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**RECENT, CURRENT AND PROSPECTIVE DEVELOPMENTS  
IN THE WORLD JUTE ECONOMY**

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## NOTES

The word “jute” is used to include allied fibres such as kenaf and roselle.

All references to “dollars” (\$) are to United States dollars.

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## I. CURRENT SUPPLY AND DEMAND, AND THE SHORT-TERM OUTLOOK

1. The prospects for a smaller crop in the 1998/99 season were reflected in a mild recovery in world export prices. This recovery, however, was very modest and short-lived, as stocks remained high. Prices of Bangladesh White, grade D (BWD) of fibre from Bangladesh ports rose to \$280 in October 1998 from \$240 in February, their lowest since December 1994, but then fell to \$250 in November 1998 and remained stable at that level until February 1999. The average for the 1997/98 season at \$257.80 remained more than 30 percent below the level of the previous season and well below the floor of the indicative price range of \$450+\$30 (agreed at the Joint Meeting of the Intergovernmental Group (IGG) on Hard Fibres and the IGG on Jute, Kenaf and Allied Fibres in December 1998). Export prices for some jute products, particularly from Bangladesh, showed signs of recovery in the early months of the season and have since remained stable.

3. Estimated world production of jute, kenaf and allied fibres declined by about 30 per cent in 1998/99 from the peak levels of the previous season to 2.8 million tonnes. Low prices at sowing time led to a reduction in the area cultivated, and the effect of this was compounded by flooding in the major jute producing countries at harvest time. The area sown with jute in Bangladesh and India, the two major producers, was 31 and 10 per cent lower respectively than in the previous season. Production in Bangladesh fell by 42 per cent and that in India by about 27 per cent. Production in Thailand remained at around the level of the previous year, while the crop in China declined by about 20 per cent.

4. World exports of jute, kenaf and allied fibres increased by some 21 per cent in 1997/98 and reached their highest level since 1991. China emerged as the dominant importer, with around 165,000 tons in 1997, compared with 21,000 tons in the previous year. A reduction in domestic supply because of flood damage contributed to this large intake. Pakistan imported 70,000 tons, the same as in 1997 compared with 55,000 tonnes in the previous year, while African countries took advantage of the low prices and increased their purchases.

5. The high level of fibre production in 1997/98 led to an accumulation of stocks during the season, despite a rise in mill consumption. Total stocks increased by over 60 per cent to a level which was equivalent to 42 per cent of mill consumption, compared to 28 per cent in the previous season. Total stocks of raw jute of the major producing countries at the opening of 1998/1999 season reached some 1.0 million tons, the highest since 1989/90. Stocks of fibre in Bangladesh were at their highest since 1990 and those of India increased by 44 per cent. Total mill consumption in the major producing countries increased by 9 per cent in 1997/98 to 2.4 million tons, of which India accounted for a record amount of nearly 1.7 million tons, about half of total world output.

6. World exports of jute, kenaf and allied fibres are likely to decline in 1998/99 from the high level of the previous season as many importing countries, particularly China, the largest importer, built up their stocks in the previous season when prices were low. Export prices of raw jute are, however, unlikely to improve significantly in the near future because of the high level of carry-over stocks.

## II. THE WORLD JUTE-SPINNING INDUSTRY AND ITS PROSPECTS

7. During the past two decades considerable changes have taken place in the global jute-spinning industry. Spinning capacity in developed countries, almost all located in western Europe, contracted, and demand was met by an expansion of yarn exports from jute-producing countries. At present, this expansion appears to have reached its limit, and spinners and exporters in Asia face some uncertainty.

8. Europe has traditionally produced the bulk of the world's high quality broadloom woven carpets, many of which are exported. In the early 1970s, around 300,000 tons of jute were spun in Europe, predominantly for backing these carpets. Since then, however, the spinning of jute in Europe has given way to the importation of yarn from Bangladesh, India and Thailand. With the latest mill closures in 1997, yarn production in Europe has fallen to negligible levels, and the market is almost entirely dependent on imports. Trade in jute yarn from jute-producing countries has expanded, while yarn has been substituted for fibre in the composition of imports by Europe. Data on exports by grade of yarn are not available, but trade is generally in the finer yarns suitable for the backing of woven carpets.

9. Bangladesh, India and Thailand together now export around 200,000 tons of yarn per year. It is estimated that about 95 per cent of the global jute spinning capacity of some 250,000 tons is concentrated in these three countries. Traditionally, jute mills in these countries incorporated both spinning and weaving operations, but in recent years, as the trade in fine yarn has developed to meet demand from Europe, specialized mills have been built to spin yarn specifically for export, while composite mills periodically divert excess spinning capacity to meet export demand.

10. Europe accounts for the bulk of global imports of jute yarn, but sales to the Near East, particularly to the Islamic Republic of Iran and to Turkey, have increased in recent years. Jute yarn imported by these countries is used mainly for the backing of woven carpets. Carpet backing for tufted carpets, together with sacking, hessian and other jute products, are generally woven in the producing countries, and the yarns used for these are not usually traded.

11. Cost considerations have been responsible for the decline in jute spinning in Europe and the consequent expansion of imports of yarn. Relatively high labour costs, environmental protection measures and health and safety regulations have all contributed to the increased costs. At the same time, there have been only limited technological improvements in jute processing machinery in the past 100 years. Thus there has been no scope for jute mills in the developed countries to offset their higher costs by introducing more efficient processing technology. Yarn produced in the United Kingdom in recent years was priced at double that imported from jute producing countries.

12. Trade in jute yarn has expanded markedly during the past two decades, not because of increased demand for the final products, but rather because of a shift in the location of spinning operations. Exports of raw jute have declined, and part of the lost trade in fibre now takes place in the form of yarn. The value of exports has, however, been enhanced by the value added through spinning prior to export.

13. Jute spinning in Europe has now virtually ceased, and thus the process of substituting imported for domestically produced yarn is complete. The period of growth in the yarn trade observed during the past two decades and attributable to the decline of spinning in Europe, is

therefore over. Changes in the level of trade in jute yarn will, henceforth, reflect changes in demand for products, particularly as backing for woven carpets. In the medium term, imports of jute products by consuming countries are likely to contract in the coming years in the face of continuing competition from synthetics.

14. However, the use of jute in the backing of high quality woven carpets appears reasonably assured for the next few years. Jute is used in these carpets in conjunction with other fibres, and there is no indication either that jute will be replaced by other fibres or that consumption of woven carpets is likely to decrease. Demand for jute yarn should, therefore, be maintained at around existing levels for some years. Some shift in the destination of jute yarn exports is, however, to be expected, as there is a growing tendency for carpets to be produced in the Near East, rather than in Europe, for export to the major consuming countries. At the same time, it is clear that the period of strong growth in exports of jute yarn is over and, with excess spinning capacity already existing in some countries, it may be unwise to undertake further investment without a very careful consideration of the situation.

### **III. THE WORLD JUTE ECONOMY: PROJECTIONS TO 2005**

15. Since the early 1990s a number of important developments affecting the world jute economy have taken place, including the collapse of the former Soviet Union, which sharply reduced demand for jute products, the further concentration of jute processing in the producing countries, and the conclusion of the Uruguay Round of Multilateral Trade Negotiations. The following projections are based on an analysis of 20-year trends, with particular emphasis on recent developments.

#### **A. Production**

16. Both the planting and the harvesting of jute are very labour-intensive, and its production is increasingly concentrated in Bangladesh, China, India and Thailand, where production costs are relatively low. These countries together account for over 95 per cent of global output, compared with 89 per cent in the early 1970s. Jute competes mainly with rice, cassava, sugar and some vegetable crops for land in the main producing countries, and relative returns from these crops are important determinants of the area planted with jute. Jute is an annual crop, and its production is also highly susceptible to changes in weather. Both flooding and drought are hazards to jute growing in the major producing countries. Other factors, such as the supplies of seeds, fertilizers and credit, the availability of irrigated land and the sowing time of other crops, also influence jute production and the area planted with jute, but their impacts vary from country to country.

17. Assuming normal weather conditions and taking into consideration as far as possible the interplay of the above factors affecting jute area and yield, world production of jute is projected at 2.9 million tons in 2005, the same level as in 1993-1995 but below the average production of the three years, 1996-1998 of 3.4 million tons.

18. Production in the Far East is expected to decline, but at a slower rate than in the decade 1983/85 to 1993/95. By the year 2005 this region is likely to account for over 98 per cent of the world total as a result of reductions elsewhere. In India, the largest producer, with about 50 per cent of the world total, output is projected at 1.5 million tons, slightly above the low level forecast for 1998/99 of 1.4 million tons, but well below the 1997/98 level of 1.96 million tons. Yields increased

from 1,400 kg per hectare in 1983/85 to 1,825 kg per hectare in 1997/98 and are expected to rise further to about 1,900 kg per hectare in 2005. The area planted would contract to about 790,000 hectares from the current level of 1,075,000 hectares, under pressure from competing crops.

19. Jute production in Bangladesh is projected at 0.85 million tons in 2005, around the same level as in 1993-1995. In the 1997/98 season, 1.2 million tons were produced, while forecasts for 1998/99 are only a little over half that level at 0.7 million tons. The area sown with jute is expected to contract from 647,500 hectares to 445,200 hectares as a result of an increase in demand for land for food crops. Moreover, an expected decrease in yields from 1,900 kg per hectare in 1997/98 to an expected 1,600 kg in 1998/99 would add to the impact of this decline in land availability.

20. Production in China, the third-largest producer of jute-type fibres, declined in the first half of the 1990s after rising considerably during the 1980s. It is, however, expected to stabilize by 2005 at around its current level of 350,000-370,000 tons. It is important to remember that China has been a net importer of jute since 1995. Production in Thailand, which is about 4 per cent of the world total, is expected to fall to about 90,000 tons in 2005 from 106,400 tons in 1997/1998, reflecting increasing labour costs. Production in other Asian producing countries, particularly in Myanmar, Nepal and Viet Nam is also expected to decline during this period.

21. Outside the main producing areas in Asia, only Latin America produces significant amounts of jute-type fibre. Production in this region (mainly in Brazil) is likely to fall further to about 10,000 tons in 2005 from 12,000 tons in 1997/98 as other crops offer greater returns. Smaller amounts of fibre will continue to be produced in the Near East and Africa.

## **B. Consumption**

22. Jute is consumed widely in both the developed and developing regions. It is used mainly to make yarn for hessian cloth, bags, carpets and backings for carpets and other floor coverings. Over 70 per cent of total consumption is in the form of hessian cloth and bags for packing various agricultural and industrial products, with the predominant share being for agricultural products, particularly cereals. Some 10 per cent is used for all-jute pile carpet and carpet backing, the remainder being absorbed by various diversified products and by the farmers themselves for their household needs.

23. Consumption of jute fibres and products is affected by prices and by other factors such as the prices of synthetic substitutes, the extension of bulk handling facilities, and the production and trade of agricultural commodities, including food-aid shipments, some of which are packed in jute bags. The influence of these factors varies between the developed and developing countries because of differences in patterns of use. While in developed regions, jute is used mainly for carpet backing and for use in shipments where bulk handling is not feasible (including food aid), the developing countries use it predominantly for sacking for agricultural and non-agricultural commodities.

24. Between 1975 and 1995, world consumption of jute declined to only 2.9 million tons, reflecting a fall in consumption in the developed countries of about 4 per cent per annum, which was only partially offset by some growth in the developing regions. The share of developed countries in world consumption declined to 13 per cent in 1997 from 21 per cent in 1987 and from about 40 per cent in the early 1970s.

25. Awareness of environmental issues, which has increased markedly in the 1990s, has not had the expected positive effect on the use of jute. Major efforts to promote synthetics, together with their price competitiveness, helped to erode further the market for jute. World production capacity of polypropylene, the main synthetic material competing against jute, is expected to grow by about 6 per cent per annum up to 2005, and prices are expected to continue to be competitive. Jute now accounts for only a small share of the shrinking global market for heavy-duty bags, its major end-use. In addition, consumption of jute in the former Soviet Union declined to only 40,000 tons in 1993-1995 from about 200,000 tons in 1983-1985, and is continuing to decline, mainly because of the financial crisis which followed the collapse of the former Soviet Union and the end of the barter trade arrangements for jute goods.

26. Consumption in the developing countries increased by about 1.3 per cent annually over the 20-year period to 1997. This growth was concentrated in the major producing countries in the Far East, while consumption by Pakistan, the largest consumer among importing developing countries, remained largely unchanged.

27. In view of factors such as the continuing competition from synthetics and bulk handling in both developed and developing countries, world consumption of jute is projected to fall to a little under 3.0 million tons in the year 2005 from the average level of 3.2 million tons in 1995-1997. The rate of decline in world consumption, however, is expected to be lower in the projected period as jute would retain its core markets such as packaging for coffee, cocoa, cereals and cotton, and yarn for backing high-quality woven carpets.

28. Consumption of jute in the developed regions is expected to fall from some 470,000 tons in 1995-1997 to 440,000 tons by the year 2005 and from 2.6 million to 2.5 million tons in developing regions, despite some increases in the Near East.

29. In India, the largest market in the world, consumption is likely to remain stable despite the threat of substitution from domestically produced synthetic products. However, consumption at this level would be dependent on the administrative regulations protecting the shares of jute in packaging major agricultural commodities. Should there be any change in this policy, consumption in 2005 might be at a lower level. Although efforts to diversify the use of jute in shopping bags, handloom products, geotextiles, pulp and paper, composites and soft luggage materials are bearing fruit, the increased volume may not be sufficient to compensate for losses in the major traditional uses. In China, the capacity for producing synthetic sacking fabrics is now sufficient to meet domestic demand and to provide a large surplus for export. It is therefore expected that jute consumption in China will continue to fall up to 2005. In most other jute-producing countries where domestic markets are relatively small, including Myanmar, Nepal and Thailand, consumption is expected to continue to decline in the period leading up to 2005.

30. In non-producing developing regions, the longer-term growth in consumption is likely to be substantially below the rates obtained in the 1990s. In Pakistan, stronger competition from domestic synthetic manufacturing industries is expected to limit growth in jute consumption. In the Near East, consumption will probably stabilize at around present levels if there is a rise in the use of yarn for carpet backing, which would compensate for loss of market share in other uses. In Africa and in Latin America and the Caribbean, consumption is expected to continue to decline, owing to further expansion in the use of synthetic packaging materials.

## C. Trade

31. The decline in jute processing in the developed countries, together with further substitution by synthetics and bulk handling in a number of markets, has resulted in a contraction of trade in both jute fibre and jute products. The average exports of jute fibre and products in 1995 and 1997 were 2.73 and 3.71 per cent below their respective levels a decade previously. Consumption by producing countries themselves has accounted for an increasing share of the market, with the volume of jute fibre and products traded reduced to 40 per cent of world production in 1995-1997, compared to 72 per cent in 1968-1970. Exports of fibre, particularly, fell as a result of the concentration of processing capacity in the producing countries, while mills elsewhere, particularly in the European region, closed under the burden of high costs. The value-added content of exports from producing countries has therefore increased, but total earnings have fallen as a result of the overall decline in trade.

32. It is projected that exports of jute fibres will stabilize at about 250,000 tons in 2005. Exports of jute products should contract only slightly from the average of 754,000 tons in 1995-1997 to 740,000 tons. As a result, only around 25 per cent of jute production would enter world trade in 2005, compared with 23 per cent at present. A reduction in the volume of exports would lead to a further fall in the export earnings of Bangladesh and India, although this would be partly offset by the increased proportion of manufactured jute goods traded. Exports of fibre from Bangladesh, which account for over 85 per cent of the world total, should fall by about 1 per cent to 233,000 tons in 2005. Bangladesh is likely to remain the dominant exporter of jute products with over 50 per cent of the world total in 2005. Exports from India, the second-largest exporter of jute products, are expected to stabilize at their current level of about 200,000 tons.

33. Sacking is expected to remain the major jute product exported, accounting for some 40 per cent of the total, at about 300,000 tons annually. The sharp growth in exports of jute yarn during the past decade has come to a halt, and they are expected to remain at around 200,000 tons, as the shift in spinning from the consuming to the producing countries is now exhausted. The proportion of hessian in global exports would fall to about 11 per cent from 16 per cent, with around 80,000 tons traded in 2005, as shrinkage of the market due to competition from synthetics continues. The share of carpet-backing cloth is likely to fall to 10 per cent in 2005 from 12 per cent at present, and the volume can be expected to settle at about 75,000 tons. Exports of other products, including diversified products such as geotextiles, handwoven products and shopping bags, are projected to continue to increase significantly, to 100,000 tons or 15 per cent of total jute exports, as markets are developed for these new products. In terms of volume, exports of these various diversified products will probably account for a relatively small share of total exports. In terms of value, however, exports from India, the largest supplier, are projected to rise to some \$40 million (in 1998 prices) by 2005, from \$17 million in 1996-1997.

34. The provisions of the Uruguay Round Agreement on Textiles and Clothing may erode the preferential advantage of jute in some traditional markets for jute packaging as a result of the elimination of some quota restrictions now being applied to synthetics. However, this is not likely to happen before 2005, when the quota restrictions under the Multi-Fibre Arrangement against synthetic packaging materials will come to an end.



#### IV. CONCLUSIONS

35. Although environmental considerations were expected to have a positive effect on the demand for jute products in the past decade in view of their appeal as natural fibre products, no noticeable impact has been discerned. Competition from synthetic materials continued to intensify, thanks mainly to their relatively low prices, ease of availability and aggressive market promotion. Continuing competition from synthetics will cause further erosion of markets for jute, particularly for traditional products. However, diversification to new uses of jute is likely to compensate partly for losses in market share of traditional products. A vigorous effort to boost demand for diversified jute products in areas where considerable quantities of jute fibre could be used, such as geotextiles, pulp for paper and non-woven products might be worthwhile.

36. Among these new uses are the use of jute reinforcements in manufacturing composite products with plastics, the replacement of glass fibre with jute in resin transfer moulded (RTM) technology, and the use of the jute plant for making pulp. New products include flexible jute bags laminated with aluminium foil and plastics, geotextiles and home textiles (for which jute fibre is converted into blended textiles in combination with other fibres). There is a need for greater investment in research and development to develop new uses so that jute compete against synthetics as well as meet the needs of environmentally conscious consumers. Efforts are also required to improve production and processing methods so as to make jute production more profitable while allowing jute products to be more competitive with synthetic materials on price.

37. In the longer term jute will continue to be affected by competition from synthetics which could be intensified after 2005 with the erosion of the preferential trading arrangement resulting from the implementation of the Uruguay Round Agreement on Textiles and Clothing.

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