STATEMENT FROM THE DELEGATION OF TAIWAN AT THE 83rd PLENARY MEETING OF THE INTERNATIONAL COTTON ADVISORY COMMITTEE

I. Overview

Taiwan's textile and apparel industry has experienced rapid growth since the 1950s. Initially focused on processing imported raw materials, the industry expanded alongside the rise of the petrochemical sector, with firms investing in man-made fibers, such as polyester and microfibers. Combined with cotton spinning technologies, this laid the foundation for a comprehensive industrial base. Over the past seven decades of continuous upgrading and innovation, Taiwan has developed an integrated supply chain encompassing man-made fibers, spinning, weaving, dyeing and finishing, and garment production. Today, it stands as a key global source of functional and high value-added textiles, exerting significant influence in the international market.

In recent years, as global inflationary pressures and economic fluctuations have gradually eased, demand in the European and U.S. markets has shown signs of recovery, with brand inventories returning to relatively healthy levels. Nevertheless, procurement models have become increasingly cautious, placing greater emphasis on supply chain responsiveness and product differentiation. To meet these challenges, Taiwan's textile manufacturers are accelerating transformation—shifting from a price-driven model toward one led by research, development, and design—thereby enhancing added value and overall competitiveness.

At present, three major trends dominate the international market: functionality, sustainability, and smart textiles. Functional fabrics highlight comfort and protection; sustainability emphasizes recycled fibers, low-carbon processes, and circular utilization; while smart textiles are extending applications into sports, healthcare, and outdoor activities. Taiwanese companies are actively promoting the use of organic cotton, eco-friendly blends, and recycled polyester, launching innovative fabrics that combine performance with sustainability, while earning recognition from international brands. Looking ahead, the industry will continue to deepen its development along the trajectory of "functionality + sustainability + technology," thereby further consolidating Taiwan's position in global supply chains and supporting brands in achieving their sustainability goals.

II. Background of Taiwan's Textile and Apparel Industry

A. Textile and Apparel Industry: Taiwan's Third-largest Trade Surplus Industry

Taiwan's textile and apparel industry is primarily concentrated in the upstream and midstream sectors, while the downstream segment, which is highly labor-intensive, is largely located overseas. By leveraging cost efficiency and production capacity advantages abroad, these downstream operations support the development of upstream and midstream industries. This industrial division enables Taiwan to focus on high value-added areas, continuously strengthening its competitiveness through research, development, and technological innovation. Such a model not only consolidates Taiwan's position in global supply chains but also provides favorable conditions for enhancing production value, export scale, and overall market influence.

In 2024, Taiwan had a total of 4,361 textile and apparel factories, employing nearly 140,000 workers, with an overall production value of USD 10.39 billion. Of this, the textile sector accounted for USD 9.73 billion, which represented 93.6% of total industry output, while the apparel sector contributed USD 660 million, and represented 6.4% of the total (see Table 1).

Table 1: Taiwan's Textile & Apparel Production Value, Manufacturers, and Employees in 2024

Items	Production Value (billion US$)	Number of Current Manufacturers	Employees
Textiles	9.73	3,223	108,395
Apparel	0.66	1,138	31,400
Total	**10.39**	**4,361**	**139,795**

Source: Compiled by the Taiwan Textile Federation (TTF) with data from the Directorate-General of Budget, Accounting & Statistics (DGBAS) under the Executive Yuan, and the Department of Statistics under the Ministry of Economic Affairs (MOEA).

Note: 1. The Department of Statistics under the MOEA conducted base period and item adjustments in Auguest 2025. As a result, the output values in the table above have all been revised.

2. As announced by the Central Bank of Taiwan in 2025, the exchange rate for 2023 was US$1 = NT$32.108.

In 2024, Taiwan's textile and apparel industry recorded an export value of USD 6.74 billion and an import value of USD 3.65 billion, resulting in a trade surplus of USD 3.09 billion. This positioned the sector as Taiwan's third-largest industry by trade surplus (see Table 2).

Table 2. Taiwan's Textile and Apparel Export, Import, and Trade Balance (2020–2024)

Unit: USD billion

Item / Year	Export Value (A)	Import Value (B)	Trade Surplus (C = A-B)	National Trade Surplus (D)
2020	7.53	3.37	4.16	58.98
2021	9.02	3.86	5.16	64.41
2022	8.85	3.93	4.92	51.33
2023	6.63	3.66	2.98	80.79
2024	6.74	3.65	3.08	80.61

Source: Compiled by the Taiwan Textile Federation (TTF) with data from Ministry of Finance Trade Statistics.

Over the past decade, Taiwan's textile and apparel industry has maintained an average export dependency ratio of 71% (measured as the share of exports in total production value), underscoring its strong export-oriented nature. In 2024, benefiting from easing global inflation and interest rate cuts by major central banks, the global economy showed improved signs of stabilization and consumer confidence, which led to year-on-year growth in the industrial output of the textile and apparel sector. However, due to the lingering impact of the economic downturn in 2023, the number of operating factories and employees did not increase immediately.

B. Textile and Apparel Exports: Fabrics Remain the Core Export Product

In 2024, Taiwan's total textile and apparel exports reached USD 6.73 billion, for a 1.5% increase over 2023. Of these, fabric exports amounted to USD 4.78 billion, up 1.8% from the previous year, while yarn exports stood at USD 910 million, for a 4.7% increase. In terms of export structure, fabrics remained the largest export category, accounting for 70.9% of total exports. This highlights not only the pivotal role of the weaving sector in bridging upstream and downstream production processes, but also its position as one of the most significant export segments within the textile and apparel industry. Overall, exports of upstream and midstream products—including fibers, yarns, and fabrics—together accounted for nearly 90% of total textile exports (see Table 3).

Table 3: Taiwan's Textile & Apparel Exports in 2023 and 2024

Items	Export Value (billion US$)				Export Volume (10,000 tons)			Unit Price (US$/kg)		
	2023	**2024**	Growth Rate (%)	Share (%)	2023	**2024**	Growth Rate (%)	2023	**2024**	Growth Rate (%)
1. Fiber	0.39	**0.34**	-12.4	5.0	30.2	**25.6**	-15.2	1.3	1.3	3.1
2. Yarn	0.87	**0.91**	4.7	13.5	28.9	**29.9**	3.7	3.0	3.1	1.0
3. Fabric	4.69	**4.78**	1.8	70.9	50.7	**49.6**	-2.0	9.3	9.6	3.9
4. Apparel	0.34	**0.35**	3.6	5.2	1.4	**1.4**	-3.5	23.8	25.6	7.6
5. Miscellaneous	0.35	**0.36**	2.9	5.3	6.2	**6.1**	-2.4	5.6	5.9	5.5
Total	6.64	**6.73**	1.5	100.0	117.4	**112.6**	-4.0	5.7	6.0	5.8

Source: Compiled by the Taiwan Textile Federation (TTF) with data from Taiwan Customs Statistics

C. Textile and Apparel Imports: Apparel Remains the Largest Imported Product

In 2024, Taiwan's textile and apparel imports totaled USD 3.65 billion, down slightly by 0.3% from 2023. Apparel remained the largest category at USD 2.21 billion, followed by miscellaneous textiles (USD 510 million), fabrics (USD 400 million), yarns (USD 330 million), and fibers (USD 200 million). Compared to 2023, total imports in 2024 increased across all categories except fibers, which declined. Yarns recorded the largest growth, rising by 10% (see Table 4).

Table 4: Taiwan's Textile & Apparel Imports in 2023 and 2024

Items	Import Value (billion US$)				Import Volume (10,000 tons)			Unit Price (US$/kg)		
	2023	**2024**	Growth Rate (%)	Share (%)	2023	**2024**	Growth Rate (%)	2023	**2024**	Growth Rate (%)
1. Fiber	0.29	**0.2**	-31.0	5.5	12.9	**9.0**	-30.2	2.3	**2.2**	-1.3
2. Yarn	0.3	**0.33**	10.0	9.0	7.9	**9.4**	19.0	3.8	**3.5**	-8.4
3. Fabric	0.39	**0.4**	2.6	11.0	7.8	**8.6**	10.3	5.0	**4.7**	-6.2
4. Apparel	2.21	**2.21**	0.0	60.5	13.3	**13.5**	1.5	16.6	**16.4**	-1.3
5. Miscellaneous	0.47	**0.51**	8.5	14.0	8.1	**9.0**	11.1	5.8	**5.7**	-1.2
Total	3.66	**3.65**	-0.3	100	50	**49.5**	-1.0	7.3	**7.4**	1.0

Source: Compiled by the Taiwan Textile Federation (TTF) with data from Taiwan Customs Statistics

III. Background of Taiwan's Cotton Spinning Industry

A. Significant Decline in Raw Cotton Imports

Raw cotton, a primary input for the cotton spinning industry, is entirely dependent on imports because there is no domestic production in Taiwan. In 2024, cotton imports totaled 20,642 bales (with one international standard bale equivalent to 218 kilograms), for a sharp 43% decrease from the 30,239 bales in 2023. The United States remained Taiwan's largest supplier, accounting for 38.9% of the import value, followed by India at 38.5% and Australia at 6.8%.

The substantial decline in cotton imports reflects the strategic adjustments in raw material procurement and production. On the one hand, as international inventory levels stabilized, orders from European and U.S. brands began to recover in early 2024. However, in response to high inventory pressures in the preceding two years, manufacturers adopted more cautious stocking strategies, avoiding large-scale cotton purchases to hedge against market fluctuations. On the other hand, Taiwan's cotton spinners have been upgrading product structures, shifting toward recycled fibers, blended functional yarns, and higher value-added orders, thereby reducing dependence on raw cotton. Additionally, some manufacturers relocated production overseas as part of global capacity realignment, further reducing domestic demand for cotton imports.

B. Cotton Yarn Production, Sales, and Inventory: Overall Decline

In 2024, Taiwan's cotton yarn (excluding CVC yarn) output reached 203,273 bales, for a 29.4% decrease from 2023. Domestic sales (including in-house use) stood at 47,859 bales (23.5% of the total), for a slight increase of 2.8% over the previous year. Export sales reached 202,036 bales, down 8.5% year-on-year, while year-end inventories dropped sharply to 39,742 bales, for a 51.3% decline compared to 2023 (see Table 5).

Table 5: Production, Sales, and Inventory of Cotton Yarn from 2020 to 2024 (Unit: bales)

Year	Production	Domestic Sales	Export Volume	Ending Inventory
2020	457,759	158,710	298,209	36,202
2021	455,772	156,306	299,669	48,841
2022	373,967	153,250	206,152	64,019
2023	288,085	46,543	220,745	81,651
2024	**203,273**	**47,859**	**202,036**	**39,742**

Note: 1 bale = 400 pounds = 181kg. (commonly used in Asian markets)
Source: Taiwan Spinners Association

In 2024, Taiwan's staple yarn production totaled 390,692 bales, down 19.4% from 2023. Domestic sales (including in-house use) amounted to 225,039 bales (57.6%), up 6.1% over the previous year. Exports reached 239,399 bales, down 5.4% year-on-year, while year-end inventories fell to 148,666 bales, for a 24.3% decline from 2023 (see Table 6).

Table 6: Production, Sales, and Inventory of Staple Yarn from 2020 to 2024

(Unit: bales)

Products	Year	Production	Domestic Sales	Export Volume	Ending Inventory
(1) Cotton yarn (including CVC yarn)	2020	519,564	206,038	319,843	52,105
	2021	549,818	204,493	345,804	64,715
	2022	443,568	186,439	236,115	86,284
	2023	328,196	68,439	242,877	99,598
	2024	**251,045**	**75,744**	**229,616**	**56,705**
(2) Man-made fiber yarn	2020	207,131	173,216	26,332	111,341
	2021	194,791	190,808	16,979	97,891
	2022	155,687	140,972	6,639	93,855
	2023	156,391	143,183	10,322	96,914
	2024	**139,647**	**149,295**	**9,784**	**91,960**
Total production of spun yarn (1+2)	2020	726,695	379,254	346,175	163,446
	2021	744,609	395,301	362,783	162,606
	2022	599,255	327,410	242,754	180,139
	2023	484,587	212,065	253,199	196,512
	2024	**390,692**	**225,039**	**239,399**	**148,666**

Note: 1 bale = 400 pounds = 181kg.
Source: Taiwan Spinners Association

C. Analysis of Cotton Yarn Trade: Decline in Both Export and Import Volumes

In 2024, Taiwan's cotton yarn exports reached 272,376 bales, down 6.3% from the 290,608 bales in 2023, with export value at USD 99.4 million, for a 14.5% drop from USD 116.3 million. Imports totaled 104,420 bales, for a 10.8% decline from the 117,127 bales in 2023, for a value of USD 56 million, down 14.4% from USD 65.4 million (see Table 7).

Table 7: Exports & Imports of Cotton Yarn in 2023 and 2024

	Volume (bales)			Value (million US$)			Unit Price (US$/kg)		
	2023	**2024**	Growth Rate (%)	2023	**2024**	Growth Rate (%)	2023	**2024**	Growth Rate (%)
Exports	290,608	**272,376**	-6.3	116.3	**99.4**	-14.5	2.1	**2**	-4.8
Imports	117,127	**104,420**	-10.8	65.4	**56**	-14.4	3.1	**3**	-3.2

Note: 1 bale = 400 pounds = 181kg.
Source: Compiled by the Taiwan Textile Federation (TTF) with data from Taiwan Customs Statistics

IV. Taiwan's Participation in the Global Cotton Spinning Value Chain

A. Global Sustainability Trends in the Cotton Spinning Industry and Taiwan's Role

Sustainability has become the key driver of transformation in the global cotton spinning industry. As brands and consumers emphasize environmental protection, carbon reduction, and supply chain transparency, the industry is accelerating its green transition—from raw material selection to process innovation. This includes a wider use of sustainable cotton, reduced water and chemical consumption, and adoption of the circular economy and recycling technologies. Meanwhile, stricter government regulations and brand demands for environmental and social responsibility are reshaping the industry.

Amid these shifts, Taiwan—despite downsizing and regional competition—continues to leverage its integrated supply chain, strong technological base, and robust R&D capacity. Domestic firms embed sustainability by developing eco-friendly yarns, adopting low-carbon processes, and applying smart systems to improve energy efficiency. Collaboration between research institutions and industry also drives new products and technologies aligned with international standards, thereby reinforcing competitiveness in high value-added markets.

Sustainability has thus moved from an ethical obligation to a decisive factor in global competitiveness. Although Taiwan is not a cotton producer, its strengths in innovation and supply chain integration position it as a leading provider of advanced and sustainable textile solutions. Through differentiation and international cooperation, Taiwan continues to expand its role in the global sustainable textile and apparel industry.

B. Taiwan's Engagement in International Cotton Advisory Committee (ICAC)

Since 2005, Taiwan has cooperated with the International Cotton Advisory Committee (ICAC) to organize the "ICAC International Seminar" in Taipei. To date, it has been held eight times, making it an important platform for aligning

Taiwan's textile and apparel industry with the international community. To further deepen our partnerships with ICAC members and strengthen the resilience of the cotton and textile value chain, we plan to once again host the "ICAC International Seminar" in Taipei in 2026. It will bring together industry experts to discuss issues related to cotton and textiles, enhance the benefits and added-value of cotton, as well as promote international exchanges on the technology and development of the cotton spinning industry.

In addition, in support of the ICAC's initiative that led to the United Nations' designation of October 7 as World Cotton Day (WCD), Taiwan organized a World Cotton Day event this September. The event in line with the ICAC's efforts to promote the positive image of cotton and to raise public awareness about cotton's image and applications..

V. Challenges and Future Outlook for Taiwan's Cotton Spinning Industry

Taiwan's cotton spinning industry has developed over several decades, initially serving as a foundational pillar of its export-oriented manufacturing system. However, with the relocation of production bases, rising costs, and intensifying global competition, the industry has contracted significantly. By the end of 2024, the number of spindles had declined sharply from 2.16 million in 1990 to fewer than 180,000, reflecting a sector at a crossroads of transformation and restructuring. In addition, exports of cotton, as well as staple and man-made yarns have remained subdued, constrained by global demand fluctuations and raw material price volatility, underscoring the need for structural adjustment and value upgrading to restore competitiveness.

A. Key Challenges

(a) Shrinking Capacity and Low Equipment Utilization

Spindle capacity has continued to decline since its 1990 peak, with many machines idle due to underinvestment. The overall operating rate stands at only 50.4%, with traditional ring spinning even lower at 48.1%, revealing eroding industrial capacity.

(b) International Low-Prices and Dumping Impact Exports

Low-priced cotton and man-made fiber yarns from China and other regions have severely affected Taiwan's export markets. U.S. import statistics show that the average unit price of Chinese textile and apparel products fell from USD 1.21 per square meter in 2018 to USD 0.75 per square meter in 2024, for a 38%

decline. Taiwan's strategy of competing on a qualitative basis faces mounting pressure from price wars, compressing both export volumes and profit margins.

(c) Rising Electricity and Energy Costs

Cotton spinning is energy-intensive, particularly in clearing, spinning, and doffing processes. From October 2024, Taiwan's industrial electricity price rose by 12.5% to NT$4.29/kWh, adding significant pressure to mills already operating on thin margins. For producers of man-made fiber and cotton yarn, such as Shinkong and Far Eastern New Century, power-intensive processes like false twisting and textured yarns are particularly affected.

(d) Carbon Fees Increase Production Costs

In 2024, Taiwan's Ministry of Environment confirmed a carbon fee of NT$300 per ton of CO_2e, to be formally implemented in 2026. At least 20 spinning mills exceeded the annual emissions threshold of 25,000 tons and will be subject to the first round of fee collection. This will require the adoption of carbon accounting, energy management systems, and equipment upgrades to mitigate operational risks.

(e) Weak Market Demand and Limited Export Recovery

Exports of cotton and staple yarns to key markets, such as the U.S. and Japan, remained sluggish in 2024. Cotton yarn export volumes fell 6.3% and export values dropped 14.5% year-on-year. With high interest rates and muted end-market demand, recovery has been limited. Mills report short order visibility and weak pricing power, suggesting that the market has yet to return to pre-pandemic levels.

B. Industry Responses

(a) Transition to High-Value Products

Manufacturers are shifting away from low-cost yarns toward higher-value products, such as open-end, siro-spun, fine-count yarns, and recycled cotton blends. Some have developed eco-friendly blends, including rPET and Lyocell yarns, to enhance differentiation and brand alignment.

(b) Equipment Upgrades and Energy-Saving Processes

In response to rising electricity costs and impending carbon fees, mills are replacing high-energy motors and outdated ring frames with next-generation energy-efficient equipment, such as variable-frequency spinning machines and smart monitoring systems. Many companies, including Lealea and Zig Sheng, are also investing in green power procurement and energy management systems.

(c) Strengthening Supply Chain Strategy and Overseas Deployments

Some mills are collaborating with overseas weaving and brand partners to adjust product designs and align with downstream demand. To offset labor and energy costs, certain stages, such as roving or pre-spinning, are being relocated to Vietnam or Indonesia, while precision spinning and R&D remain in Taiwan—adopting a dual-track strategy of "domestic quality control + overseas cost efficiency."

(d) Establishing Carbon Management and Data Systems

To comply with carbon fee regulations and international disclosure requirements, mills are building monitoring and reporting mechanisms. Some participate in voluntary reduction programs to obtain preferential rates (NT$50–100 per ton), while adopting carbon footprint software and internal data platforms to improve resilience against policy changes.

C. Future Outlook

Looking ahead, Taiwan's cotton spinning industry faces dual pressures from global sustainability trends and supply chain restructuring. While short-term challenges, such as weak domestic demand and order relocation persist, the industry is gradually moving toward specialization, small-batch diversification, and digital transformation. With global brands increasingly focusing on recycled material sources—and phasing out rPET from PET bottles in favor of more circular options—demand will grow for high-durability, recyclable, and functional green blended yarns. Integration with bio-based polyester and CCU carbon-capture fibers will further enhance value and differentiation.

At the same time, mills must leverage Taiwan's strengths in materials and dyeing, while incorporating smart manufacturing to improve flexibility and efficiency. Industry players are already exploring AI and generative AI applications in demand forecasting, scheduling, and quality analysis. Stronger data integration and knowledge systems could enable real-time optimization of raw material allocation and yarn blends, thereby aligning with evolving brand requirements for functionality and carbon footprint transparency.

Global supply chain reorganization also presents opportunities for strategic repositioning. Many firms have established operations in Vietnam and Indonesia to form an "R&D in Taiwan, manufacturing in Southeast Asia" model that preserves technical advantages while dispersing costs and risks. Closer vertical collaboration with downstream clients, brands, and garment makers—through joint development and high-frequency small-batch production—will help secure long-term orders and reinforce Taiwan's position in functional and differentiated yarns.

To sum up, while Taiwan's cotton spinning industry is in a trough period following decades of contraction, proactive investment in sustainable materials, smart manufacturing, and international partnerships holds promise for regaining a niche position in mid- to high-end global supply chains. Only by seizing global trends and technological inflection points, while shifting from passive production to active innovation, can the industry rebuild its competitive edge in the next wave of transformation.