

**STATEMENT FROM THE DELEGATION OF TAIWAN**

**AT THE 77<sup>th</sup> PLENARY MEETING OF THE**

**INTERNATIONAL COTTON ADVISORY COMMITTEE**

**Overview**

Faced with restrictive domestic business conditions and intensified international competition, Taiwan's textile industry has been placing greater emphasis on design and R&D to enhance the added value of products and upgrade product differentiation. In other words, the industry has gradually changed its production focus from price to innovation. As a sector of the textile industry, Taiwan's cotton spinning industry has actively incorporated with other sectors to develop unique, refined and innovative products.

Two recent global consumption trends for fashion and home textiles are functionality and environmental sustainability. There have been no revolutionary breakthroughs in cotton spinning technology in recent years since the sector is technically very mature. The cotton spinning industry has instead placed an emphasis on investment in research and development to improve production processes and elevate facility automation and production efficiency.

Thanks to the fully developed textile value chain in Taiwan, the cotton spinning industry is able to work with the synthetic textile sector to develop high sensitivity, high-performance and high-value products to meet consumers' needs. Meanwhile, to protect the environment and consumers' health, many cotton spinners in Taiwan, including Far Eastern New Century, Formosa Taffeta, Chia Her Industrial, Everest and Tai Yuen, etc. have actively engaged in the production of organic cotton textiles, and their products are certified by international authorities such as the Swiss-based Institute for Marketecology (IMO) and the Netherland-based Control Union.

It is forecast that textiles using organic cotton and eco-friendly fibers will become important export items for Taiwan in the future. Taiwan's textile industry is also considering ways to develop more eco-friendly functional textiles. This combination of advanced functionality and environmental sustainability is making the industry even more competitive and socially responsible.

## **Background on Taiwan's Textile Industry**

### **Textile industry: Taiwan's fourth-largest trade surplus industry**

Over the years, Taiwan's textile industry has steadily upgraded its operations from processing imported raw materials and exporting finished goods, to developing synthetic yarn and using imported raw cotton yarn and man-made staple yarn. During this period, Taiwan's textile industry has also become more vertically integrated.

Since the 1950s, Taiwan's textile industry has steadily invested in new machinery and has developed innovative products to meet changing global market demands. These efforts have lead Taiwan as a major supplier of textile products to the world.

In 2017, Taiwan's textile industry comprised 4,383 manufacturers and 133 thousand employees. In 2017, the production reached US\$12.3 billion in value. In the same year, the gross export and import values for Taiwan's textiles & apparel were US\$10.08 billion and US\$3.37 billion respectively, and as a result, Taiwan's textile industry recorded a total trade surplus of US\$6.71 billion, ranking it fourth among all sectors in Taiwan in this regard. Today, Taiwan is one of the world's leading suppliers and innovators of high-quality man-made fabrics. (Please refer to Table 1)

The textile industry of Taiwan is highly export-oriented. Exports have accounted for more than 78% of total textile and apparel production over the past 10 years. During this period, Taiwan's textile industry has experienced some contraction in overall production value, manufacturers and employment.

**Table 1 -2005~2017 Taiwan's Textiles & Apparel Production Value, Manufacturers and Employees**

Year	2005	2012	2017	2005	2012	2017	2005	2012	2017
	Production Value (NT\$ billion)			Current Manufacturers			Employees		
Textiles	452.6	445.6	355.1	3,614	3,134	3,214	125,378	109,890	100,292
Apparel	46.2	27.2	20.1	1,244	1,119	1,169	39,228	31,271	32,208
Total	498.9	472.8	375.2	4,858	4,253	4,383	164,606	141,161	132,500

Note: e\*=estimate

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

(The annual average exchange rate for 2005/2012/2017 was US\$1:NT\$32.17/29.61/30.5)

## Taiwan Textile Exports

Taiwan textiles & apparel exports amounted to US\$10.08 billion in 2017, increasing 1.5% compared with the previous year. Fabrics exports amounted to US\$6.81 billion in value, up by 1.1% compared with the previous year, and 892,000 tons in volume, down by 1.6%. Yarn exports amounted to US\$1.53 billion in value, up by 6%, and 575,000 tons in volume, down 5.6%. Fabrics were the main export item, accounting for 67.7% of total textile exports. Yarn ranked second in this regard, accounting for a share of 15.2%. (Please refer to Table 2)

**Table 2 : 2016~2017 Taiwan Textiles & Apparel Exports**

Items	Export Volume (10,000 Tons)			Export Value (100 million USD)			Share (%)	Unit Price (US\$/Kg)		
	2016	2017	Growth Rate (%)	2016	2017	Growth Rate (%)		2016	2017	Growth Rate (%)
<b>1.Fiber</b>	60.6	54.5	-10.0	8.2	7.8	-5.4	7.7	1.35	1.42	5.1
<b>2.Yarn</b>	60.9	57.5	-5.6	14.4	15.3	6.0	15.2	2.36	2.66	12.4
<b>3.Fabric</b>	90.7	89.2	-1.6	67.4	68.1	1.1	67.7	7.43	7.64	2.7
<b>4.Apparel</b>	2.6	2.4	-7.8	5.7	5.5	-3.7	5.5	21.59	22.56	4.5
<b>5.Miscellaneous</b>	7.1	7.9	10.6	3.6	4.1	13.8	4.0	5.01	5.15	2.8
<b>Total</b>	221.9	211.6	-4.7	99.3	100.7	1.5	100	4.47	4.76	6.5

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

## Taiwan Textile Imports

Taiwan textiles & apparel imports amounted to US\$3.37 billion in 2017, for an increase of 0.7% compared with 2016. Apparel & accessories imports amounted to US\$1.74 billion, down by 4.7% year-on-year and accounting for 51.7% of total textile imports, fiber imports amounted to US\$0.43 billion (up by 10.1%; and 12.9% of total), fabrics imports amounted to US\$0.49 billion (up by 6.2%; and 14.5% of total), yarn US\$0.39 billion (up by 11%; and 11.6% of total), and miscellaneous textiles US\$0.31 billion (up by 1%; and 9.3% of total). (Please refer to Table 3).

**Table 3 - 2016~2017 Taiwan Textiles and Apparel Imports**

Items	Import Volume (10,000ton)			Import Value (100 million)			Share (%)	Unit Price (US\$/Kg)		
	2016	2017	Growth Rate (%)	2016	2017	Growth Rate (%)		2016	2017	Growth Rate (%)
1.Fiber	22.7	22.4	-1.4	3.9	4.3	10.1	12.9	1.73	1.94	11.7
2.Yarn	10.3	10.8	4.7	3.5	3.9	11.0	11.6	3.41	3.62	6.1
3.Fabric	8.3	8.7	4.2	4.6	4.9	6.2	14.5	5.54	5.64	1.8
4.Apparel	12.0	11.5	-3.5	18.3	17.4	-4.7	51.7	15.28	15.1	-1.3
5.Miscellaneous	6.8	6.9	1.6	3.1	3.1	1.0	9.3	4.56	4.54	-0.7
Total	60.0	60.3	0.3	33.4	33.7	0.7	100.0	5.56	5.58	0.4

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

## **Background on Taiwan's Cotton Spinning Industry**

### **Raw Cotton Imports**

Taiwan depends on imports for all of its raw cotton needs. Imports of raw cotton in 2016 were 170,000 tons, with a value of US\$239 million. In 2017, cotton imports decreased to 160,000 tons, but the value increased to US\$260 million. These figures represented a decline of 5.9% in weight and a rise of 8.8% in value from the previous year. The United States was the largest supplier of raw cotton to Taiwan in 2017, providing 55% of the total imports by value, followed by India (16%) and Brazil (7%).

Taiwan does not produce cotton. However, as with its neighboring countries in Northeast Asia, Taiwan is one of the world's major cotton consumers. Taiwan is willing to offer some views on cotton production. First, the supply of cotton should be stable and abundant, and the cotton trade should remain transparent to ensure the stability of the market price. In addition, in cotton planting, we look forward to more breakthroughs in developing high resistance to pests and diseases, and improvements in breeding, in order to benefit cotton farmers in ICAC cotton producing countries. In addition, Taiwan supports the establishment of a traceability system to ensure that cotton and textile producers abide by environmental and human rights standards.

The reasons for the increase in raw cotton imports by value are as follows:

1. Since 2016, manufacturers were destocking, resulting in a decline in cotton yarn production. Moreover, in recent years, mainland China has continued to focus on reducing its state cotton reserves, causing the world's cotton stock to decrease and influencing cotton prices in the global futures markets.
2. The operating ratio of cotton spinning spindles slightly declined to 69.1% in 2017 from 69.4% in 2016, and the number of spindles dropped from 937,851 in 2016 to 873,073 in 2017, meaning that the production of the spindles decreased, leading to a decline in cotton imports. In addition, because of the dramatically increasing volume of spindles from emerging markets, Taiwan was not competitive in terms of prices and had a decrease in production. (For more details, please refer to the data below). In addition, the need to replace cotton-spinning machinery with new machinery also had an impact on the operating ratio of cotton spinning spindles.
3. Development of new synthetic textiles: The development of advanced innovative synthetic textiles rivaling natural cotton reduced demand for cotton accordingly.

#### **Analysis of Cotton Yarn Production, Sales and Inventory**

Cotton yarn production (excluding CVC yarn) was 664,340 bales in 2017, for a decrease of 17.5% from 2016. Domestic sales totaled 305,602 bales (a share of 46%), down by 17.5% from 2016, while the export volume amounted to 373,637 bales, down by 4.9% from 2016. Ending inventories amounted to 45,071 bales, a decrease of 25.8% over 2016 (Please refer to Table 4).

**Table 4 : 2010~2017 Production, Sales and Inventory of Cotton Yarn** (Unit: Bales)

Year	Production	Domestic Sales	Export Volume	Ending Inventory
2010	882,361	465,785	431,872	45,874
2011	658,001	352,265	297,957	55,605
2012	955,044	518,713	435,740	56,336
2013	965,507	532,673	424,696	71,980
2014	902,732	501,491	402,532	78,567
2015	660,604	285,446	377,567	77,747
2016	805,158	429,115	392,712	60,776
2017	664,340	305,602	373,637	45,071

Note: 1 bale=400 pounds=181kg.

Source: Taiwan Spinners Association.

Taiwan's total production of spun yarn was 1,305,077 bales in 2017, a decrease of 13.22% from 2016. Domestic sales (including for self-use) of spun yarn totaled 807,643 bales (a share of 61.89%), for an increase of 16.05% from the previous year, and the export volume amounted to 530,861 bales, down by 5.06%. Ending inventory for 2017 stood at 198,035 bales, a decrease of 14.28% over 2016. (Please refer to Table 5).

**Table 5 : 2010~2017 Production, Sales and Inventory of Spun Yarn** (Unit: Bales)

Products	Year	Production	Domestic Sales	Export Volume	Ending Inventory
Cotton (including CVC yarn)	2013	1,398,691	745,955	638,324	106,390
	2014	1,302,653	736,387	569,838	106,723
	2015	901,995	418,907	475,860	122,691
	2016	1,073,272	587,155	498,251	115,419
	2017	838,722	416,822	447,968	81,372
Man-made fiber yarn	2013	690,596	511,360	161,271	108,463
	2014	681,882	523,427	137,298	135,405
	2015	525,865	411,594	95,417	144,252
	2016	430,684	374,892	60,927	115,599
	2017	466,355	390,821	82,893	116,663
Total	2013	2,089,287	1,257,315	799,595	214,853
	2014	1,984,535	1,259,814	707,136	242,128
	2015	1,427,860	830,501	571,277	266,943
	2016	1,503,956	962,048	559,178	231,018
	2017	1,305,077	807,643	530,861	198,035

Note: 1 bale=400 pounds=181kg.

Source: Taiwan Spinners Association.

### **Analysis of Cotton Yarn Trade**

The export volume of cotton yarn was 118,900 tons in 2017, down 7.97% over the previous year, while the export value was US\$260.3 million, up 0.42% year on year. The import volume was 25,000 tons, up 13.64%, and the import value was US\$71.7 million, up 21.32%. (Please refer to Table 6).

**Table 6 : 2016~2017 Exports & Imports of Cotton Yarn**

	Volume (1,000 tons)			Value (million US\$)			Unit price (US\$/Kg)		
	2016	2017	Growth Rate (%)	2016	2017	Growth Rate (%)	2016	2017	Growth Rate (%)
Exports	129.2	118.9	-7.97	259.2	260.3	0.42	2.0	2.2	10
Imports	22.0	25.0	13.64	59.1	71.7	21.32	2.7	2.9	7.4

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

### **Shaping Sustainability in the Cotton Value Chain**

#### **The Situation of "Sustainability" in Taiwan in Recent Years**

As global environmental conditions continue to experience more volatility, consumers worldwide are becoming more and more eco-savvy. Accordingly, governments in a number of countries have begun to stipulate more rigorous environmental regulations and standards. When environmental regulations and market demand coincide, brands and retailers adopt a positive response to “green sourcing” policies and are willing to set mandatory guidelines for their suppliers. Such a shift in trade symbolizes the advent of the “eco-economy”.

The organic textile market has gradually taken shape in Taiwan after years of promotion. Organic cotton production in Taiwan has a long history. Several companies have had their organic cotton products certified, such as Far Eastern New Century, Formosa Taffeta, Chia Her Industrial, Everest and Tai Yuen. Organic certification bodies, such as the Institute for Marketecology (IMO) and the Control Union, have grown more prominent.

The worldwide “green wave” has directly and indirectly created greater demand for eco-friendly products, generating thriving research and development in “green” textiles around the world. As a result, “eco-textiles” are emerging and becoming more main stream. Given greater consumer interest in climate change and global environmental conditions, it can be expected that concerns about ecology will surpass purely economic factors for both industry and consumers. As a result, eco-friendly and green products will prove to be good for business. Introducing eco-friendly practices into the production of goods should create jobs and generate new business opportunities.

In fact, eco textiles and related services are now a popular focus at international textile exhibitions. The Taipei Innovative Textile Application Show, organized by the Taiwan Textile Federation, has devoted special sections to displaying eco textiles and

the relevant certification services (including their identification marks) to facilitate buyers' sourcing choices. The Taiwan Textile Federation (TTF) also publishes a "Taiwan eco-textiles selection" and promotes the products through its website, exhibitions, and other channels.

Digital printing and paper transfer printing can work directly on fabrics, reducing energy consumption and enabling the skipping of the wastewater treatment process. Companies in Taiwan specializing in such applications are thus considered eco-friendly. Advances in the related technology have greatly enhanced dyeing efficiency and printing speed.

### **The Role of the Government of Taiwan in Facilitating "Sustainability" of the Sector**

Taiwan has implemented the VPC (Voluntary Product Certification) for organic textiles. In recent years, the importance of sustainability in economic and development work has been widely recognized internationally. Introducing innovations in the manufacturing process to meet ecology demands as well as environmental protection goals are prevailing trends in both the textile and apparel industries. Consumer groups have requested that the Taiwan government establish an organic certification mechanism as a way to manage production of organic textile products. The range of materials included in the certification system covers organic cotton, organic wool, organic hemp, organic silk and organic leather. The products cover the yarn, fabrics, clothing and household textiles categories. The validation process includes product testing and factory inspection, and is divided into four grades:

- (A) The first level: the product contains more than 95% organic material or organic transition material.
- (B) The second level: the product contains more than 70% organic material or organic transition material.
- (C) The third level: the product contains more than 55% organic material or organic transition material.
- (D) The fourth level: the product contains more than 5% organic material or organic transition material.

### **International Cotton Advisory Committee seminars**

In order enhance exchanges within the ICAC, Taiwan has co-organized six international seminars in cooperation with the ICAC Secretariat, in 2005, 2008, 2010, 2012, 2015 and 2017. The most recent seminar, whose theme was "Market Trends and



Sustainability of Cotton & Textile Industry,” focused on new business opportunities created by IoT, big data and other technological trends, as well as on how to expand creative applications to blend cotton and man-made fibers. Representatives of industry, government and academia from more than a dozen ICAC member states gave presentations and engaged in discussions during the gathering. The next seminar in Taipei will be held in 2019, and we invite all ICAC members to take part.

## **Conclusion**

Taiwan’s textile industry is utilizing novel technology to produce high value-added and best quality products. In doing so, we raise the high-quality image of Taiwan’s textile products and broaden Taiwan’s competitive edge in the industry and in the Asia-Pacific region.

Taiwan’s textile industry is developing many high value-added materials as a means of creating product differentiation. Facing the twin effects of over-supply and higher energy prices, the industry acts prudently by concentrating its innovative efforts on developing functional applications, including promoting the use of eco-fibers, as well as developing attractive, high-quality products.

Over the years, the government has significantly assisted the textile industry to realize the vision set for the sector: namely to become a global R&D and production base for functional and technical textiles and a fashion design center in the Asia-Pacific region. Another objective is to shift from made-in-Taiwan (MIT) to designed-in-Taiwan (DIT) and branded-in-Taiwan (BIT).

The Ministry of Economic Affairs and the ICAC have jointly organized six seminars in Taipei since 2005. The seventh one will be held in 2019 for all attendees to gain new knowledge and exchange information.

As an active member of the ICAC, Taiwan enjoys the many opportunities provided to share its development experiences with the other members. Taiwan looks forward to continuing to work with members of the ICAC in pursuing the objectives and goals established by the organization.