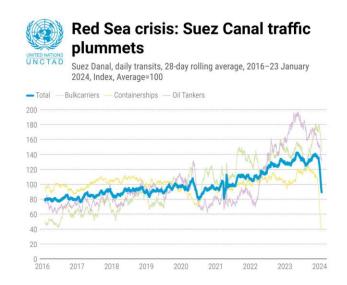


World Natural Fibre Update February 2024

Ocean Shipping Disruptions Threaten Natural Fibre Markets

Natural fibres are export-dependent commodities, with most processing and end-use consumption taking place outside countries of production. Approximately 40% of world cotton production is exported as fibre, and if trade in apparel and home furnishings is considered, approximately two-thirds of all cotton moves via ocean freight at some point in the value chain. Virtually all abaca is exported as fibre or pulp. Virtually all flax long fibre is grown in Europe and processed in East Asia. Exports of jute and jute products account for approximately three-fourths of all production in Bangladesh. Almost all sisal produced in Brazil and East Africa is consumed in the Middle East and East Asia. Virtually all Merino wool production is exported from Australia.



The UN's trade and development body, UNCTAD, says that disruptions to shipping in the Red Sea, the Black Sea and the Panama Canal are affecting key trade routes. UN's daily press briefing on 26 January.

The conflict in Ukraine has triggered substantial shifts in oil and grain trade patterns. The Panama Canal is grappling with a severe drought, resulting in a 36% reduction in total transits during January 2024 compared to a year ago. Weekly container ship transits through the Red Sea plummeted by 67% by the end of January.

Shipping costs, including insurance premiums, are increasing. Ships rerouted from the Suez and Panama Canal routes must travel faster to compensate, burning more fuel per mile. Circumnavigating Africa via the Cape of Good Hope rather than moving through the Red Sea adds up to 14 days to a ship's journey. Nearly 15% of all global maritime trade passes through the Red Sea.

According to UNCTAD, prolonged interruptions in container shipping pose a direct threat to global supply chains. Current container rates are still approximately half of the peak seen during the COVID-19 crisis, and it will take time for the higher prices to hit consumers. Nevertheless, the impacts of disruptions to world trade will be significant if they continue.

Container Rates

The Freightos Baltic Global Container Index for backhaul traffic from US West Coast ports to China (FBX02) for 40' containers, including surcharges, rose an additional 6% during January to \$396. The indicator was still 52% lower than a year earlier, and 64% lower than in May 2022.

The Freightos Index for traffic using the Panama Canal (FBX04) rose 24% in January to \$626 per container. Nevertheless, charges on this route are still lower than at the height of the Covid disruptions.

In contrast, the Freightos Index for traffic using the Red Sea exploded during January. FBX14 climbed from \$186 per container in December to \$1,330 in January, a rise of 616% and higher even than during the worst of the Covid disruptions. Greek and Spanish cotton going to Asia, West African cotton going to Asia is often transshipped through Rotterdam and hence through the Red Sea, flax and hemp moving from Europe to Asia, jute and jute products moving from Bangladesh to Europe, are all affected by the disruptions to sea-borne traffic through the Red Sea. (https://fbx.freightos.com/freight-index/FBX)

UN General Assembly Recognizes Key Contributions of Natural Plant Fibres

Resolution 78/169 adopted by the UN General Assembly on 19 December 2023 recognized that the sustainable production, consumption, and use of natural plant fibres can make a positive contribution towards efforts to achieve sustainable development, poverty alleviation, improved human well-being, while addressing environmental degradation and climate change.

The General Assembly encouraged Member States to foster political support, the mobilization of resources, capacity building and proper management and momentum for the sustainable production, consumption, and use of natural plant fibres at the global, regional, national and local levels (https://digitallibrary.un.org/record/4032270?ln=en)

Annual DNFI Meeting in Frankfurt

The Discover Natural Fibres Initiative (DNFI) held its 15th annual meeting since its formation in 2010 on 10 January 2024 in the office of the German Textile Industry Association (IVGT) in Frankfurt. A full report of the meeting will be available on DNFI.org. Highlights of the meeting:

- Prices of commodities as an asset class remained 40% above the pre-covid average during 2023. However, slowing economic activity in China is resulting in declining global consumption, and lower prices are expected by The World Bank during 2024.
- Yields of natural fibres are not rising. Investments are needed to support productivity gains and to improve technical fibre performance characteristics.
- Over the last four decades, synthetic fibres have accounted for all the growth in world fibre consumption. As of 2023, China accounts for about two-thirds of world synthetic fibre production.
- New trade laws, such as the German "Corporate Sustainability Due Diligence Directive (CSDDD)", will require greater investment in processing, certification, and measures to ensure the traceability of supply chains. However, the return on investment is not guaranteed.

- A combination of poor weather, disruptions to ocean shipping, rising energy costs linked to the
 war in Europe, increased labor costs, tax policies in importing markets, and exchange rate
 fluctuations are posing challenges for trade in all natural fibres.
- Current, unregulated textile foot printing methodologies, such as the Worldly (HIGG) MSI, have
 enabled the growth of fast fashion during the past 30 years. Upcoming legislation aims to deal
 with this issue, but the textile industry has never been regulated before, and big industry is
 being payrolled by fossil fuel industry lobbyists in Brussels. The Make The Label Count
 Campaign is working to strengthen and unite natural fibre efforts to ensure robust, objective
 and fact-based discussions about textile measuring tools and textile sustainability standards.

DNFI Innovation in Natural Fibre Research Award

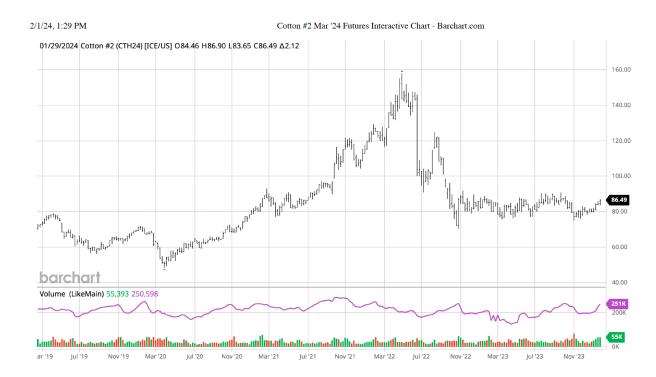
Ms Amelie Pörschmann was recognized as the winner of the 2023 DNFI Innovation in Natural Fibres Award. Ms. Pörschmann is a textile design student at Hochschule Hof, Germany. She developed a woven fabric pot in which plants can be started. Once seedlings reach a stage suitable for transfer to soil, they can be planted intact within their biodegradable pots and do not need to be removed from plastic planting trays, which are currently in common use.



(From left: Mr. Khaled Schuman, Ms Dalena White, **Ms. Amelie Pörschmann**, Ms. Elke Hortmeyer, Dr. Christian Schindler, Dr. Terry Townsend (Photo: (c) 2024 Mr. Stefan Schmidt)

Natural Fibre Price Trends

- The Eastern Market Indicator of prices for merino wool in Australia fell 4% in January to US\$7.80/kg. The EMI in USD was 18% lower than in January 2023. (https://www.wool.com/market-intelligence/weekly-price-reports/)
- However, the British Fleece Wool Price Indicator of broad wool prices rose 3% in January to US\$1.69/kg. The Indicator was 29% higher than in January 2023. (https://www.britishwool.org.uk/price-indicator)
- The nearby cotton futures contract on the Intercontinental Exchange (March 2024) ended January at \$1.88/kg, up 5% compared with the end of December, and basically unchanged from a year earlier. After rising during Covid and falling in the first ten months of 2022, cotton prices have been unusually stable since November 2022. (https://www.barchart.com/futures)



https://www.barchart.com/futures/quotes/CTH24/interactive-chart

- Polyester yarn, 32 count, single, white, virgin material, grade 1, (directly competitive with spun cotton yarn) in China was quoted at US\$1.76/kg at the end of January, essentially unchanged since June 2023, but 10% lower than in January 2023. (http://www.sunsirs.com/uk/prodetail-1241.html)
- The Government of India set minimum prices for jute in market yards beginning in October 2023, with the predictable result that transactions volume plummeted. The

Indian Jute Balers Association (JBA) did not publish quotes during December 2023 or January 2024 as volume was nil. Quotes during October and November converted to US\$ averaged 69 cents/kg, 12% higher than at the end of September.

 However, market reports indicate that export prices for raw jute fibre from Bangladesh (Bangladesh exports between half and three-fourths of production as jute fibre) increased by between 3 cents and 5 cents per kg during January.

In India, 70% of total demand for jute is satisfied by government procurement for sackings to store wheat and sugar. As of January, government orders were continuing at a "satisfactory" level, and prices of jute were rising, though they remained below the minimum price. (WILHELM G. CLASEN GmbH & Co. KG)

- Prices of silk (grade 3A; Denier 20/22D; regain 11%) in China were quoted at US\$71.70/kg at the end of January, 3% higher than at the end of December and 11% higher than one year earlier. (http://www.sunsirs.com/uk/prodetail-322.html)
- Quotes for coir fibre in India are again published on the Connect2India web site. Prices in January 2024 converted to US\$ were 20.5 cents/kg, unchanged over the past year. (https://connect2india.com/Coconut-Coir-Fiber)
- Quotes for coir fibre fob Indonesia converted to US\$ were \$0.11/kg in January, unchanged from November and December but up from \$0.09 per kilogram in October. (https://coconutcommunity.org/page-statistics/weekly-price-update)
- Prices of Western European flax long fibre, ex scutching mill, averaged over all qualities, converted to US\$, continued their extraordinary rise during October and November 2023, reaching nearly \$9 per kg. Dollar prices in November were 71% higher than a year earlier and about seven times their average level in 2010. Poor weather in the growing areas of France, Belgium, and The Netherlands, which account for around 75% of world production, caused shortages and higher prices according to Alliance for European Flax/Linen and Hemp: (https://dnfi.org/go/aeflh)
- Prices of Brazilian sisal, Bahia, Type 3 DB, FOB Salvador were quoted at US\$0.945 per kilogram in October (the latest month available), 10% lower than a year earlier. Tanzania/Kenya 3L, FOB were \$1.975 per kg in October, while UG was quoted at \$1.750 per kg. Both were unchanged over the most recent four months, but prices were down 13% compared with a year earlier.
 (https://fpma.fao.org/giews/fpmat4/#/dashboard/tool/international)

World Natural Fibre Production

World natural fibre production in 2023 is estimated at 31.4 million metric tons, down approximately 600,000 tons from 2022. Natural fibre production has not increased in the last two decades because yields (kilograms per hectare) have stagnated.

Based on updated data from FAO for agave fibres, other fibre crops, flax, hemp, kapok and ramie, estimates of natural fibre production in 2020, 2021 and 2022 have been revised downward in the past month.

Estimates for cotton published by the United States Department of Agriculture are used in DNFI tables. The International Wool Textile Organization provides information for wool. Data from the Philippines for 2023 are used to estimate world abaca production. Reports of jute crop conditions and harvest progress in Bangladesh and India are used to estimate jute production, and comments by industry observers influence the estimate of flax fibre production. Estimates of 2023 production of other fibres are trend extrapolations.

Abaca: Abaca production in the Philippines dropped 15% in 2023 compared with 2022, and world abaca production is estimated lower accordingly. (https://philfida.da.gov.ph/index.php/2016-11-10-03-32-59/2016-11-11-07-56-39/fiber-statistics-2023)

Cotton: World cotton production in 2023 was estimated in January by USDA at 24.6 million tonnes, essentially unchanged from the estimate released in December. Between 85% and 90% of world cotton production occurs in the Northern Hemisphere each season, and most of the 2023 crop has been harvested and ginned.

Wool: For 2023-24, the Australian Wool Production Forecasting Committee estimates no change in Australian production from 2022-23. Fresh shorn wool volumes during July-December 2023 were about 2.5% higher than in the same months of 2022, but extremely dry weather during June to October 2023 in Australia will be reflected in lower wool production in Jan-Jun 2024. Consequently total 2023-24 Australian production may be slightly lower than in 2022-23. (Independent Commodity Services on behalf of IWTO)

The dry weather that withered pastures across Australia in 2023 caused farmers to send increased numbers of animals to slaughter, which triggered a plunge in cattle and sheep prices. The crash in sheep meat prices in 2023 seems likely to rule out increases in sheep numbers in the major wool exporters. Sheep numbers are under downward pressure in New Zealand, South Africa, and South America. In summary, an unchanged world wool volume for 2023 from 2022 is assumed. (Independent Commodity Services on behalf of IWTO)

Silk: World silk production rose from approximately 160,000 tonnes per year between 2010 and 2014 to 202,000 tonnes in 2015 and then fell to 86,000 tonnes by 2021. The preliminary estimate of silk production in 2022 is 91,000 tonnes.

(International Sericulture Commission: https://www.inserco.org/en/home).

Just as cotton is ginned from seed cotton, clean wool is scoured from greasy wool, and jute fibres are retted from raw jute, silk is reeled from cocoons. However, unlike seed cotton, greasy wool or raw jute, silk cocoons are storable. Consequently, annual production of silk fibre can vary with changes in cocoon stocks. About 85% of world silk production occurred in China in 2015, and newly-installed silk filatures (machines that reel silk from cocoons) in Guangxi Province beginning around 2015 drove silk production higher as cocoon stocks were consumed. As cocoon stocks were depleted after 2015, silk production declined. Over the long run, annual world silk production is likely to recover as production of cocoons and production of silk are brought into balance. (Comments by Mr. João Berdu, Vale de Seda, Brazil https://dnfi.org/qo/vale-da-seda).

World Fibre Production						
	2020	2021	2022, est.	Pct of total fibres in 2022	Pct of natural fibres in 2022	2023, est.
	Metric Tonnes	Metric Tonnes	Metric Tonnes			Metric Tonnes
Abaca	75.889	83.501	72.000	0,06%	0,2%	62.000
Agave Fibres	40.481	40.656	40.639	0,04%	0,1%	41.000
Coir, without pith	1.101.498	1.115.349	1.145.000	1,0%	3,6%	1.175.000
Cotton Lint	23.989.000	24.920.531	25.377.749	22,4%	79,3%	24.641.846
Other Fibre Crops, raw, n.e.c.	738.308	572.945	554.146	0,5%	1,7%	622.000
Flax, Long Fibre	194.000	180.000	175.000	0,2%	0,5%	175.000
True Hemp, raw or retted	219.995	289.883	256.564	0,23%	0,8%	276.564
Jute, Kenaf & Allied Fibres	2.874.800	3.175.600	2.817.000	2,5%	8,8%	2.900.000
Kapok fibre	75.827	75.472	77.000	0,07%	0,2%	76.000
Ramie, raw or retted	62.022	8.166	7.625	0,01%	0,0%	8.000
Sisal, Henequen and similar hard fibers	280.800	281.400	273.000	0,2%	0,9%	278.000
Silk, raw	91.765	86.311	91.221	0,08%	0,3%	90.000
Wool, clean	1.019.575	1.037.933	1.053.000	0,9%	3,3%	1.053.000
Other animal fibres	27.000	26.460	27.000	0,02%	0,1%	27.000
Total Natural Fibers	30.790.960	31.894.207	32.000.000	28,2%	100,0%	31.400.000
Cellulosic	6.600.000	7.155.000	7.334.000	6,5%		7.407.000
Synthetic Filament	49.514.000	53.029.000	53.981.000	47,6%		56.641.000
Synthetic Staple	19.750.000	20.050.000	20.178.000	17,8%		20.421.000
Total Manmade Fibers	75.864.000	80.234.000	81.493.000	71,8%		84.469.000
Total Fiber Production	106.654.960	112.128.207	113.493.000	100,0%		115.869.000

(Table World Fibre Production: © Dr. Terry Townsend)

Value of Natural Fibre Production and Employment

World Natural Fibre Value and Employ	yment				
-	2023 Average Price Received by Farmers	2023	2023	2023 Average Earnings per Household	
		Value of Production	Producing Households		
	\$/kg	\$ Billion	Millions	\$ Thousands	
Abaca	\$1,29	\$0,08	0,1	\$0,5	
Agave Fibres	\$0,99	\$0,04	0,0	\$1,0	
Coir, without pith	\$0,21	\$0,24	0,6	\$0,4	
Cotton Lint	\$1,78	\$43,87	24,0	\$1,8	
Other Fibre Crops, raw, n.e.c.	\$0,32	\$0,20	0,6	\$0,3	
Flax, Long Fibre	\$1,09	\$0,19	0,0	\$19,0	
True Hemp, raw or retted	\$2,17	\$0,60	0,3	\$2,1	
Jute, Kenaf & Allied Fibres	\$0,71	\$2,05	10,0	\$0,2	
Kapok fibre	\$3,56	\$0,27	0,1	\$3,4	
Ramie, raw or retted	\$1,13	\$0,01	0,0	\$1,1	
Sisal, Henequen and similar hard fibers	\$1,73	\$0,48	0,1	\$8,6	
Silk, raw	\$7,75	\$0,70	2,0	\$0,3	
Wool, clean	\$6,70	\$7,05	5,0	\$1,4	
Other animal fibres	\$13,40	\$0,36	0,1	\$4,2	
Total Natural Fibers		\$56	43	\$1,3	

(Table World Natural Fibre Value and Employment: © Dr. Terry Townsend)

The value of world natural fibre production at the farm level reached nearly \$60 billion in 2023. The farm value of natural fibre production averaged US\$50 billion prior to Covid but rose to approximately \$80 billion in 2021 and \$75 billion in 2022 because of increased prices of many fibres. During 2023, prices of fibres tended to return to pre-Covid levels.

Between 40 million and 50 million households are involved in natural fibre production around the world. When seasonal labor is considered, total annual involvement in natural fibre production reaches between 150 million and 200 million people, or 2-3% of the world population. Average annual household earnings from natural fibre production were approximately \$1,300 in 2023, and this amount was highly significant in meeting UN Sustainable Development Goals.

Other News

Jute: The Government of the Indian State of West Bengal (containing the city of Kolkata) reached an agreement during January 2024 with jute workers and mill owners to raise wages. (https://www.wgc.de/en/)

Reflecting the labor-intensive structure of the jute industry, the agreement is expected to benefit 250,000 workers in 113 jute mills, meaning that average employment per mill is 2,200. In comparison, a large integrated cotton spinning and weaving mill in India might have total employment of between 500 and 1,000.

Sisal: China now accounts for three-fourths of all sisal exports from Brazil. The major factors encouraging increased imports by China during 2023 included the favourable price level for Brazilian Sisal since the end of 2022, the expectation that the Chinese economy would experience a strong economic boost in 2023 following the lifting of Covid-related restrictions, and falling freight rates from Salvador / Bahia to Asia and the Far East (especially China) between the first and third quarter of 2023.

The majority of Brazilian sisal shipments go through the southern Brazilian port of Santos and then across the Southern Atlantic past South Africa, either directly to the Far East (China), or they are transhipped in Asia (Malaysia / India). Freight rates from Brazil to Asia and Far East destinations have increased since the last quarter 2023, but the additional charges are much lower in comparison with most other routes.

East Africa experienced severe weather during 2023, including floods during some months and drought during others. The weather had only a minor impact on sisal production in Kenya and Tanzania, but persistent drought is resulting in a significant decline in production in Madagascar. (https://www.wgc.de/en/)

Wool and Mohair: The United Nations' International Fund for Agricultural Development (IFAD) and the Kingdom of Lesotho have partnered to improve the lives of 225,000 small-scale wool and mohair producers over seven years. The initiative named the Wool and Mohair Value-chain Competitiveness Project (WaMCoP) has received \$72m and aims to foster inclusive and sustainable economic growth while generating employment opportunities within the private sector.

Small-scale farmers in Lesotho are the primary source of wool and mohair fibres, constituting 60% of agricultural exports and supporting more than a quarter of the rural population. However, challenges such as climate change, unreliable input supply, overstocking, and poor land conditions

hinder production. Coordination issues, the absence of a certification system, limited capacity to address market demands, and insufficient access to finances compound these challenges.

More About DNFI

The Discover Natural Fibres Initiative facilitates the exchange of information and experiences and works to advance the common interests of all natural fibres in the face of competition with oil-based and wood-based manmade fibres. Membership in DNFI is open to anyone with an interest in the growth of natural fibre industries. To become a member, simply register on-line at https://dnfi.org/.

DNFI is a member of Make the Label Count (https://www.makethelabelcount.org/), a coalition of natural fibre and environmental organizations working to ensure that sustainability claims for textile products in the EU are technically sound. Sustainability claims must be transparent, accurate and complete, allowing producers and consumers to make informed choices about the clothing and home furnishings they make and buy.

Events:

- The 37th International Cotton Conference Bremen will be held during 20-22 March 2024. The event will be surrounded by a complete Bremen Cotton Week with several additional cotton and textile related meetings and workshops. The conference will be held in hybrid format on-site in Bremen and online. (https://dnfi.org/go/cotton-conference-bremen/)
- The DNFI members ITMF.org, IVGT.de and Fiber Institute Bremen are organising the 3rd International Spinners and Textiles Seminar on 19 March 2024 in Bremen at the Bremen Cotton Exchange Building, Room 406, Wachtstrasse 17-24, 28195 Bremen, Germany. (https://textileseminar.com/)



- The next meeting of DNFI members is scheduled for 22 March 2024 in Bremen at the Bremen Cotton Exchange building, as always in hybrid format. Information and agenda to follow.
- The 93rd IWTO Congress, hosted this year by Wool Industries Australia (WIA) in Adelaide, Australia on 15-18 April 2024, is the annual meeting point for the global wool industry. It is a key time for woolgrowers, traders, primary processors, spinners, weavers, garment manufacturers to meet with retailers, fashion designers and other companies involved within the global wool supply chain. (http://www.iwto.org/)
- The ITMF Annual Conference is scheduled for September 8-10, 2024 in Samarkand, Uzbekistan together with the IAF World Fashion Convention 2020. (http://www.itmf.org/)