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Status and Scope of the Jute Industry in India in Comparison to other World Producers

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Abstract

India is the leading producer of raw jute and jute products in the world. India's sacking goods production comprises 75% of the total goods production and B twill bags, used for packaging rice and wheat, and contributes 85% of the total sacking bag production. Still there exists an increasing trend of imports of jute products due to the increase in the domestic consumption of conventional jute goods. Bangladesh is the major exporter in jute goods, with India in 2nd position. Hessian cloth and bags are the major exporting items of jute goods from India. In the overall situation, there exists a unique opportunity of the jute industry to improve the social and economic conditions of the states concerned as well as the country. Being the preferred sector in raw jute production due to suitable topographical conditions, emphasis now needs to be placed on modernization of the jute sector with a view to developing a viable and efficient jute manufacturing sector in the country.

Key words: A twill bags1), B twill bags2), hessian, jute goods, sacking.

Introduction

Today, jute can be defined as an ecofriendly natural fibre with versatile application prospects ranging from low value geo-textiles to high value carpet, apparel, composites, decorative, upholstery furnishings, and fancy non-woven for new products. Jute, with its unique versatility, rightfully deserves to be branded as the "fibre for the future". In coming decades, it is expected that a number of jute mills and mini-jute plants will be seen engaged in a big way in the production of jute and jute blended yarns, especially of finer accounts, through various routes of yarn manufacturing. The uses of jute are manifold, although the traditional use remains in packing, such as sacking, hessian and carpet backing. These light weight yarns are used in value added textile applications like upholstery, furnishing, garments and fancy bags. Jute has been cultivated in India for centuries, being predominantly a crop of eastern India. The major jute growing states are West Bengal, Assam, Bihar, Orissa, Tripura, and Uttar Pradesh. Of late, Jute industries have been facing a challenge from synthetic fibres, which have some advantages compared to jute. Hence it is necessary to assess the viability of jute and the jute sector and come up with a long term strategy for the development of this sector. This research paper mainly focuses on the status of jute industries and its viability.

Overview of the jute industry in India

An overview of jute industries in India are summarized in *Table 1*.

Table 1. Overview of Indian jute industry.

SI No	Parameters/Status
1	Turnover: 10,000 crores
2	Workmen engaged: 3.50 lakhs
3	Average land area under Raw Jute & Mesta Cultivation: 884 thousand hectares
4	Farmers involved: 4 million
5	The Indian jute industry is the biggest manufacturer of jute goods in the world
6	The Indian jute industry is the largest producer of raw jute in the world.
7	The Indian jute industry has world class research and development facilities in the area of jute cultivation, product development and diversification, new machinery design and implementation and constant efforts of fashion technology implementation in finished products as required by customers.
8	Availability of skilled, competent jute/textile/fashion technologists
9	Highly developed infrastructures like ports, shipping, airlines, roadways
10	Constant efforts by Central Govt. for development of the export processing zone, export houses, and making different financial aid and consultancy available.
11	The Indian jute industry has the capacity to produce and meet the international demand for food grade Jute bags and cloth.

A brief literature review

Ghimire et al. [2], based on their survey, highlighted that unstable or low price of raw jute, the unavailability of quality jute seeds, limited irrigation water at the sowing period, complex diseases (wilt), the labour shortage during the peak season, the weed problem, and the lack of retting water/retting ponds were the main constraints in jute production and processing. The study indicates that the maximum production cost is in fibre extraction (16.9%) and weeding (16.33%). Jute productivity ranged from 1788 to 2260 kg per hectare. The JRO-524 variety of jute has been widely grown across the region due to its wider adaptability, high yield potential and quality fibre. However, the cost of production of jute has been comparatively higher than other crops in the season. As such, jute areas have been replaced by sugarcane due to its high yield potential and high profit margin. For the promotion of jute cultivation, it would be better to provide subsidies for seeds and fertilizer to jute growers, as practiced in neighboring countries.

Karthik et al. [4] pointed out that the jute industrial sector has been an important segment of the Indian economy. With jute being the most versatile natural fibre, this sector produces ranging from low value geo-textiles to high end garments, decorative, upholstery, etc. Many jute plants and mills are now engaged in producing jute blended yarns. The jute industry scenario in India has changed from making traditional hessian to high end fashion garments. Thus this sector has lots of opportunities and strength.

Islam et al. [3], based on their studies of major Jute producing countries, e.g.,

India, Bangladesh, China, Myanmar, Nepal, and Thailand, conclude that world jute production and the area of production are decreasing with a fluctuating trend. The solutions recommended are to use the scientific method of cultivation, make market information available, develop diversified products, implement the law for using jute rather synthetic material, create jute policy, etc. for the development of jute production.

Khondaker et al. [5] conducted researches as part of the Centre for Policy Dialogue's (CPD) Independent Review of Bangladesh's Development (IRBD) programme. The focus was on economic, technological and worker related issues of jute mills, on theopportunities and challenges faced by the jute manufacturing industry, and on possible policy options with a view to developing a viable and efficient jute manufacturing sector in the country.

Singh [7], Score Information Technologies Ltd, a member of the Rs 500-crore Kankaria group of companies, has successfully deployed contact-free smart cards and RFID (radio frequency-based identification) for data acquisition, quality assurance and production flow automation at Ambica Jute Mills in Howrah, on the outskirts of Kolkata. The application has, in one stroke, eliminated errors associated with manual data collection on the shop-floor. The data is collected, recorded and fed into the backend computer for generation of ERP data. Besides 100 per cent accuracy in data collection, the application offers quality assurance and facilitates both online inspections and preventive & corrective action.

Ahmad et al. [1], in their research findings, highlights handicrafts as a pivotal

source of revenue generation of the Jammu & Kashmir states. This industry is unique in terms of design, cost and quality of products and thus provides a competitive advantage over other National and international players of the handicrafts market. In spite of the various advantages, the industry needs to explore and identify various opportunities and challenges ahead. This paper focuses on the contemporary challenges as well as the scope of the handicrafts sector in the states of Jammu and Kashmir, thereby providing suitable suggestions in order to make the market more oriented and sustainable in the future.

Ray [6], based on a 53 year database on jute/summer paddy acreage and the prices of the Nadia and Burdwan districts, West Bengal, assessed farmers' real life behaviour with the Nerlovian Price Expectation Model. The conclusion suggests no internalization of the external cost of producing/consuming pollution-intensive synthetic goods, and perhaps generate potential market bargains for the revival of the jute industry in India and that of the jute market at the international level, in turn likely displacing synthetic goods with sustenance and employment generation.

Research methodology

the scope of the study extends to the jute sector of India with the motive of exploring the prospects of this industry in contributing towards the economic development of the state and nation. The database for the present study has been prepared from official websites of the Indian Jute Manufacturing Association, the International Jute Study Group, the Jute Corporation of India, and various research engines.

Results and discussion

Table 2 and Figure 1 indicate the total supply and distribution of raw jute bales (lakh bales of 180 kg/bale) in India for industry and domestic purposes. Supply data indicate a gradual decreasing trend from 2011 - 12 to 2014 - 15 due to the gradual decrease in crop production from 102.50 lakh bales (2011 - 12) to 86.0 lakh bales (2014 - 15). Agricultural policies of the Govt., the price of raw Jute, the climatic condition of India during crop production, rain falls in the rainy season, farm-

Table 2. Supply and distribution of raw jute in India (figure in lakh bales of 180 kg).

Subject	2011-12	2012-13	2013-14	2014-15 Estimated
SUPPLY Opening stock with: Mills at Mill-go down, JCI Others (including undelivered balance of mill purchase and jute held upcountry and in transit)	7.00 15.50	12.50 18.50	9.50 0.50 19.00	10.50 13.50
Total Crop: total Imports	22.50 102.50 9.00	31.00 93.00 9.00	29.00 90.00 1.00	24.00 86.00 5.00
Total supply	134.00	133.00	120.00	115.00
DISTRIBUTION i) Mill consumption ii) Exports iii) Domestic and industrial consumption	92.00 1.00 10.00	94.00 0.00 10.00	86.00 0.00 10.00	90.00 0.00 10.00
Total distribution	103.00	104.00	96.00	100.00
Carry over	31.00	29.00	24.00	15.00

ers benefitting from crop cultivation, etc. influence jute crop production in India. On the other hand, the total demand for raw Jute in India also slightly decreases from 103 lakh bales (2011 - 12) to 96 lakh bales (2013 - 14). As such, carry over quantities of raw jute gradually diminish. Furthermore it has also been observed that during 2013 - 14, both mill consumption values and crop production decreased to 80 and 90 lakh bales, respectively, due to the fluctuating demand for raw jute in India. Thus our country's demand for raw jute is internally fulfilled by jute crop production for the time being, thereby decreasing the import of raw jute from other countries. But in future, if this trend of supply and distribution continues, we may be unable to meet our own requirement for jute crop and have to depend on the import of raw jute from other countries.

Table 3 shows a gradual increase in world jute product export around the world from 732.7 thousand tons (2007 - 09) to 902.4 thousand tonnes (2012 - 13). Bangladesh is the leading exporter in the world, and Bangladesh Jute a pioneer in the world in respect of the colour of fibres, fibre reed length, high bundle strength, good golden yellow lustre and fewer defects on fibre. India is the 2nd exporter in the world, but the quantity of which is fluctuating. India is a large country, and hence due to more internal demand for jute products, the export quantity is less compared to Bangladesh. China, Pakistan, Africa, Turkey, Europe, etc. also registered as jute product export countries. All these countries do not have as favourable climate conditions for raw jute crop production as in India and Bangladesh. Figure 2 indicates the dominant export performance of Bangladesh in comparison to India. Possible reasons for this may be summarised as given below:

- Quality of raw jute is much superior to the Indian subcontinent.
- Better climatic conditions, which favours jute crop production.
- High rain fall and large number of rivers, canals, ponds, etc.
- Better retting process due to high flowing water in rivers, canals, etc. Due to less rain fall in the rainy seasons, the retting process is problematic to farmers in India. Sometimes farmers use dusty pond water, which gives a dull lustre of fibre.
- Cost of production of finished products is less due to the large availability of raw jute with less price.

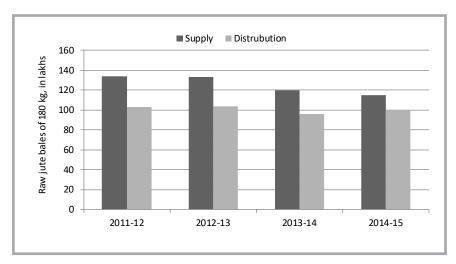


Figure 1. Supply and distribution of raw jute in lakh bales. Source of data: Indian Jute Mills Association.

Table 3. Export of jute products over different financial years, \times 1000 ton. **Source**: Indian Jute Mills Association.

Country	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Bangladesh	431.0	491.5	459.4	475.5	696.3	651.9
India	206.9	173.6	163.5	182.9	211.7	171.1
China	21.1	11.8	15.9	12.0	10.3	12.6
Pakistan	15.1	6.1	6.9	12.0	10.5	15.9
Nepal	13.0	13.0	19.8	34.6	13.2	15.0
Africa	5.2	3.6	2.8	2.1	2.5	2.5
Turkey	5.7	5.1	4.4	7.4	4.2	4.0
Europe	23.3	22.8	21.1	19.9	17.0	16.3
Rest	11.4	18.2	15.9	14.2	14.5	13.1
World	732.7	745.7	709.7	760.6	980.2	902.4

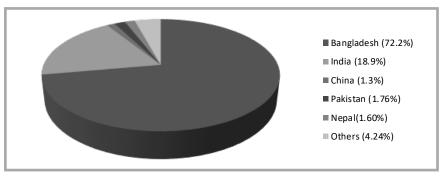


Figure 2. Pie diagram indicating exporters of jute products of different countries during 2012 - 13. Source: FAO Statistics, September 2013.

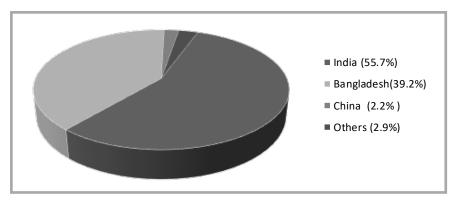


Figure 3. Major producers of raw jute as a percentage (2012 - 13). Source: FAO Statistics, September 2013.

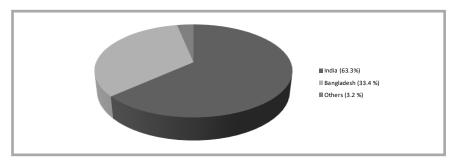


Figure 4. Pie diagram indicating major jute product manufacturers in the world. Source: FAO Statistics, September 2013.

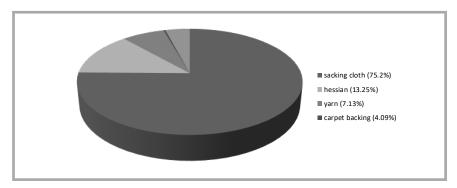


Figure 5. Pie diagram indicating the contribution of different conventional products manufactured in India. Source: FAO Statistics, September 2013.

Table 4. Distribution of jute products in India over different Financial Years (Figure, 000 ton). **Source:** Indian Jute Mills Association (IJMA).

Period april - march	Hessian	Sacking	Carpet backing	Yarn	Others	Total production	No. of days worked during the session
2009-10	206.8	922.5	3.6	123.4	68.4	1324.7	297
2010-11	244.4	1676	4.7	177.3	62.4	1565.7	358
2011-12	239.6	1164.6	3.6	123.5	50.5	1581.8	359
2012-13	210.0	1218.2	2.7	114.1	46.3	1591.3	357
2013-14	202.5	1150.4	3.2	109.0	62.6	1527.7	355

Table 5. Production of jute goods other than hessian, sacking, carpet backing & yarn (Figure, 000 tons). **Source:** Indian Jute Mills Association.

Year	Canvas and tarpaulin	Deco fabrics	Web- bing	Matting	Felt	Soil saver	Scrim cloth	Spl Hessian	Any other	Total
2008 - 09	55,524	9,733	373	1167	707	2,955	1,532	3,531	7,813	83,336
2009 - 10	42,744	8,403	191	898	765	1,961	2,014	3,192	4,996	65,144
2010 - 11	36,983	6,654	300	1158	848	0,804	3,145	2,608	4,181	56,681
2011 - 12	35,201	4,550	379	679	786	1,195	2,595	2,211	3,085	50,690
2012 - 13	31,600	4,110	396	773	820	1,717	2,615	1,896	4,649	48,577
2013 - 14	42,382	6,317	284	788	901	1,746	2,492	4,061	6,004	64,935

Table 6. Distribution of production of sacking bags in India. (Figure in tons) **Source:** Indian Jute Mills Association.

	B Twill	A Twill	D W flour	Heavy cees	Other bags	Total
2008 - 09	825,983	106,079	22,320	20,674	63,477	1,038,533
2009 - 10	738,375	97,880	14,419	10,442	37,638	898,754
2010 - 11	865,726	98,943	14,185	13,964	64,611	1,057,429
2011 - 12	940,732	109,887	15,476	24,552	74,488	1,165,134
2012 - 13	1,065,560	80,912	16,914	24,642	42,086	1,229,514
2013 - 14	883,628	54,159	17,012	26,438	47,580	1,028,817

Availability of cheap, skilled and competent labour.
 Involvement of a large number of small entrepreneurs in small export

oriented products of jute twine, fabrics and bags, etc.

Figure 3 (see page 21) explains that India is the leading producer of raw Jute in the world. On average, 55.7% of the total quantity is cultivated in India. Bangladesh has the second position in the world, producing 39.2% of the total quantity. Thus India and Bangladesh are the main producers of raw jute in the world.

Similarly India is the leading country in manufacturing of jute products, contributing 63.3% of the total jute products manufactured in the world (*Figure 4*). Bangladesh has the 2nd position in the world as a jute product manufacturer.

Tables 4 and Figure 5 reveal the increasing trend of the total production of jute goods (conventional products) from 1324.7 (2009 - 10) to 1591.3 thousand tons (2012-13). In the year 2013 - 14, the total production slightly decreased to 1527.7 thousand tons due to lower production of hessian, sacking and yarn as well as a lower number of working days. Lower production in the year 2009 - 10 is also due to the lower number of working days. 'Sacking' denotes conventional cloth for manufacturing 'B twill' bags¹⁾, 'A twill' bags²⁾, LP twill bags, etc. Sacking cloth production thus covers 75% of the total production in any year and has an increasing trend from 922.5 (2009 - 10) to 1218.2 thousand tons (2012 - 13). It seems that sacking bags, as a food packaging material, has large demand in India. On the other hand, hessian, the 2nd largest product in the jute industry, slowly diminishes from the year 2010 - 11 to 2013 - 14, which may be due to the lower demand for such types of products in India as well as in the foreign market.

Table 5 displays the decreasing trend of the total production of Jute goods other than conventional hessian, sacking, CBP and yarn in India from 83,336 (2008 - 09) to 48,577 (2012 - 13) thousand tons. It did, however, increase to 64,935 thousand tons in 2013 - 14 due to a considerable increase in demand and production of canvas & tarpaulin and decorative fabrics. This also seems to be due to the acceptance of biodegradable jute fibre in place of plastic as safe packaging material. The considerable low production from 2010 - 11 to 2012 - 13 seems to be due to the decreasing demand for such products in domestic and as well as

foreign markets. The production of raw jute is also comparatively less, causing a higher price for raw jute as well the high production cost of jute products.

As regards sacking bag production alone, Table 6 displays an increasing trend from 2008 - 09 to 2012 - 13. In the 2013 - 14 session, the total sacking bag production dropped to 16.23% due to a reduction in both B. Twill and A. Twill bag production by 17.07% and 33.04%, respectively. This may be owing to less demand, a shortage of skilled manpower, and the high price of raw Jute, which creates high production cost, the closure of some mills, industrial strikes and lockouts. However, there is an increase in D W Flour, Heavy Cees and other bag production by 4.1%, 7.2% and 13.05%, respectively. It should be mentioned that all Jute bags for food grain packing are produced in India. B twill bags, however, dominate, i.e., over 85% of the total sacking bag production.

Table 7 and Figure 6 indicate the 73.19% of the total bales of jute production was in West Bengal, 14.81% in Bihar and 7.2% in Assam in India in the year 2012 - 13. Similarly Figure 7 indicates 69.7%, 16.85%, 8.45%, 1.52% and 2.7% of the total jute production land coverage was in West Bengal, Bihar, Assam, Meghalaya and Orissa in India, respectively, in the year 2012 - 13.

The export performance of the Indian jute industry indicates a positive sign for Indian jute industries (Table 8 and Figure 8, see page 24) and enhances the export position of India in world trade. In 2013 - 14, 2235.41 crores of jute goods were exported to foreign countries. Shopping bags, floor coverings, decorative fabrics, webbing and soil saver seem to exhibit a significant improvement in export performance from 2011 - 12 to 2013 - 14. The value of export of sackings goods also increased from 418.93 crores (2011 - 12) to 527 (2013 - 14). However, hessian export performance gradually declines from 987.28 crores (2011 - 120) to 861.02 (2013 - 14). More interest in sacking production and export performance truly serves the viability of this industry.

Table 9 (see page 24) indicates a decreasing trend of local consumption of jute products (other than traditional products) in our country from 77,588 (2008 - 09) 43,720 tons (2012 - 13). However, during

Table 7. State-wise production distribution of raw jute in India. Source: IJMA.

	2	0011-12	2012-13			
State	Area in '000 Hectares	111001111111111111111111111111111111111		Production in '000 bales of 180 kgs/bale		
Assam	167	795	70	823		
Meghalaya	12.0	86	12.6	86.31		
West Bengal	608	8800	577	8349		
Bihar	158	1930	139.1	1690		
Orissa	24	193	22.4	177.7		
Tripura	2	9	1.3	11		
Uttar Pradesh	30	96	0.4	4.5		
Total	901	10,690.7	827.7	11,406.7		

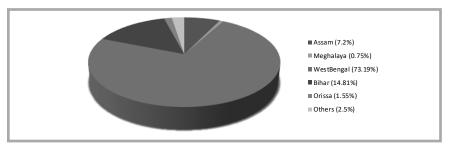


Figure 6. Pie diagram indicating state-wise production of raw jute in India. Source: IJMA.

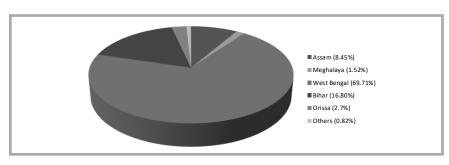


Figure 7. Pie diagram indicating the state-wise distribution of the total jute production land coverage. Source: IJMA.

Table 8. Value of exports of jute goods from India. (Value: Cr - Crores. Source: The Directorate General of Commercial Intelligence and Statistics (DGCI&S).

Commodity	2011 - 12	2012 - 13	2013 - 14
Hessian cloth	558.96	496.16	526.36
Hessian bags	419.86	407.12	334.66
Total (cloth + bags)	987.28	903.28	861.02
Sacking cloth	12.44	15.85	6.33
Sacking bags	406.49	400.62	520.67↑
Total (cloth + bags)	418.93	416.47	527.00↑
CBC	0.40	0.17	0.26
Yarn	282.01	221.16	143.58
Shopping bags	163.66	169.70	244.80↑
Floor coverings	142.00	178.99	216.10↑
Deco. fab.	8.61	7.96	18.44
Gift article	1.46	6.50	3.83
Blanket	0.07	0.24	0.14
Wall hangings	4.10	0.21	0.57
Webbing	4.24	6.34	7.94↑
Soil saver	7.04	8.68	8.61↑
Felt	1.92	2.46	2.28↑
Cotton bagging	5.17	2.63	3.37
Canvas	2.86	0.22	0.85
Tarpaulin	6.01	4.49	4.26
Others	148.59	147.54	192.36
TOTAL VALUE	2175.89	2077.04	2235.41↑

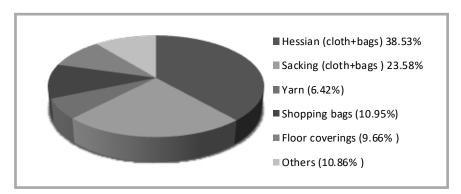


Figure 8. Contribution of different jute products in terms of export value. Source: IJMA.

Table 9. Distribution of jute goods for local consumption in tons. **Source:** Indian Jute Mills Association (IJMA).

Year July - June	Canvas & tarpaulin	Decorative fabrics	Web- bing	Mat- ting	Felt	Soil saver	Scrim cloth	Special hessian	Any other	Total
2008 - 09	55,401	9,760	95	1,257	590	283	464	1,877	7,861	77,588
2009 - 10	41,514	8,042	30	904	623	412	188	1,919	3,864	57,496
2010 - 11	36,049	7,052	31	1,085	579	89	722	1,150	3,621	50,376
2011 - 12	36,407	4,452	26	625	503	299	697	690	2,698	46,397
2012 - 13	32,103	3,877	1	804	507	1,254	161	683	4,330	43,720
2013 - 14	41,552	5,989	24	791	616	1,768	109	1,940	6,086	58,875

Table 10. Distribution of import of jute products by foreign countries (,000 tonnes). **Source:** Indian Jute Mills Association (IJMA).

Countries	2007	2008	2009	2010	2011	2012
World	664.3	742.6	601.3	674.1	845.7	949.9
Turkey	125.1	148.3	136.9	160.0	165.0	209.5
Iran	74.0	57.5	56.4	66.1	61.5	62.0
Syria	39.7	33.4	32.0	32.3	40.0	40.0
USA	42.4	37.2	25.1	30.9	31.7	32.0
Russia	15.0	17.4	10.5	12.7	15.0	15.5
Saudi Arabia	19.3	16.0	4.8	16.4	17.8	18.5
Ghana	14.2	12.8	12.8	6.9	24.3	15.0
Rest of Africa	42.5	35.4	32.1	38.1	47.2	46.3
Far East	31.6	43.5	36.4	57.8	99.1	223.2
India	48.4	121.6	99.4	72.7	175.0	138.6
Japan	13.6	14.3	14.2	13.0	8.0	7.7

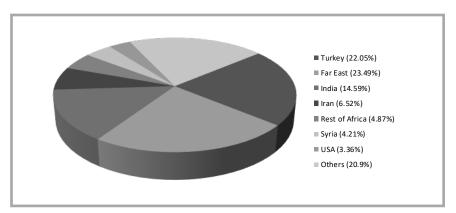


Figure 9. Importers of jute products (2012). Source: IJMA.

2013 - 14, except matting and scrim cloth, the consumption of almost all products increased and the total consumption rose to 58875 tons, i.e., a 34.6% increase over the 2012 - 13 total consumption. There

was an increase of 29.4% for canvas and tarpaulin, a 54.4% for decorative fabrics, 21.5% for felt, 40.9% for soil saver and 184% for special hessian in 2013 - 14 over 2012 - 13. The increase in consump-

tion of Jute goods in the Indian market certainly provides a boost for the production of jute products.

Table 10 provides us with a list of the major countries importing jute products round the year. There was an increase of 42.9% in the import of jute goods from 2007 to 2012 due to the bio-degradable character of jute fibres. A significant increase in the import of jute products is observed for all the leading countries listed in Table 9, e.g., 67.4% for Turkey, 606% for Far East countries, and 186% for India during the above-mentioned period. The import levels for other countries more or less remain the same. For Japan, a decreasing trend was observed, maybe due to the influence of the synthetic lobby of foreign countries. Figure 9 indicates the percentage-wise contribution of jute product imports of different countries during 2012. The Far East is the leading area in global jute product imports, which contributes 23.4% of the global amount. Turkey is the 2nd largest importer of Jute products, which contributes 22.05 % of the global import quantity. Apart from India,, Iran, the rest of Africa, Syria, the USA also imports jute products.

Figure 10 shows the list of countries importing raw jute. Pakistan is the leading raw Jute importer (25.1% of the total global import) in the world. India is 2nd largest country in the importing of raw jute, which contributes 25% of the total raw jute import. China exhibits 23.5% and Thailand contributes 1.6% of the total raw jute import in the world.

Conclusions

The research investigation above thus concludes:

- India is the leading producer of raw jute and jute products, and West Bengal is the largest producer of raw jute, covering 69.7% of the area of the total jute cultivation land in India. Thus the jute industry has become an important contributor to the economy of West Bengal as well as India.
- In India, the import of jute products increases commensurately with the increase in domestic consumption.
- World Jute exports is showing an increasing trend and India as an exporter of Jute products occupies 2nd position after Bangladesh. Hessian cloth & bags are the leading export items.

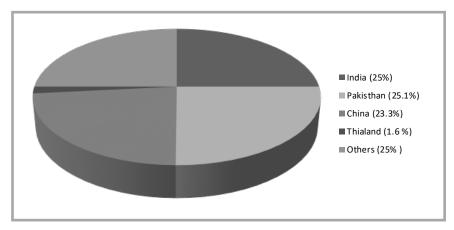


Figure 10. Importers of raw jute in the World. Source: IJMA.

- The total production of conventional jute goods is also seeing an increasing trend and sacking cloth production covers more than 75% of the total jute products in India. B twill bags contributes 85% of jute bags production in India.
- Jute is now facing challenges from the cheaper prices of synthetic substitutes. Hence more development/diversification of jute products are required for the viability of the industry.
- The cooperation of government, the owners of organizations, employees etc. is required to make a concerted effort for the future sustainability of this industry.

Editorial note

- 1) 'A twill bag' refers a special type of 100% jute bag which is used as packaging of food grains of 100 kg capacity in India, Bangladesh. Wheat, paddy, rice, sugar, spices etc are packing in this bag for transportation. The term 'Twill ' is a textile design pattern which imparts during weaving of cloth at loom stage. The bag itself has weight of 1120 g as per Bureau of Indian Standards.
- 2) 'B twill bag' refers to 100% jute bag used for packaging of rice of capacity 50 kg. The bag itself has weight 650 g as per Bureau of Indian Standards. Twill is a design which imparts on cloth during weaving at loom stage.

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