



联合国
粮食及
农业组织

Food and Agriculture
Organization of the
United Nations

Organisation des Nations
Unies pour l'alimentation
et l'agriculture

Продовольственная и
сельскохозяйственная организация
Объединенных Наций

Organización de las
Naciones Unidas para la
Alimentación y la Agricultura

منظمة
الغذية والزراعة
للأمم المتحدة

COMMITTEE ON COMMODITY PROBLEMS

JOINT MEETING OF THE FORTIETH SESSION OF THE INTERGOVERNMENTAL GROUP ON HARD FIBRES AND THE FORTY-SECOND SESSION OF THE INTERGOVERNMENTAL GROUP ON JUTE, KENAF AND ALLIED FIBRES

Beijing, the People's Republic of China, 22–24 October 2019

AN ASSESSMENT OF THE JUTE INDUSTRY IN INDIA AND ITS LINKAGES WITH THE GLOBAL VALUE CHAIN

Executive Summary

The jute sub-sector represents an important source of livelihood for millions of smallholder farmers and rural labourers. India is the world's largest producer of jute fibre and the largest market for jute textiles, including diversified products. The country has a presence in almost every stage of the global value chain, from yarn production to the manufacturing and exporting of both traditional and diversified jute textiles. The most significant upgrading experienced in the jute value chain of India is in the composition of exports in jute textiles. The country has been able to export more value-added products like fabrics, jute handicrafts and other diversified products, including agro textiles. This enhancement indicates a better integration of the production chain and the creation of more employment opportunities. However, it can further be strengthened by enhancing the linkages with the global value chains, modernizing production processes and implementing dedicated government-enabling policies.

Suggested action by the Joint Meeting

- Review the results of the analysis and provide comments, especially in terms of policies;
- Provide guidance on the need for further work on value chain analysis, recognizing the knowledge gap that exists and the necessity to engage the Membership. This would mean providing the Secretariat with the necessary assistance to conduct the work and to obtain qualitative and quantitative information, particularly on profitability of jute and alternative crops at the farm level, value addition at every stage of the value chain for jute-based products and market intelligence.

*This document can be accessed using the Quick Response Code on this page;
an FAO initiative to minimize its environmental impact and promote greener communications.
Other documents can be consulted at www.fao.org*



I. INTRODUCTION

1. At the last Joint Meeting (JM) of the Intergovernmental Group (IGG) on Hard Fibres and the IGG on Jute, Kenaf and Allied Fibres in Tanga, the United Republic of Tanzania, in 2017, delegates stressed the need to better understand the characteristics of the value chain of the various fibres to assist countries in improving the economic viability of these fibres and enhancing the participation of smallholders in the value chains. In requesting the Secretariat to prepare discussion documents, delegates recommended that value chain be examined for each fibre rather than collectively. Following upon the request of the JM, the Secretariat has prepared this document¹, which provides an examination of the jute industry in India and its linkages with Global Value Chain (GVC) and identifies key constraints facing the sub-sector.

II. OVERVIEW OF THE CURRENT SITUATION AND FUTURE DIRECTION OF JUTE

2. Aside from being known for its environmental friendliness, jute has inherent valuable physical characteristics such as lustre, high tensile strength, low extensibility, moderate heat, fire resistance and long staple grade. In addition, it is an important source of livelihood for millions of smallholder farmers and rural labourers.

3. Jute products have a favourable resource footprint. Their production requires limited amounts of energy and, considering the fibre's life cycle, jute is carbon negative. When countries across the globe strive for feasible alternatives to mitigate greenhouse gases, jute can play a significant role in achieving this goal.

4. In recent years, the growing demand for eco-friendly products has brought about positive changes to the jute sub-sector and opened new opportunities for stakeholders in the value chain. These positive environmental attributes have underpinned the evolvement of its production and consumption over the last decade.

A. PRODUCTION

5. In 2017/18, global production of jute fibre reached a volume of 3.31 million tonnes, compared to 2.59 million tonnes in 2008/09. Over the last decade, it has experienced a compound annual growth rate (CAGR) of 2.5 percent.

6. The sub-sector has also benefited from increased productivity, which rose by 7.44 percent between 2008/09 and 2017/18. Productivity gains were underpinned by the availability of good quality high yielding seeds, the use of modern technology in the process of production, like retting technologies, and improved skills at the farm and processing levels.

7. India has produced 1.53 million tonnes of jute fibre during 2017/18 (46.2 percent of global production), compared to 1.48 million tonnes during 2008/09, with a CAGR of 0.4 percent between 2008/09 and 2017/18. Production in Bangladesh grew at CAGR of 5.9 percent during the same period.

B. TRADE

8. The value of global exports of jute textiles has increased from USD 0.78 billion in 2008 to USD 1.43 billion in 2017, registering a CAGR of 6.96 percent. In 2017, Bangladesh was the leading jute textiles exporter (USD 941.36 million), followed by India (USD 341.53 million), Nepal (USD 45.14 million) and Myanmar (USD 30.78 million). It is important to note that the non-producing

¹ This document is based on a report prepared by the National Jute Board of India to the Secretariat.

jute countries like the United Kingdom, Belgium and Germany, also exported jute value-added products worth USD 27.29 million, USD 11.46 million and USD 6.72 million, respectively, in 2017, thereby playing an important role in the jute value chain.

9. Yarn of jute, or of other textile bast fibres (HS code 530710), was the most exported product in the world with a share of 29.8 percent. Bangladesh is the largest exporter of jute yarn, and contributed a share of about 98 percent of total exports, while India exported 0.3 percent of the total. Sacks and bags, for packing of goods of jute or of other textile bast fibres (HS 630510), was the second most exported item with a share of 26.2 percent of global exports. India was the top exporter of this product with a share of 32.5 percent, followed by Bangladesh with a share of 31.8 percent.

10. As regards global imports, Turkey was a significant importer of jute textiles, purchasing jute products worth USD 272 million (19.2 percent of global imports) in 2017, followed by India (USD 170 million), China (USD 132 million), Sudan (USD 83 million) and the United States of America (USD 64 million).

11. The European Union has emerged as the top export destination for the Indian jute, with a share of 18 percent, followed by the United States and Ghana, with a 12 percent share each. Exports to Côte d'Ivoire have been impressive, recording a CAGR of 25 percent between 2008 and 2017, turning that country into an important export destination for India. A study carried by the National Jute Board of India identified key potential export markets for the future. This list includes Ghana, Sudan, Indonesia, Vietnam and Tanzania.

C. COMPETITIVENESS

12. The comparative advantage² (RCA) analysis at 6-digit HS level reveals that Bangladesh enjoys a comparative advantage in three products: (i) yarn of jute or of other textile bast fibres, single (530710); (ii) jute and other textile bast fibres, raw or retted (530310); and (iii) yarn of jute or of other textile bast fibres, multiple (folded) or cabled (530720). India maintains comparative advantage in two products: (i) woven fabrics of jute or of other textile bast fibres, unbleached (531010); and (ii) sacks and bags for packing of goods (630510), whereas China has enhanced its comparative advantage in products like woven fabrics and sacks and bags for packing goods.

13. On the other hand, the export similarity index³ (ESI) analysis reveals that India is competing with China, Belgium, the United Kingdom and Nepal in the global market. Bangladesh is mostly experiencing competition from Belgium in the diversified products. The diversified products exported by Bangladesh have helped the country improve its presence in international markets.

III. INDIA AND THE GLOBAL VALUE CHAIN OF JUTE

A. INDIA'S CURRENT PARTICIPATION IN THE JUTE GLOBAL VALUE CHAIN

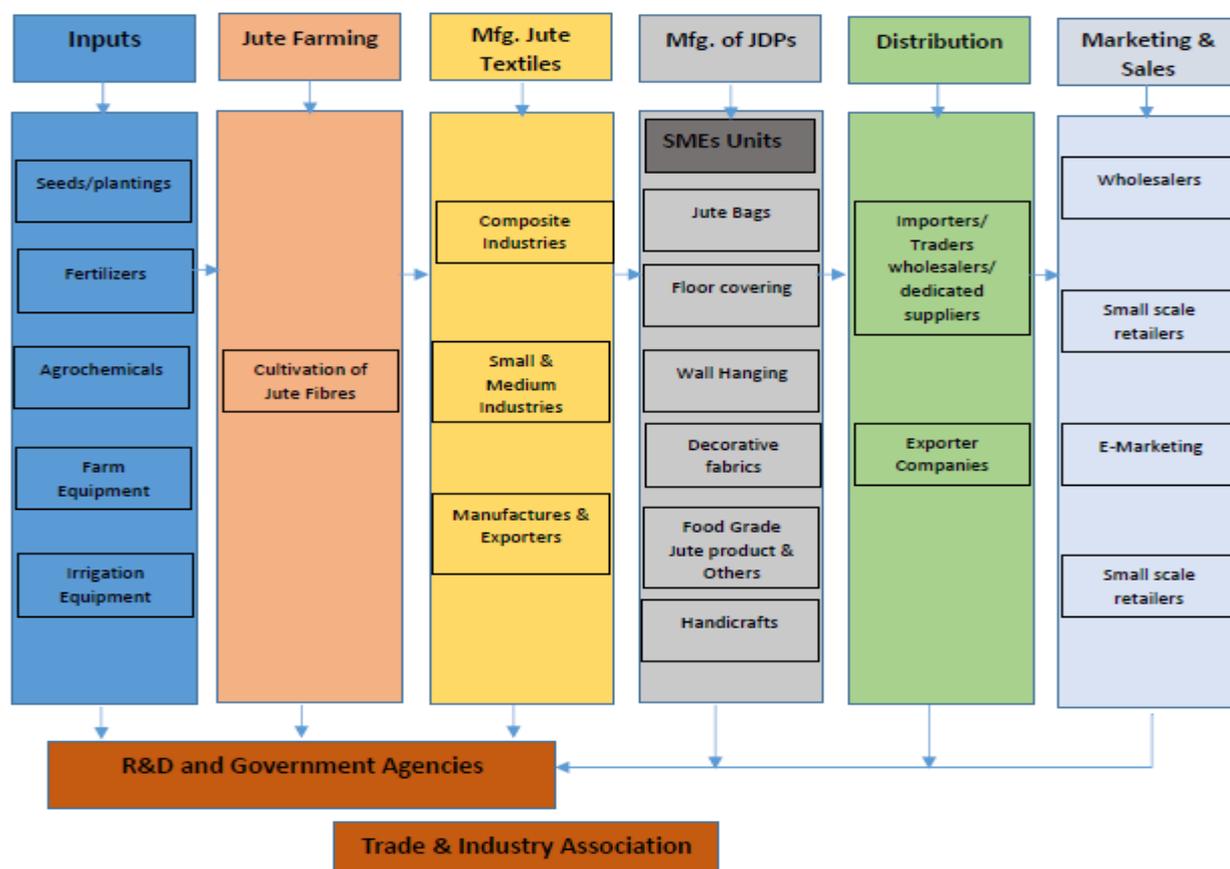
14. India is the largest producer of jute fibre and the largest market for jute textiles, including diversified products. The country has a presence in almost every stage of the value chain, from manufacturing and supply of inputs, like seeds and fertilizers, to manufacturing and exporting of both, traditional and diversified jute textiles. The jute industry provides direct employment to about 0.37 million workers in organised mills and in diversified units, including tertiary sector and allied

² The revealed comparative advantages (RCA) index measures the relative advantage or disadvantage of a country in exporting a particular product or service.

³ The export similarity index (ESI), on the other hand, quantifies the similarity of export structures of countries/regions.

activities and supports the livelihood of around 4.0 million farmers. The detailed value chain of the Indian jute sector and its presence in the value chain is depicted below:

Figure 1. Jute Value Chain of India



Source: National Jute Board of India

15. While India exported some USD 341.5 million worth of jute textiles in 2017, it also imported USD 167.3 million in the same year. The export basket consists of intermediate and value-added products, whereas the imports mainly consist of raw material and intermediary products. The underlying factors driving imports are the limited availability of locally produced high-quality jute fibres and low-cost of importing jute.

16. India's export markets and products are more diversified, as compared to competing countries like Bangladesh. The exports of jute diversified products (JDPs) have been emerging as an important item in the export basket.

17. Among the products exported, the contribution of value-added products like fabrics, sack and bags for packing of goods is significant. The contribution of raw material and intermediate products like fibre and yarn is limited in the overall export basket. Hence, the Indian jute industry is in a position to manufacture and export more value-added product by using domestic or imported raw materials. The Jute Packaging Materials (JPM) Act 1987⁴ and the Jute-Smart⁵ platform have been

⁴ Act to provide for the compulsory use of jute packaging material in supply and distribution of certain commodities in the interests of production of raw jute and jute packaging material, and of persons engaged in the production thereof and for matters connected therewith.

⁵ Jute-Smart is a web based application developed to facilitate end to end transactions for the procurement of jute sackings.

supporting the industry by providing opportunities for growth to cater to domestic jute demand, particularly in the traditional products like sacks and hessian.

18. During the last ten years, the performance of India in the jute export destinations has been mixed. It has added new markets like Ghana, Côte d'Ivoire and the United Kingdom to its basket, and strengthened its market share in the United States, however, losing market shares in Turkey, Belgium, Egypt, Thailand, Sudan and Nepal. The loss of market shares is mostly due to stiff competition from Bangladesh, as the latter has boosted its presence in key markets. Bangladesh products benefit from cost competitiveness as well as ease in market access provided under preferential tariffs offered to the Least Developed Countries (LDCs).

19. It is pertinent to mention here that non-jute producing countries like Belgium, Netherland, Turkey, and the United Kingdom have also been competing for export shares, by manufacturing and exporting value-added products often with imported fibres from India and Bangladesh. The higher level of technology adoption, coupled with innovation and manufacturing of finer quality products, have been significant in explaining their participation in the GVC of jute.

B. VALUE CHAIN OF THE JUTE INDUSTRY OF INDIA

20. To support the analysis in this document, a survey was conducted by the National Jute Board of India to identify key factors driving the jute value chain in the country and the critical stages from production to cultivation and manufacturing of value-added products. The results show that India has a comparative advantage and knowledge in a wide range of activities, including crop breeding, yarn and fabrics manufacturing and value addition. Besides, the analysis has revealed the key role played by support services provided by graders, traders of raw material, intermediary end final producers, research organisations, input suppliers, transporters, and designers of jute products.

21. The cultivated area was estimated at 770 thousand hectares in 2017, compared to 786 thousand hectares in 2008, experiencing a small decline of the CAGR of 0.2 percent. This decline had been accompanied by gains in productivity, underpinned by an increase in the adoption of better quality seeds and technology. Results of the survey also indicate that the lowest value addition occurs at the cultivation stage, which was estimated at USD 330 per hectare in 2017. The decline in earnings at the farm level and the low value addition are the main cause behind the decline in jute cultivated area. The number of farmers has declined to 1.93 million in 2010-11, as compared to 2.04 million in 2005-06, corresponding to a CAGR of -1.04 percent.

22. About 59 percent of the cost of jute cultivation is allocated to labour, for both cultivation (44.05 percent) and retting activities (14.92 percent). Based on the return from the survey, the average income from jute farming was estimated at USD 864.15 per hectare, and the expenditure incurred is estimated at USD 534.39 per hectare, leaving an estimated gross margin of USD 330 per hectare.

23. For the purpose of this study, the contribution of different key actors of the jute value chain was classified as follows:

Segment I: Value Chain of traditional jute textiles, including raw jute to fabrics/sacks; and
Segment II: Value Chain of Jute Diversified Products.

C. VALUE CHAIN ANALYSIS FOR TRADITIONAL JUTE TEXTILES

24. The traditional jute textiles mainly consist of sacking and sacking bags, twine and hessian and hessian bags. About 60 percent of the traditional jute textile products are being manufactured to cater to the requirements under the Jute Packaging Materials (Compulsory Use in Packing Commodities) Act, 1987. The remaining 40 percent of products are marketed directly in the domestic and international markets. Key segments of the traditional jute textile value chain are described in Table 1.

Table 1. Gross Value Addition in Traditional Jute Textiles

Products	Stage in value chain			Total
	Farming, harvesting, retting by farmers	Traders/Brokers	Mills	
Sacking Cloth/Bag	13.0%	14.3%	72.7%	100%
Hessian Cloth/Bag	12.9%	14.1%	73.0%	100%

Source: National Jute Board of India

D. VALUE CHAIN ANALYSIS FOR JUTE DIVERSIFIED PRODUCTS

25. While manufacturing of traditional jute textiles is mostly concentrated in the eastern region of India, the JDPs units are scattered across the country. The product basket in JDPs has been consistently growing and includes products such as decorative fabrics, home furnishings, shopping bags, handicrafts, shoes, folders etc. It is important to note that, while the organized mills are manufacturing JDPs, Small & Medium Enterprises (SMEs) are responsible for the bulk of the production activities.

26. The eco-friendliness and consumer preferences towards JDPs in both domestic and international markets, have boosted the performance of the sub-sector. It is estimated that the market size of JDPs in India has increased from USD 476 million in 2012/13 to USD 652 million in 2017/18, registering a growth rate of more than 10 percent per year. The exports of JDPs have increased from USD 66.4 million in 2012/13 to USD 88.1 million in 2016/17. Among the JDPs, decorative fabrics have emerged as one of the most important products with a 37.6 percent share in exports, followed by yarns (24.8 percent). The JDPs contribute to the highest value addition for the jute global value chain (Table 2). The development of jute products blended with other fibres like cotton, wool and coir, contribute to expanding the market further.

Table 2. Value Addition in JDPs Sector

Product	% Value Addition
Yarn	39.3
Jute Decorative fabrics	10.5
Jute Bags	51.0
Jute Carpets	60.5
Jute Made-ups	80.8
Laminated Hessian Cloth	78.3
Other Jute Products	45.0
Fine Fabric	23.1

Source: National Jute Board of India

IV. KEY CONSTRAINTS

27. In order to leverage on the strength of the domestic jute sub-sector, the industry will need to address a number of key constraints at both the micro and macro levels, including, but not limited to, constraints in production, harvesting, processing and marketing, as well as related to trade and market access, such as Tariff and Non-Tariff measures (NTMs) imposed by the importing markets. A summary of the challenges is presented below.

A. DOMESTIC

28. Lack of availability of quality seeds at affordable prices, particularly in the remote rural areas, has affected productivity and the quality of jute fibre.

29. Lack of scale at the production level, and dependence on small scale production, including fragmented landholdings in the cultivable area. Global buyers tend to favour suppliers that can consistently and reliably deliver on time, with good quality and a competitive price. The inability to scale up and deliver on a consistent basis, good quality supplies, results in loss of markets or inability to integrate in the GVC.
30. Farmers face a series of constraining factors, which include non-availability of high yielding seeds, lack of training on farm practices and difficulties in accessing modern technologies to boost farm returns.
31. Lack of co-ordination between organised industry and other key actors in the value chain such as farmers, JDPs manufacturers and other support services providers.
32. Lack of price incentives, which is adversely affecting land allocation to jute, leading to a decline in cultivated areas.
33. The potential of geotextiles is yet to be explored appropriately. Better policy initiatives with more focus on the use of geotextiles for infrastructure developments, and that address the impact of soil erosion and protection of coastal regions are needed.
34. The limited number of service providers such as designers and other skilled artisans is also adversely affecting the sector.

B. INTERNATIONAL

35. The export of jute and jute textiles products from India face import tariffs up to 20 percent in most of the export destinations including the United States and the European Union.
36. The lack of adequate knowhow among the manufacturers and exporters about the NTMs, and ways to address them is also constraining growth and greater integration of the jute sub-sector in the GVC.

V. CONCLUDING COMMENTS

37. The most significant upgrading experienced in the jute value chain of India is in the composition of exports in jute textiles. The country has been able to export more value-added products like fabrics and other diversified products, as compared to raw material and intermediaries. The export basket has also increased from traditional products to diversified jute products, including jute handicrafts and agro textiles, like soil saver. This enhancement indicates a better integration of the production chain and the creation of more employment opportunities. However, it can further be strengthened by considering the following actions:
 38. Creating a mechanism for strengthening the linkages with global markets by addressing issues of tariffs and non-tariff measures. This is essential for better market penetration and greater integration with the jute global value chain.
 39. Strengthening collaboration with Bangladesh and other countries, such as the Netherlands, the United Kingdom, Belgium and France, on product development, sharing technology and the enhancement of the quality of the fibre.
 40. Pursuing a strategy focused on modernisation and product diversification in organised jute mills to increase the product basket for jute.
 41. Implementing dedicated government-enabling policies for expanding the use of geotextiles.

42. Considering specific generic promotion to enhance the use of eco-friendly natural textiles for packaging, as most of the states in India have either banned or are in the process of banning the use of plastics for packaging purpose. The ban of plastic is estimated to generate a market of about USD 540 million for the domestic jute sub-sector.
43. Implementing a dedicated policy for the development of JDPs with a focus on products and market development to consolidate and expand India's market share in various segments such as home textiles, agro textiles, jute textile handicrafts and other diversified products.