

Jute -The Golden Fibre of Bangladesh A Framework to Resolve the Current Critical Situations

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Abstract

In Bangladesh nine million farmers, laborers, workers and 45 million dependents, earn less than a dollar a day per family to grow jute in rotation with rice. They grow almost three million tons on 1.6 million hectares of land. Jute provides a necessary break between rice crops and four times its weight in bio-mass to enrich the soil. It also provides a vital cash flow for people who live at the very margins of subsistence. It has been important to jute based farming systems in parts of Bangladesh for over a century and this fundamental has not changed.

Key word: Jute, current problems, framework, resolve

1. Introduction of Jute

The jute plant grows six to ten feet in height and stem of the jute plant is covered with thick bark and it contains the fibre. In two or three months, the plants grow up and then they are cut, tied up in bundles and kept under water for fermentation for several days. Thus the stems rot and the fibres from the bark, become loose. Then the cultivators pull of the fibres from the bark and wash the fibres very carefully, dry them in the sun and put them in bundles for sale. Jute mainly grows well in moist and swampy lands and Bangladesh has plenty of low lands that go under water during rainy season. Eighty percent of the world's high quality jute grows in Bangladesh. Jute is used in making cloth, shawl, ropes, carpet backing cloth, gunny bags and many other useful things. Jute bags are very suitable for packing of food grains.

1.1 Jute History in Bangladesh

The importance of one cash crop overshadows all else as the source of Bangladesh's export earnings. Bangladesh is the world's second largest producer of jute, a fibrous substance used in making burlap, sacks, mats, rope and twine, and carpet backing. Jute is sold on the international market either raw or in the form of manufactured goods. This so-called "golden fibre" is cultivated on the same land as rice; thus each season farmers must decide which crop to plant. During the colonial period, when East Bengal was used by the British to produce primary goods for processing elsewhere, raw jute was the main product. Calcutta (current Kolkata) became the manufacturing center where jute was transformed into twine and rope, sacking material, and carpet backing. The partition of British India in 1947 put an international boundary between the source of the basic commodity and the manufacturing center and imposed a great burden on Pakistan to compensate for the disruption of the industry that was its greatest source of foreign earnings. Between 1947 and 1971 jute mills were constructed in East Pakistan but industrialization proceeded slowly.

1.2 Jute trade over the century

While production declined gradually, the most marked development has been changes in jute trade. World trade in jute and jute products, estimated at roughly \$700 million has halved over the last quarter of a century, falling by over 600,000 tons. In very general terms this has led to a decline in exports by Bangladesh of 100,000 tons, India 200,000, China 180,000 and Thailand of 120,000 tones decline in world markets is masked by increased consumption within the Indian market and imports by China. Some 800,000 tons of exports have been lost over the 25 years, with 58000 tons being accounted for by USA, Western Europe and the former USSR (as in summary chart 3). Loss of exports of around 230,000 tons to USA over the last quarter of a Century, 180,000 tons to Western Europe and 170,000 to the former USSR account for much of the decline in trade. In the USA the losses were due mainly to the virtual elimination of use of jute as carpet backing combined with sacking, in Western Europe mainly to sacking and in the former USSR due to collapse of the economy and barter trade of the former USSR. During the same period there has been a loss in exports to Africa and Latin America of roughly 90,000 tons each. Imports lost total 800,000 tons while exports lost are only 600,000 tons because of re-exports. Exports to developing countries as a whole over the 25 years have not changed much in global terms but there has been a strong decline in Africa and Latin America compensated by increased imports by China and India. Again, although the net result in developing country markets as a whole is neutral, there has been a substantial decrease in non-producing export markets. The first major decline was in the case of the USA which dates back to the mid 1970s, followed by the collapse of the former USSR markets from 1990 and the latest has been Western Europe from the mid 1990s (as in summary chart 4). Taken together they constitute a major reduction in importance of jute in trade despite the

compensation of rising imports by developing countries.

2. Jute and its numerous challenges

Jute provides a vital cash flow for people who live at the very margins of subsistence. This pattern of cultivation has been established for centuries and there is no immediate alternative. It is a;

- ✓ Environmentally friendly crop
- ✓ Enriches the soil
- ✓ Vital to ecology, economy and sustainability of rice cultivation
- ✓ Totally bio-degradable and unique and useful qualities

For a long time jute is facing several challenges which made the critical situation for it. The challenges are

2.1 Challenge from Synthetics

In the 1960s and early 1970s rapid growth in commodity trade and of the USA carpet market led to an increase in demand for jute (see chart 1. At the height of this period 200,000 tons of jute carpet backings were being used in the USA alone. This caused strains in availability with unreliable supplies and high prices, offering an opportunity and incentive to develop synthetic substitutes. It was obvious that jute production could not be expanded to the required degree at what turned out to be the lower prices that were made possible for the expansion that was taking place.

In the 1960s plastic emerged a commercial by-product from the petroleum industry at the same time as growth in markets for jute strained availability and prices. Expected at first only to make a marginal contribution to petroleum, the petroleum industry priced as low as they could to secure end-uses. This was followed up by product development and market promotion on far larger budgets than the jute industry could muster. The volume and varieties of plastic over the next two decades represented a formidable force. Plastics were assisted by poor jute availability, high prices and tariffs and quotas in importing countries. In the way of an illustration, plastics captured 50% of the sacks market between 1965-75. Plastics enabled cheaper products that suited a period during which consumer markets developed at a rate unknown in history. Costs of packaging became far lower. Carpets were produced that could be purchased by consumers never before able to buy them. Prices of plastics fell with economies of scale but strengthened as industry realized that this new revenue stream could more than contribute marginally and became used to earning profits on this by-product. The jute industry fought back by trying to reduce costs, increasing productivity and re investment. This proved to be a fruitless task since it was never possible to reduce costs enough. The gap between the cost of jute and its synthetic substitutes was too large and supply assured. Moreover reducing costs required squeezing among the poorest in the world. In contrast to this, plastics were becoming cheaper due to economies of scale and improved production methods. The technologies that enabled this were serving far larger markets than merely jute substitutes. Synthetic substitutes were improved by manufacturers in a continuing process. In some cases the reason for switching to plastics or staying with them was a technical one and the synthetic products were technically superior. A major reversal for jute came as a product of a shift of processing from consumer to producer countries and former processors in consuming countries switched to synthetics. These processors were able to use their knowledge of markets gained while supplying jute to supplying the new materials. Their experience in the marketplace was not and could not be adequately compensated by efforts by jute processors in jute producing countries.

2.2 Changes in Production and global trade pattern of jute

The major producers are India, Bangladesh, China, Thailand, Myanmar, and Vietnam, but in recent years China and Thailand have sharply reduced their production of jute. There has also an increase in productivity in jute production with a gradual decline in both, land use and production. Bangladesh has not allowed the Taka (BD currency) to fall in value as much as the Indian rupee. With stagnant dollar prices in traditional export markets, this has increased pressure on farmer incomes and distribution margins. After a fall in production in the 1970s, production stabilized in overall terms within the context of a general long term decline, if fluctuating between fairly wide margins. Jute farmers and farm laborers are of great economic and political importance to the country, as are workers in the jute industry who have few alternative employment prospects.

Decline in demand in traditional export markets as well as falling real values of exports and a squeeze on local prices has led to a great deal of unused capacity at the mills. A shortage of new capital to modernize processing has contributed to a large public sector faced with an increasing crisis. The World Bank made available a substantial credit line to close mills and renovate remaining ones but the project has stalled due to the near impossibility in the economic situation of the country to dismiss or make workers redundant on a large scale. However, there has been a gradual reduction in processing capacity in face of very strong political resistance. Bangladesh production, more export oriented than that of India, has been marked by a significant decline in Hessian and CBC production while sacking has remained comparatively stable, partly strengthened by continuing substitution of sack production in export markets through export of sacks, and there has been a strong statistical increase in the others category with yarn the most important component. Public mills keep producing sacking and many often accumulate substantial indebtedness. In order to keep selling, discounts are common. As a result

it is difficult for the industry as a whole to make positive net results. Compensate for loss in production. However, it is unclear how much will be imported in the long run and there is an inevitability due to the nature of the process, as illustrated by what happened when European production of jute products was replaced by that in producing countries, of jute being replaced by substitutes for many end-uses. India is becoming an increasingly important export market for Bangladesh, particularly for fibre.

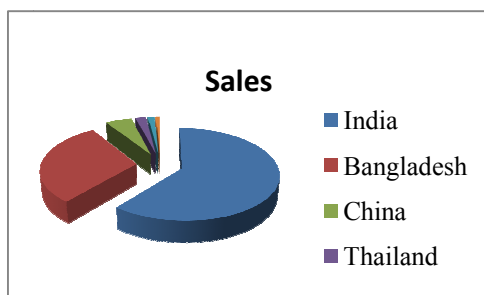


Chart: 1 India 61%, Bangladesh 30%, China 5%, Thailand 2%, Myanmar 1.3% and others .7%
According to 2006-2007 statistics

World trade in jute and jute products, estimated at roughly \$700 million has halved over the last quarter of a Century, falling by around 800,000 tons. In very general terms this has led to a decline in exports by Bangladesh of 100,000 tons, India 200,000, China 180,000 and Thailand of 120,000 tons. Reduction in exports of 600,000 tons was offset partially by an increase in consumption in India of 300,000 and production of 100,000 tons and reduction in production in China, Bangladesh and Thailand of 350,000 tons. Production fell marginally over the two decades and imports fell from 1.8 million to 1.2 million tons. Decline in world markets is masked by increased consumption within the Indian market which now allows imports from Bangladesh of around 140,000 tons per annum.

The most important decline in imports of jute has been amongst the main importing developed countries. The first major decline was in the case of the USA which dates back to the mid 1970s, followed by the collapse of the former USSR markets from 1990 and the latest has been Western Europe from the mid-1990s. Taken together they constitute a major reduction in importance of jute in trade despite the compensation of rising imports by developing countries. Some 800,000 tons of exports have been lost over the 25 years. The position of jute in world markets probably suffered its worst reversal in the USA. The decline has taken a material that was relatively well known in user sub-sectors to almost below critical mass where it is now relatively unknown with a whole new generation of people who do not even think of using jute. While overall global consumption may have been assisted by factors in other markets, the dominant position of the USA in world markets means that the reversal cannot be adequately compensated. Loss of exports of around 230,000 tons to USA over the last quarter of a Century, 180,000 tons to Western Europe and 170,000 to the former USSR account for much of the decline in trade. Most of the American market has been lost with complete elimination of primary backing in particular. In Europe and the Near East jute is still widely used as secondary backing. The decline started with problems of unreliable delivery, something that the growing industry could simply not afford. This led to the users turning to the synthetic industry, which built on this initial market entry on grounds of supply by technical and market development.

Opinion is divided with some considering that the sector is irrevocably lost to jute. Those who do so cite reliability, prices and technical arguments. Another body of thought argues that given recent price movements with the gap between jute and synthetics narrowing, arguments on environmental grounds and the possibility of assuring supply, it would be possible to win back up to 10% of the secondary carpet backing market. In particular a window of opportunity is offered by the synthetic industry finds that it too has become commoditized and is in financial crisis. The problems faced by sacking are more intractable. A shift to synthetic bags on grounds of a big difference in prices was the initial reason. Over time, greater use of bulk handling has accelerated and this has reduced need for all materials used in sacking. Synthetic bag manufacturers have partially overcome technical disadvantages developing ventilation and India is an important supplier. Moreover, delivery times for jute sacks are more than 2-3 weeks in the USA while synthetic bags can be delivered within a matter of days or a week. Timely delivery is a major factor in the markets. There is also a problem in ordering minimum quantities with a container carrying 85,000 sacks.

There are important technical characteristics that militate against the decline. Jute allows air to pass through and this is important for particular crops such as potatoes and onions when drying. It retains moisture and this helps with cement among other construction uses. Importing burlap is preferred because printing cloth is easier than printing sacks although the numbers of converters active has declined. There are also technical problems with some produce with fibres adhering to potatoes for example or synthetic fibres in cotton. It is preferable for

food use particularly the new food grade sacks. Finally, although the up front cost of jute sacks is far higher than its synthetic substitutes, it can safely be used a number of times. The loss of much of the market in the USA owes at least as much to problems in distribution as to prices. Secondary carpet backing of jute is today cheaper than synthetic substitutes but has not made a comeback because of apprehension on deliveries, poor quality control, lack of product development and no market promotion for the last ten years. The emphasis in the USA market is on cheap carpets produced in such a large volume that there is not enough jute being produced to supply any one of the three leading producers even if they were inclined to use it. Loss of market share has had as much to do with uncertainties on delivery and quality as on cost. While synthetic producers have improved their product, there has been no technical innovation for jute.

Jute has always been better known by potential en-users in Western Europe than in other markets such as the USA for historical reasons. There is a higher level of appreciation of the merits of using jute. Sacking could be used more than once, the carpet market had space in it for higher value products and woven carpets are popular using a great deal of yarn. The sharp decline from 1995 was due to reduced imports was due in part to the decline of imports by Belgium-Luxemburg and the UK related to re-structuring of carpet production to outside the Europe. There was also a decline in imports by Eastern Europe

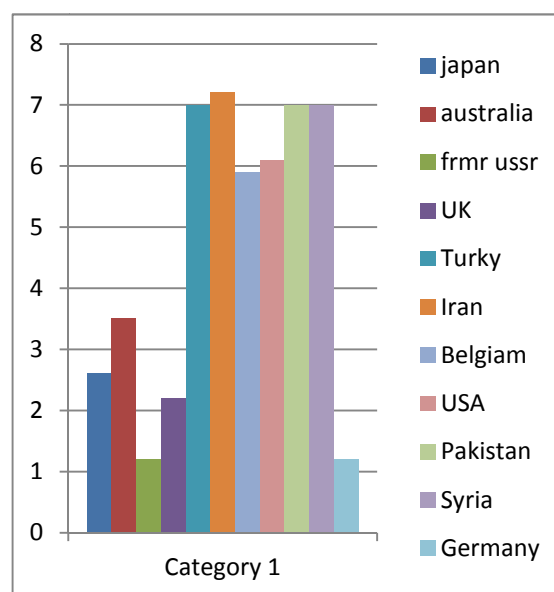


Figure.1 Top importers of 2006-2007(per points = 100mt)

3. Frame work to face the tough challenges

For more than two decades there has been a search for new applications that would take over from low value commodity usage. Interestingly there have been few developments beyond categories under consideration in 1975 .The main areas being investigated were:

Jute substrate for coating or reinforcement

- I. Barrier fabrics
- II. Carpets and rugs
- III. Laminates
- IV. Composites
- V. Wall coverings

Most of the above were to prove relatively unsuccessful. There has been recent investment in Bangladesh to produce cloth for the purpose and this relatively high value added value development. Barrier fabrics continue to be used mainly for inner spring upholstery for which jute is still favored. Carpets and rugs were produced in limited quantities in export markets particularly in Finland and Spain but the woven products were not seriously promoted. In recent years there has been a measure of success for high quality carpets being produced in India and production of rugs continues in the USA. Laminate use never really took off and neither did composites at the time. Wall coverings proved a passing fashion with the high quality European products loosing ground eventually to a very low point. Today, attention has shifted to:

- ✓ Geotextiles
- ✓ Nurseries
- ✓ Garden Centers
- ✓ Composites

- ✓ Pulp
- ✓ Home Furnishings
- ✓ Textiles

However, there has been considerable refinement of options. Investigation must pay sufficient attention on commercially significant volumes and values. Jute needs to find new or under-used applications that are able to absorb significant volumes if the losses from traditional markets are to be adequately counteracted. With the plethora of directions for jute diversification being advocated, it is important to set criteria by which their implications can be measured. One obvious criteria is the scope for the development application being put forward. That is not to suggest that niche markets, often of high value, should be ignored. Only those efforts have to commensurate with market development scope. The second criterion that appears to have strong merits is the marketability of the resulting products. The latter can be influenced by product development but there are competitive arguments that need to be taken into account. Some schemes have attracted all those concerned with hard fibre s and jute and they include: fibre boards, softening, composites, cutting costs, bleaching, and dyeing. These have entailed giving jute some of the characteristics associated with other materials and fibre s in particular. While the approach promises good development scope in the case of household furnishings, clothing and decorative, a lot depends on viability since it is not much use developing new characteristics at a cost that makes them uncompetitive.

Applying the criteria of market scope, the volumes that can be absorbed by particular market segments is decisive. There are some that offer great potential scope and these include: pulp; geotextiles; garden products; composites; home furnishings; clothing and mixed fibre s. Fibre boards could be added to the list and may well be worth considering for jute sticks and waste but efforts over decades with jute, coir and sisal have not led to success. It is a worthwhile market to pursue but only if the resulting product is marketable. In the way of illustration, in 1987 there was already a heat bonding process for coir boards in the building materials technology park in the Philippines which used husks with some silica but the resulting products could not be marketed. This experiment has since been forgotten and the exercise is now being repeated. There are some areas that where jute has been applied and one of them is geotextiles. The efforts date back to the early 1970s and at one stage with the sub-sector developing rapidly led to early success but marketing and promotion efforts tailed off as market growth became last fast, and the result is that jute share of the end use has not changed much for a decade. Moreover, the sub- sector appears today to be growing at a far lower rate of growth. Other new end uses that have found their way to production include products, mainly household furnishing and shopping bags, based on mixed fibres resulting from the UNDP project in India. There are a large number of mainly small but some large firms offering the products but they have lacked resources, product development and marketing to enable a significant growth in exports.

3.1 Current Market Developments

Yarn: The market for yarns, the most significant form in which jute is exported, is considered by trade sources contacted to be relatively free of risk in the foreseeable future. Jute is considered the ideal material for weft in woven carpets and efforts to use substitutes have not been successful. This end use will depend largely on the popularity of woven carpets as well as use for face yarn in rugs. There is an element of risk, however, in that the main markets are Turkey, Iran and Syria, countries that vary in degree of political stability in a volatile region. Even temporary loss of any of these markets for any reason could threaten demand for yarn in the short to medium terms although that will not affect substantially the demand for woven carpets.

Sacking: As already noted, jute sacking is more expensive to buy than polypropylene by a factor of 2-6. In addition, the increasing popularity of bulk handling continues to erode jute use. Trade sources in USA were opined that use of jute is set for further falls. In part, this process is inevitable and irreversible. One incidental effect is that more importers are now content to import finished products rather than undertaking it themselves. There are some uses which look safe in the near future such as cocoa, coffee, edible nuts and other food products particularly with food grade sacks are being used. It is important to safeguard the reputation of jute by avoiding contamination during processing and care should be taken to avoid arsenic contaminated water in Bangladesh and West Bengal.

Competitors would use any failing to do so with dire consequences. However, many uses are being lost without a struggle. Not only does jute and, in particular food grade sacks, have many characteristics that favor its use, but also the sacks if reused are not as uncompetitive with synthetics as the up front purchase price would suggest. Some sub-sectors as is the case for sand bags are switching to synthetics even when jute has superior technical qualities. In flood control, jute is distinctly superior but requires the advantages to be promoted. The same can be said for emergency food aid which even when sent to jute producing countries is in pp sacks. There is a good reason for this in that when required there is a very short delivery time and tender procedures favor those materials that are produced in purchasing countries and available at call.

Hessian: Hessian has a wide variety of uses and no study has provided disaggregated data. Hessian is a general purpose material for which many uses are found in the market place. A great deal of spontaneous product

development takes place under such conditions. It should be possible to undertake a detailed study but would require that to be a specific objective of a study. Something that does need to be undertaken in order to be able to promote this sub-sector. Jute is also used in the construction industry for keeping concrete moist while setting. It is by far the most favored material as a barrier fabric used to cover spring structures in upholstery and with the popularity of inner spring constructions, use is not under threat. Jute webbing is also used as a substitute for springs in furniture.

Carpet Backing Cloth: One of the biggest reversals for jute over time is its declining use as carpet backing cloth. It was replaced almost entirely as a primary backing and has lost most of its market share as secondary backing. India has all but stopped producing it and Bangladesh exports have fallen to around 25,000 tons in a market that is over 400,000 tons in the USA alone and globally probably over 800,000 tons. The main reason why jute began its decline was that of unreliable supplies and price volatility. It then became more expensive than synthetic substitutes but is today around comparable levels if not often cheaper. Price was a factor in the decline but the industry does not probably even know the share of carpet backing as a cost with any accuracy and some consumers are aware of buying natural fibres thus providing a good promotional factor. A window of opportunity is provided by the fact that the producers of synthetic carpet backing and geotextiles are themselves in trouble. Production has become a commodity and margins are very tight. One of the largest producers, synthetic Industries, is for sale and believed to be in financial straits. The other is believed by trade sources to be open for offer from its existing owners, Amoco. Those producing synthetic substitutes to jute thus find themselves in a crisis.

3.2 SWOT Analysis

Beside the market analysis the unpretentious strength, current weakness, impending opportunity and plausible threat analysis can give a original framework to fix the course of action for its proper development.

Strengths

1. Jute is a natural fibre , biodegradable and sustainable. Its production has been long established and although there has been a decline in production over a fairly long period of time, it would be possible to increase production in a relatively short period of time.
2. The fibre has well known and tested attributes of tensile strength, resistance shearing, high moisture absorbency, inertness, allows air to pass through, stability and non-toxicity.
3. Although less well known than it used to be, it remains a leading material in sacking, yarns, carpet backing, upholstery, shopping bags, cordage, twines construction, packaging, geotextiles and a whole host of technical uses such as filters, insulation, rubber coating, belts, cable wrapping, tarpaulin, linoleum backing, and less well known applications.
4. Processing has shifted to a large degree to producing countries bringing much needed added value and employment.
5. Jute enjoys large established domestic markets that assure its continuing use.
6. Enjoys price support and protection in its main markets.
7. Remained a low cost material in real terms.
8. As we have seen earlier China, Thailand have reduced their jute production but they need a big amount of jute need so our past competitors can be a good choice as buying country of our jute.
9. India in recent time is importing jute from Bangladesh. So as their demand is increasing day by day, as a result we can export to them more and more.

Weaknesses

1. Some of the traditional end-uses are no longer required in some market segments such as in packaging where bulk handling has displaced sacking.
2. The industry is fragmented and individual exporters and those representing the lack the resources to match competing material suppliers for product and market development and promotion.
3. Price volatility.
4. A reputation for less than totally reliable delivery.
5. Unease in consuming countries about business relationships with suppliers.
6. There was a lot of talk, money and research on diversification that has not been translated into sold products.
7. There has been a lack of direction, focus and resources in developing new end- uses.
8. A weak transport system can be a weakness for quick export delivery.

Opportunities

1. The synthetic industry has gone through its period of treating substitutes to jute as marginal cost contributors and tries to earn profits.
2. Synthetic substitutes to jute have also been commoditized with low rates of return and production is being moved to lower wage countries. As a result, the industry particularly in USA is in the midst of a crisis with the

leading production facilities up for sale.

3. There is no decisive technical reason why the American carpet industry could not increase its use of jute secondary backing.
4. While the richest industrialized countries are switching away from sacking to bulk handling, there are very many countries that cannot switch to bulk handling in the near or medium future.
5. There are new end uses that offer good prospects for developing, some of which could absorb substantial quantities of jute.
6. Technical developments have led to blending of finer jute yarns with others in union and intimate blends.
7. These same technical developments also allow for production of household furnishings, apparel and decorative.

Threats

1. The substantial export sacking market accounting for over 180,000 tons annually is under pressure from bulk handling.
2. Some leading medium sized jute importers in USA have ceased operation for reasons unconnected with problems facing jute and this is likely to lead to a reduction in imports of sacks in particular.
3. Reduction of jute exports is leading to a reduced level of material consciousness in some markets.
4. Reductions in some former markets may soon approach loss of critical mass if allowed to continue unabated.
5. The Indian market depends on regulatory protection to a large degree and this cannot be taken for granted.
6. A record of falling world markets and low margins are leading to some jute processors being closed and others to diversify away from jute.

3.3 Action plans for future of jute

In order to allow for detailed commodity sector strategy, there are gaps in the information currently available that need to be met.

3.3.1 Detailed commodity chain analysis

There is a need for greater transparency in the value commodity chain. Most of the information required is probably available and at least one corporate participant at the workshops claimed to have undertaken it. However, although there is published information on various stages, there is not enough disaggregated data to allow for a full chain analysis and transparency. Only when information is available on the farmer portfolio of activities and land allocation and choice of inputs in jute based farming systems and field data as to how much is received at farm gate and the cost/price determination up to and beyond mills will it be possible to see precisely what leeway exists to lower costs of fibres while providing farmers adequate incentives and how much if any leeway there is in conversion costs. The chain analysis could then be extended to competitive analysis of markets in jute producing countries such as the critical one of sacking in India as well as in export markets.

3.3.2 The synthetic bag market in India

One part of the missing information is on the size and distribution of the Indian market for woven plastic sacking in various end-use sectors and the buyer criteria for choosing to use it. This would allow an assessment to be made of the competitive posture of jute and to likely future demand and regulatory policy implications and the best way of liberalizing the market.

3.3.3 Market for jute sacking in Africa and South America

The market for jute sacking in Africa has all but collapsed. Yet there is no published market survey as to requirements, distribution and costs in a Continent which used to be an active major buyer of jute packaging and has substantial production of commodities, some of which are using jute which is the case for coffee and cocoa and others such as cotton that could profit from doing so. There may well be opportunity for regaining and developing markets through better distribution, sector targeting and promotion. Similarly, the market demand for jute packaging has all but collapsed in South America, which also used to be an important market for jute. A market survey is required for much the same reasons as those given for Africa above.

3.3.4 End-use applications for hessian

Hessian has always been a major export category and traders in particular do know the major end-uses. Hessian was often imported for further processing into lighter sacks aimed at specific market requirements. This end-use has declined in line with that for imported sacking. There are, however a large number of minority end-uses for hessian that little is known about and thus little can be done to develop. As a general-purpose fabric, hessian is long well established and it is likely that there are end-uses for which it enjoys a strong comparative advantage but which have not been targeted for development and promotion.

3.3.5 Feasibility of use of jute in plastic composites

There have been frequent reports of major initiatives to develop use of jute fibres for glass fibre substitution and plastic composites in general. Few of them have been implemented and yet there is market sentiment among many that this end-use offers a good potential opportunity for a major use of lower grade fibres, which would alleviate the current dependence on sacking for their use. One international corporate developer has undertaken a feasibility study as well as a commodity chain analysis and has allowed the Consultants access to their find-

ings. The latter are very interesting and establish a case for further examination. The findings are rather more disturbing about what farmers get paid in real terms.

3.4 Initiatives additional market Development and other actions

For the development of jute market the following initiatives should be taken in to account in order to make it successful.

3.4.1 Explore possibility of re-capturing some part of the secondary carpet backing market in USA

The suppliers of synthetic carpet backing for tufted carpets in USA have recently changed hands. The profitability of cheap synthetic backing and sacks has resulted in low profitability and the end-use had become less attractive for plastic manufacturers. The largest carpet producer in USA has recently acquired the carpet backing interests of Amoco, which were on sale for the above reasons. There appears to be a window of opportunity for jute to be re-considered for secondary backing. This would require various steps to assure the carpet industry of reliability of supplies, price stability and quality controls. However, the profitability of exporting jute carpet backing at historic prices does not appear attractive enough to motivate the jute sector. This may change with the strategy that has emerged from the Road Map where that if higher yields are combined with lower conversion costs, it may be possible to compete in this end-use once again. The advantage is that a substantial volume of value added fabric could be absorbed.

3.4.2 Apparel and household applications for new finer jute fabrics

The UNDP Project in India encouraged production of finer yarns that a number of users are combining in intimate and union blends with yarns from other fibres. The weak point has been market development and marketing and further assistance would be well advised. In Bangladesh the finer yarns have been combined with further treatment to result in fabrics that appear to offer market opportunity for use in the large and for jute largely untapped apparel and household furnishings market segments. Production of these, higher quality, higher value fabrics needs to be further improved and scaled up to develop these opportunities. An investment of around \$4 million is estimated as being required and market reaction has been very positive. There will also need to be a market development program, which will probably entail a further outlay of \$ 500,000.

3.4.3 Market development of jute sacking

Following up on the greater information already recommended in the above section, there will need to be a market development and promotion program for jute packaging in Africa and South America. There are specific potential end-use markets that could be developed for jute in much the same as those for food grade sacks in coffee, cocoa and groundnuts. The rubber sector is one of these opportunities that could be developed. This is a particularly interesting prospect given the fact that there is familiarity with the fibre in Indonesia, Thailand, Malaysia and Vietnam, which would be among the major consumers. There have been complaints of contamination of cotton in West Africa from synthetic slivers that can be eliminated by use of cotton packaging. Equally, this is an area where jute has been favored in the past and could be promoted in further.

3.4.4 Development and promotion of jute geotextiles applications

Jute early established a strong market penetration of the geotextiles and landscaping market. At one stage end-use exceeded 10,000 tons. It has since rather lost its way and coir has supplanted its leading natural fibre position. However, there is general consensus that jute has unique characteristics, such as ability to absorb moisture that make it particularly suitable in some applications such as in landscaping and it needs to be promoted to regain some of the lost momentum.

3.5 Agricultural development

As an agriculture based country this sector bears higher priority that means planning and effective implementation is essential. The required phases for agricultural developments are;

3.5.1 Higher yield, low lignin and better fibre seeds to be developed

Emphasis has been on increasing yields in the past even at the cost of lower quality mix. Farmers had a clear financial incentive to pursue higher yields and have done so but the incentives to use seeds that lead to better quality fibre need to be given as well as availability of proven seeds that will increase net incomes while giving the industry the higher qualities they need to develop higher value diversified products.

3.5.2 Measures to ensure adequate supply of suitable seeds

There are frequent shortages of seeds and there needs to be an effort to improve the supply chain so that better seeds are developed, multiplied, certified and distributed. Most of all that the issue of farmer returns from adapting these better seeds need to be addressed.

3.5.3 Premiums for better grades of jute

The best incentive farmers could be offered to consider adapting improved seeds would be a system of premiums that reward such practice. Without that, farmers have no logical reason to meet what the industry needs.

3.5.4 Action to ensure higher farm gate prices

Much is said about the need to alleviate poverty amongst jute farmers. There needs to be a detailed analysis to ensure that farmers are actually getting higher nominal prices and a program to ensure that any obstacles to that are overcome.

3.6 Other strategies

Beside the above strategies following areas should be taken into account as:

3.6.1 Trial of warehouse receipts system

The concept of warehouse receipts is in vogue in development circles but evidence for success so far limited. The Jute Corporation of India Ltd. intervenes at the time of the harvest and performs some of the function that warehouse receipts aim to accomplish. The problem is that small farmers have financial pressure to sell quickly and this pressure can be alleviated where there are co-operatives who can increase the time before farmers have to sell as well as by the market intervention of JCI. The warehouse receipt system would probably benefit co-operatives and traders rather than small farmers unless and until the access to finance is improved.

3.6.2 Introduction and promotion of stem ribboner

This would reduce conversion costs at farm level and would thus be likely to benefit small farmers in a direct way as well as increasing the efficiency of the supply chain.

3.6.3 Efficiency in use of water

Water is a scarce resource and any steps that improve efficiency of use of water or reliable supply of water over a longer period would also increase the efficiency of the value chain as well as farmer incomes.

3.6.4 Furnishings, apparel and machineries

There have been two programs with important long term implications directed towards developing high value added diversified projects. The earlier one was the UNDP US\$23 million project that has led to finer yarns that mostly small and medium enterprises have been developing into products. However, they individually lack the capacity to develop export markets and technical assistance is required to help them develop product-markets. The second was the NORAD Bangladesh Jute Development Project that built on developments of finer yarns into higher quality softer fabrics. An evaluation of the NORAD Project proposed additional investment to up-scale the pilot project and a recently completed review by SEDF has recommended further investment of US\$4 million. There are long standing problems of availability of suitable machinery, spares and technical management that need to be resolved to allow the conversion process to be made substantially more efficient and jute to be made more competitive. As;

- Technical Assistance
- Design and adaptation of machinery
- Assistance to capital investment in machinery design
- Selection of capable and interested companies for machinery development
- Tender process to allocate development funding to interested companies

Conclusion

After this can come to some points that are important to survive in this jute business. There are still possibilities in this market. There are many scopes in this jute market around the world. There are some reasons for what the most attractive market is declining for us. We need to transport our orders in foreign countries as soon as possible. We have to look after the quality of our jute and products because in international market the quality is a very important factor. We know some of the jute producer countries are reducing their production in a large scale. For example China and Thailand. They need to import jute to meet up their annual need. So we can take that market which is profitable. As a procedure India consumes about 70% of their total production. For last 5 years India is importing jute from Bangladesh. As the need of India is increasing so in near future we can export jute to our main competitor. We have to increase the rate of consumption of jute made products in our country and also have to bring in new products made from jute to bring back its golden era.

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