers wishes and can only in this way be persuaded (forced) to use jute. The advertisement should be designed carefully and needs the involvement of a professional publicity agency. The message to bring across is quality, durability and the natural character. To enhance the impact (and reduce costs) cooperation can be sought with the IWS who brings about the same message. Belgium, The Netherlands and the UK are the most promising countries to start with. Germany can follow is results are booked in the other countries. Due to consumer preferences the effects in Southern Europe will be minimal.

Review and readjustment

Each advertisement should be evaluated on the influence on jute consumption. A quantitative analysis of advertisements in general is very difficult, an accurate estimation of extra sales due to advertising is impossible. Nevertheless a more qualitative evaluation is possible and should give clear (objective) indications of the impact of the advertisement.

Setting 2

Some luxury retail chains on clothes, household textile, furnishing etc. etc. have an international cooperation with respect to developing and buying of
some product (categories). The group as such has, with the help of their own stylists and designers, developed an to western consumers appealing assortment of high quality Indian loose carpets. They had this year a special promotional action week on these carpets with a 5 pages background story about making carpet in their monthly magazine. There was not a word about jute in it.

**Target group**

Market promotion officers of large retail chains that sell carpets.

**Objective and working out**

By a regular contact with the retail chains one stays informed about promotional activities with respect to carpets. It will not be hard nor costly to persuade the promotion officer to include jute in the campaign. It needs a good established contact and a good briefing about jute. The impact of an 'editorial' in such a magazine of a quality shop is high.

**Review and adjustment**

As it will be an ad hoc action no regular review is necessary.

5.3.2.3 Consumer orientated promotion though editorials in interior decorating magazines

**Setting**

In Western Europe there are quite a number of interior decorating magazines. They present articles on the latest fashion in interior decorating, furniture and household equipment, new product and instruction for hobbyist to do all kind of things in the house themselves. In the articles product are fully named with most of the time a price indication, name and addresses of importer and/or retail outlet. These magazines are read by all professionally involved with interior decorating and a large number of consumers. The impact of editorials on fashionable trends and buying behaviour of both consumers and purchasing managers is high.

**Target group**

Editorial staff of the most important interior decorating magazines.

**Objective and working out**

A regular briefing with, if possible, well formulated evidence of the quality of jute as carpet backing for tufted carpets and jute yarn for weft carpets may lead to editorials on jute. If cooperation in this field can be
established with a high quality carpet manufacturer, the impact can be enlarged. The same goes for presenting new items: new or improvements in jute products.

**Review and adjustments**

A yearly evaluation of the results of this effort is necessary. If no articles on jute have appeared in a magazine a personal visit can be required and/or a questionnaire why they have not done anything with the presented information.

5.3.3 Generic promotion per country

5.3.3.1 Belgium

**Setting**

The Belgium textile engineers have a club which regularly organizes meetings (4 x a year) for the members with lectures on new developments in products and processing, to update technical knowledge and exchange information.

**Target group**

Technical engineers in the carpet business.

**Objective and working out**

Presenting lectures on the intrinsic product pluses of jute yarn and/or CBC. The speaker should be an expert on both jute and carpet manufacturing. Perhaps cooperation can be sought with the remaining Belgian spinner/rewinder/trader of jute. With this action regular attention is given to jute as a raw material for the carpet industry and perhaps a network of contacts with production/product development managers can be established. The impact of the lectures can be enlarged if new, customer oriented, product developments are presented such as very regular fine yarn for high quality carpets or possibilities to improve the flame retardency of jute yarn and CBC.

**Review and adjustment**

The questions, discussion items and customers wishes that arise after the lecture, should be passed on to production managers and research institutes in the producing countries.
Setting

The Belgium carpet industry is very dependent on exports. Germany is an important market for Belgian carpets. Environmental issues are becoming very important in Germany. It is essential to establish a 'RAL-Gütezeichen für Tapeten', a certificate of not being harmful for the environment, in order to maintain position on the German market.

Target group

The institutions behind the RAL-Gütezeichen für Tapeten.

Objective and working out

This action has to be taken in cooperation with a carpet manufacturer as the certificate is connected with a specific carpet of a specific producer and cannot be established for raw material only.

Review and adjustment

Once a certificate is granted to a carpet with jute (yarns/CBC) it is easy for others to refer to this in order to obtain a certificate as well.

5.3.3.2 Germany

Setting 1

RAL Gütezeichen für Tapeten. See 5.3.3.1.

Target group

See 5.3.3.1.

Objective and working out

With the certificate it might be possible to convince both the carpet industry and consumers jute is a good material for carpets and synthetics are not superior.

Review and adjustment

See 5.3.3.1.

Setting 2

The German consumers are said to prefer all synthetic carpets. The environmental wave in Germany offers opportunities for jute. To persuade car-
pet manufacturers and retailers, a demand pull effect from consumers is necessary. This has to be combined with information towards carpet manufacturers.

**Target group**

Both consumers and carpet manufacturers.

**Objective and working out**

For consumer oriented action see 5.3.2.2. For reaching German manufacturers a German speaking consultant is necessary. The EPEA report on the environmental comparison of jute versus PP can be used to highlight the environmental character of jute and the possibilities of using this argument in promotional activities.

**Review and adjustment**

See also 5.3.3.1. A trial period of one year is suggested to see whether long term results can be booked.

5.3.3.3 France

Promotional activities:

No specific projects for promotion are suggested for France.

5.3.3.4 Spain

Promotional activities:

No specific projects for promotion are suggested for Spain.

5.3.3.5 United Kingdom

The market promotion for jute yarns for the UK will be re-instated given the overall importance of the UK market for the jute business and the emphasis of the preceding (non-successful) promotion programme on the UK markets. The cooperation of the remaining independent spinning mill in Dundee is a prerequisite to a market promotion programme in the UK.

**Setting**

The UK market for carpets is dominated by UK-made carpets sold under firm name. Promotional activities towards consumers therefore have to take place in cooperation with carpet manufacturers. Especially the high quality
axminster/wilton carpets can be a good vehicle to promote jute as a quality and durable material for carpets.

**Target group**

UK carpet manufacturers and consumers.

**Objective and working out**

In the UK jute has an established position as a raw material for carpets. The economic recession in the UK puts a lot of pressure on the carpet industry. Turnovers and profits decline and therefore there is a great attention for cost control. The position of jute has to be defended against the cheaper synthetic alternatives. In cooperation with carpet manufactures promotional activities can be set up in the retail outlets. Also cooperation can be sought with carpet retail chains, see 5.3.2.2.

**Review and adjustment**

See 5.3.2.2.

### 5.4 Market promotion for jute sacks and bags

#### 5.4.1 Introduction

The Netherlands, Italy and Germany are the largest customers for new jute sacks and bags as shown in figure 5.3.

![Figure 5.3 Net import of new sacking and bags](image)
As has been said before, the sacks and bag trade is in the hand of a limited number of traders who are not sensitive for traditional promotional. Also end-users will not shift to jute due to advertisements or radio and TV commercials.

The best promotion is to ensure the contamination problem is completely solved. Before that no promotional action will have a lasting impact (besides perhaps a negative one).

5.4.2 Generic promotion for Europe

5.4.2.1 Product development as a promotional activity

Setting

Bag traders in general like to have as less different sizes and qualities of bags for an easier stock control, less stock and thus minimal costs. The users and end-users (the ones who receive the bags with a contents) have special requirement which are not met with the standard bags.

Target group

Users and end-users.

Objective and working out

Development of special sacks (like the rice bag and hazelnut bag); niche marketing.

Review and readjustment

Active control on developments in close cooperation with buyers associations.

5.4.2.2 Recycling jute bags as a promotional activity

Setting

The new packaging laws to come impose severe restriction to waste packaging material. If no proper solution is found for recycling or re-using jute bags, the costs of disposal will become a barrier to use jute. Only then jute can be promoted as an environmental friendly packaging material.

Target group

Bag traders and end-users.

Objective and working out
In cooperation with the European trade and end-users, developing of recycling possibilities and a market for recycled jute, which will enlarge the possibilities for re-use (by modifying the opening systems used by the end-users) and to see that jute gets a special place in the packaging directives.

Review and readjustment

See 5.4.2.1.

5.5 Market promotion for jute geotextiles and nonwovens

5.5.1 Introduction

The markets for jute geotextiles and nonwovens is still in its infant stages in the EC. The interesse for biodegradable geotextiles is growing fast especially in Germany, Switzerland and The Netherlands. New applications for jute in the direction of nonwoven materials are still in a research stage.

5.5.2 Generic promotion for the whole of Europe

Setting

The ITC report on the markets for geotextile in Western Europe is not suited for further marketing actions. It clearly indicates that besides a more detailed market description, technical data on properties of biodegradable geojute is needed. Market promotion as such is not yet possible, since technical promotion for geojute can only be done (e.g., on civil-engineering symposia) with the help of ample technical data.

Target group

The ultimate target group for promotion for geotextile and/or technical textiles and nonwovens are technical managers from large enterprises in the field of civil engineering (product development division) and technical textiles.

Objective and working out

The acceptance of natural materials as either geotextile materials or raw material for technical textiles is the major objective for any promotional project.

Through cooperation with technical institutions in the consuming countries, possibilities for jute should be further explored and implemented.
Review and readjustment

Annual progress reports should be presented to the IJO-COP by the commissioned consultants.

5.6 Market promotion for diversified products

5.6.1 Introduction

The diversified products are not (or hardly any) exported to Europe. The main barrier is the design, which is not tuned to European consumers. The use of jute in clothing is for the time being not considered very promising due to the association of jute with bags. Household textiles and soft luggage can benefit of the new wave towards natural material, although the market will be small at first. A successful penetration of the market with these rather high valued product can however be an impulse for the improvement of the imago of jute.

5.6.2 Household textiles and soft luggage

5.6.2.1 European design and fair presentation

Setting

Lack of appealing design is probably the major barrier to entry to the European markets of consumer goods. It is therefore essential that for further product development and market promotion European designers are used to restyle the Indian/Bangladeshi designs. It is questionable whether all jute cloth is suitable for household textiles. There are however already good examples of jute based blends. Reliable information about colour fastness, durability, the influence of washing on strength etc. etc. must be available before any European designer will be willing to use jute or jute blends.

Target group

Manufacturers of diversified products and European designers.

Objective and working out

Contacts have to be made with one or two European designers of name to design a series of jute based product. These products have to be shown on the fairs in Milan and/or Frankfurt. The name of the designer will draw attention to the products but will also reduce the risks of the purchasing manager. Products of a top-designers have a better chance of being sold than (maybe even better) products with no name. When contacts are made with retail chains, they are also able to steer further developments (see 5.3.2.2 setting 2).
Review and adjustment

It will take a lot of money and efforts to find a top-designer, who is willing to do something with jute, as most of them are not familiar with jute. It is however necessary to draw attention to those products. After the first push a follow up is the responsibility of individual manufacturers.

5.6.3 All jute carpets

5.6.3.1 European design

Setting

Much that has been said in paragraph 5.6.2.1 applies to all jute carpets as well. Special designs for European taste is essential. To appeal to fashionable consumers, imitation China/Persian carpets are the worst market proposition one can make. It is therefore essential that new design are made, in cooperation with European sales outlets.

Target group

Carpet manufactures in the producing countries.

Objective and working out

All jute carpet have a different price and a different quality than hand knotted Chinese or Persian carpets. Imitation of more expensive but also more durable carpets leads to disappointment with consumers. This will damage the image of jute and all jute based product. See further 5.6.2.1.

Review and adjustment

See 5.6.2.1.
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Apparent consumption 20367 8 3247 19943 70724 15951 32440 504 -1100 -5631 67300

Jute and other bast fibres
- raw or retted
- processed not spun, tow and waste
Yarn of Jute
- single <1000 decitex
- >1000 decitex
- folded or cabled

Woven fabrics
- unbleached <150 cm
- >150 cm
- other

Needlemoom felt
- Sack and bags
- used sacks
- new sacks

Wall covering
### Import, export and apparent consumption in 1990

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102
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**Apparent consumption**

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### Import, export and apparent consumption in 1987

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## Import, export and apparent consumption in 1986

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Annex 3  European Coffee Federation regarding contamination

Re: contamination of jute bags

The European Coffee Federation (ECF) is the umbrella organization of the European green coffee trade and coffee roasting industry. Its combined membership represents a total import volume of some 36 million bags of coffee annually, roughly half of the international trade in coffee.

The ECF has noted with great concern that in some instances residues of mineral oils in jute bags have contaminated foodstuffs contained in the bags. This applies not only to coffee, but also to other products such as cocoa, rice, nuts and dried fruits and the ECF is therefore closely cooperating with other industry sectors.

Contamination of foodstuffs is, of course, a serious matter, both for the health authorities and for the consumer. It is irrelevant if contamination is widespread or limited. If foodstuffs packaged in jute are perceived to have a potential risk, this will be a serious threat to the jute as a packaging material.

We have closely followed the discussion in the International Jute Organization on a project to improve spinning technology, using batching oils that prevent contamination problems. Let us hope that the project will lead to concrete results in the near future.

In the meantime new developments are taking place that we would like to draw your attention to. So far we have mainly addressed the health aspects of jute bag contamination. To this aspect, which of course remains of the utmost importance, we must now add environmental considerations.

As you may know, several countries in the European Community as well as the EC as a whole are implementing or preparing programs to limit the use of packaging materials. There is a strong pressure to use re-usable packagings or to recycle packaging materials. Dumping or burning of waste is or will be severely restricted.

We tend to think of jute as an environmentally friendly product. Nevertheless, the new policy to reduce waste will present serious problems. Re-use of jute bags is hardly realistic. It would require re-exportation of the bags to the countries of origin, which is not cost-effective or practicable. The market for secondhand bags in Europe is limited.

Furthermore, in most of the larger coffee roasters the bags are shredded, and can not be used again as such. Theoretically, the shredded jute material can be re-used as felt, but the possible applications are very limited and for the time being this presents no real solution.

Recycling through composting is a possible alternative to re-use. In order to make this a feasible option, the following conditions must be fulfilled:
- no contamination from batching oils;
- no pesticide or herbicide residues;
- no plastic stitching;
- no printing with non-biodegradable inks;
- no metal clips or badges which can not be easily removed.

If these conditions are not met, dumping or incineration are the only other means of disposal and these are precisely the ones that will be very severely restricted.

The inescapable conclusion is that the use of jute for the transportation of coffee and other products, already facing competition from recent developments such as bulk shipments, will come under additional pressure, unless the manufacturers of jute and jute bags strictly apply the abovementioned measures (including the use of the proper batching oils) to ensure that jute is indeed as environmentally friendly in practice as it is in theory.
The relevance of the issue is underlined by the fact that according to our information the FAO is considering to organize a symposium on the potentially positive environmental aspects of natural fibers.

We have alerted also the other important jute producing member countries of the IJO, the IJO itself and the FAO to this problem. We strongly recommend that a thorough discussion takes place in the appropriate fora, followed by a prompt and universal implementation of the measures indicated above, in the interest of the entire jute economy.
Annex 4 Import and export prices of jute goods and dollar values import/export

Figure A4.1 Net import of raw jute in the EC (Mt)

Figure A4.2 Net import of raw jute in the EC (US$)
Figure A4.3 Import/Export prices raw jute in the EC

Figure A4.4 Net import of jute yarn in the EC (US$)
Figure A4.5 Import/Export prices jute yarns in the EC

Figure A4.6 Net import of jute CBS in the EC (US$)
Figure A4.7 Import/Export prices jute CBC in the EC

Figure A4.8 Net import of new jute sacks in the EC (US$)
Figure A4.9  Import/Export prices of new and used jute sacks in the EC

US$/ton

1400
1200
1000
800
600
400
200
0

p import new    p import used
p export new    p export used
Annex 5 List of interviews

Abedin, M.E.
   Beximco
   Bangladesh

Adler, Heinz
   Société des Produits Nestlé S.A.
   Switzerland

Bates, Derek W.
   Abilco (UK) Ltd.
   United Kingdom

Bharat Jalan
   The India Jute and Industries Ltd.
   India

Blanch, François
   Société des Produits Nestlé S.A.
   Switzerland

Burger, Kees
   Free University Amsterdam
   Netherlands

Bouchous, Monique
   Promex-PMA
   France

Bouckaert, Lieven
   Algetex S.A.
   Belgium

Cousins, Stephen
   John Lee (sacks) Ltd.
   United Kingdom

Didier Ameye
   Beaulieu Tufting
   Belgium

Dr. Enam-E-Rasul Choudhury
   Bangladesh Jute Research Institute
   Bangladesh

Gall, Kenneth W.
   J. Mackenzie Stewart & Co. Ltd.
   United Kingdom

Goosmann, Alcke
   Friedrich W. Goosmann GmbH
   Germany

Grant Adamson, R.
   J. Mackenzie Stewart & Co. Ltd.
   United Kingdom
Gregory, Ian L.
   Department of Trade and Industry
   United Kingdom

Groves, L.W.J.
   J.C.Duffus & Co. (London) Ltd.
   United Kingdom

Günzburger, Fabian
   Textil-Emballagen AG
   Switzerland

Harbans Singh
   India

Hill, Peter
   Tomkinson Carpets Ltd
   United Kingdom

Indra Jeet Sharma
   The India Jute & Industries Ltd.
   India

Johnstone, Graham R.
   D.Pirie & Co. (1931) Ltd.
   United Kingdom

Kan, Edgard
   Bibatra BV
   Netherlands

Kirchhofer, Kurt
   Jacobs Suchard Tobler
   Switzerland

Kloppers, Ing. E.Th.M.
   Van Besouw B.V. Tapijt
   Netherlands

Kreuning, Rob P.
   De Bijenkorf BV Department stores
   Netherlands

Lubbers, Huijb J.D.
   Carpet Land
   Netherlands

Majumder, A.
   The Champdany Industries Ltd.
   India

Martin, Andrew
   Robertson, Ireland & Co., Ltd
   United Kingdom

Mazid Talukder, M.A.
   Karim Jute Mills Ltd.
   Bangladesh
McClelland, Mark
United Kingdom

Md. Abu Sayed
Bangladesh Jute Mills Corporation
Bangladesh

Merry, Jim
J. Mackenzie Stewart & Co. Ltd.
United Kingdom

Mill, A.
Wigginsworth & Co. Ltd.
United Kingdom

Mukherjee, Dr. A.K.
Indian Jute Industries’ Research Association
India

Najmul Huq
Janata Jute Mills Ltd.
Bangladesh

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Janata Jute Mills Ltd.
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Olsen, Björn E.
International Trade Centre UNCTAD/GATT
Switzerland

Ozsanlav, V.
British Textile Technology Group
United Kingdom

Panzani-Ullmo, Françoise
Promex-PMA
France

Pellegrinelli, Ivan
Foreign Trade Department
Switzerland

Perles, Norbert
Berry Tuft
France

Pinchou, Robert
Ets. Robert Pinchou S.A.
France

Preston, T.J.
Brintons Carpets
United Kingdom
Put, A. van
P.G. Kleinschmidt's Handelmaatschappij B.V.
Netherlands

Rahman, Kamran T.
Pubali Jute Mills Ltd.
Bangladesh

Rowan, R.W.
J&D Wilkie Ltd.
United Kingdom

Saggi, N.
Jute Manufactures Development council
India

Saleem, Ahsan M.
The Pakistan Jute Mills Association
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Sandana, Anthony
International Trade Centre, UNCTAD/GATT
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Sansum, Michael
Ablico (UK) Ltd.
United Kingdom

Saraf, J.P.
The Champdany Industries Ltd.
India

Sarkar, D.K.
Ministry of Textiles
India

Schinasi, Edmund
Codefine S.A.
Switzerland

Seerat Narinda
Sesaka Advertising & Marketing Services
India

Schaagen, Drs. R.E. van
Ministry of Economic Affairs
Netherlands

Shabbir Yusuf
Bangladesh Jute Spinners Association
Bangladesh

Sharpe, Neil
Tomkinson Carpets Ltd
United Kingdom
Swaan, Geert de
De Swaan & Spaan
Netherlands

Ter Horst, J.J.
Handelsonderneming J.J. Ter Horst
Netherlands

Visje, Theo
Wilhelm G.Clasen
Germany

Vogelzangs, F.H.J.
Flame Guard B.V.
Netherlands

Wadhwa, D.J.
The Champdany Industries Ltd.
India

Wolf, H.
Max Wolf BV
Netherlands

Walle, Marc van de
Beaulieu Ter Lembeek
Belgium