Overview of Taiwan Textile Industry- 2022

Taiwan Textile Federation 2023.06

Contents

A.	Status of Taiwan Textile Industry	1
	(A) Overview of Taiwan Textile and Apparel Industry	1
	(B) Taiwan's Textile and Apparel Exports	5
	(C) Taiwan's Textile and Apparel Imports	7
В.	Overview of Global Textile and Apparel Industry	8
	(A) The Statistics of Global Textile and Apparel Trade	8
	(B) The Leading Textile and Apparel Exporting Countries in 2021	9
	(C) The Major Textile and Apparel Importing Countries in 2021	. 10
\mathbf{C}	The Vision of Toisson Toytile Industry	12
U .	. The Vision of Taiwan Textile Industry	, 1 <i>2</i>

Overview of Taiwan Textile Industry – 2022

A. Status of Taiwan Textile Industry

At the beginning stage, Taiwan textile industry imported raw materials for processing and exported most of the finished goods to overseas markets. Later, the sector turned to using materials derived from petrochemicals, and concurrently also imported raw cotton yarn and man-made staple yarn. Gradually, the industry became vertically integrated, eventually joining all the links in the supply chain, including the manufacture of man-made fibers, yarn spinning, weaving and knitting, dyeing and finishing, and apparel and accessories industries.

From its origin, the Taiwan textile industry has steadily invested in new machinery and developed novel products to meet the global market demand. As a result of these efforts, the textile industry has built a comprehensive production system, making Taiwan a major supplier of textile products to the world.

(A) Overview of Taiwan Textile and Apparel Industry

a. Scale of production, manufacturing and employment

Taiwan's textile industry is the main force in the upper and middle reaches, and the downstream industry needs ample labor, and more of them are scattered overseas, and they play a role as the driving force for the development of the upper and middle reaches of the industry. According to statistics, in 2022, there were about 4,511 textile factories in Taiwan, with an estimated number of 140,555 employees, and a total output value of NT\$400.9 billion, of which the output value of the textile industry was NT\$373.8 billion, accounting for 93.2% of the overall textile industry output value; the output value of the apparel industry was NT\$27.1 billion, accounting for 6.8% of the overall textile industry output value. (Table 1)

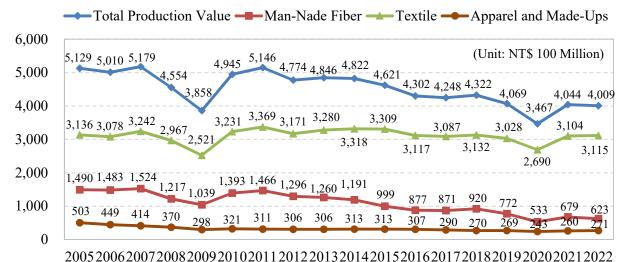
Table 1 Production Value, Manufacturers and Employees of Taiwan's Textile and Apparel Industry

Itam			Ye	ar	
Item		2005	2010	2015	2022
Production Value	Textile	4,626	4,624	4,307	3,738
(NT\$ 100 million)	Apparel	503	321	313	271
(1415-100 IIIIII0II)	Total	5,129	4,945	4,621	4,009
	Textile	3,614	3,134	3,163	3,362
Manufacturers	Apparel	1,244	1,119	1,144	1,149
	Total	4,858	4,253	4,307	4,511
	Textile	125,378	95,736	110,943	109,027
Employees	Apparel	39,228	31,271	32,071	31,528
	Total	164,606	127,007	143,014	140,555

Note: The Statistical Department of the Ministry of Economic Affairs (R.O.C.) conducted base period and item adjustments in May 2023. As a result, the output values in the table above, starting from 2005, have all been revised. Sources: Directorate General of Budget, Accounting and Statistics, Executive Yuan (employees), Dept. of Statistics, MOEA (production value).

The apparel industry of Taiwan is highly export-oriented. The export value accounts for more than 75% of total textile and apparel production over 10 years. The textile and apparel industry's production value, manufacturers and the employees all declined in the past 18 years (2005~2022). In 2022, the production value of textile and apparel in Taiwan was NT\$400.9 billion, went down 21.8% from NT\$512.9 billion in 2005; the production value of textile dropped 14.1%, and apparel and made-ups shrunk 62.3%, while the man-made fiber decreased 55.8%. (Fig. 1)

Fig. 1 Production Value of Taiwan's Textile and Apparel Industry in 2005~2022



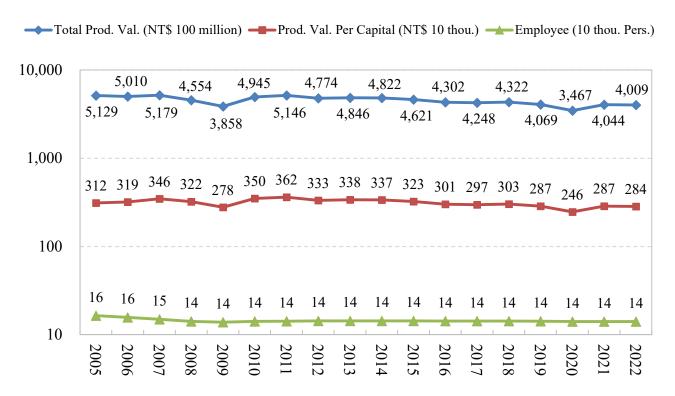
20032000200720002009201020112012201320142013201020172010201920202020212022

Note: The textile and apparel industry's production value includes three sub-segments, i.e. man-made fiber, apparel and made-ups, and textile.

Sources: Dept. of Statistics, MOEA.

Considering the production value per capita, the average value dropped from NT\$3.1 million in 2005 to NT\$2.8 million in 2022, with a growth rate of -9%. From the year of 2021 to 2022, although the impact of the COVID-19 has declined, the outbreak of the Russo-Ukrainian War caused global inflation and rising interest rates, and depressed the global demands. Therefore, compared to 2021, in 2022, the production value of textile and apparel industry shrunk to NT\$400.9 billion, and the production value per capita decreased by 1% to NT\$ 2.8 million. (Fig. 2)

Fig. 2 Production Value Per Capita of Taiwan's Textile and Apparel Industry in 2005~2022



Sources: Dept. of Statistics, MOEA.

b. Taiwan's labor cost of manufacture industry

According to labor statistics from the Directorate-General of Budget, Accounting & Statistics, Executive Yuan, from 2005 to 2021, the monthly wages of textile industry and apparel industry grew from NT\$34,341 and NT\$30,216 to NT\$42,019 and NT\$39,983 respectively, with the growth rate of 22.4% and 32.3%; the average annual growth rate were 1.2% and 1.8%. (Fig. 3)

Fig. 3 The Average Monthly Wage of Textile and Apparel Industry



Sources: Directorate-General of Budget, Accounting & Statistics, Executive Yuan.

c. Textile and apparel industry: The fourth largest foreign exchange earner segment in Taiwan.

In 2022, the gross export and import values of Taiwan textile products were US\$8.8 billion and US\$4 billion respectively. In that same year, the textile and apparel industry recorded a total trade surplus of US\$4.9 billion, which marking it Taiwan's fourth largest trade surplus industry. (Table 2)

Table 2 The Export and Import Value/Trade Surplus of Textile & Apparel Industry from 2005 to 2022

(Unit: US\$ 100 Million)

Item Year	Export Values (A)	Import Values (B)	Trade Surplus of Textile & Apparel Industry (C=A-B)	Trade Surplus of Total Trade (D)
2005	118.3	26.4	91.9	158.2
2010	113.1	29.4	83.7	233.7
2015	108.2	35.1	73.1	481.3
2016	99.3	33.4	65.9	497.5
2017	100.7	33.6	67.1	578.8
2018	100.7	36.8	63.9	494.0
2019	91.8	35.5	56.3	434.8
2020	75.3	33.7	41.6	587.9
2021	90.2	38.6	51.6	652.8
2022	88.4	39.5	48.9	514.3

Source: Compiled by TTF with data from Dept. of Statistics, MOFA.

(B) Taiwan's Textile and Apparel Exports

a. Export proportion

Due to the impact of the China's zero-COVID strategy and global inflation caused by the Russo-Ukrainian War, the export value of Taiwan's textile and apparel stood at US\$8.8 billion in 2022, dropped by 2%, compared to 2021. The largest decreased level of export value derived from fiber, by -13.7%, and the value amounted to US\$4.4 billion; the value of Miscellaneous shrunk by 9.8% to US\$4.6 billion. By the largest exports, the export value of fabric amounted to US\$6.4 billion, went up by 1.4%, compared to the same period in 2021; the share took 71.8% of the total export amount of textile and apparel. It indicates that fabric plays an important role in the full stream of textile production. Yarn with the share of 13.1% took up the second place, and the export value amounted to US\$1.2 billion, went down by 9.4%. (Table 3)

Table 3 2022 Taiwan's Textile and Apparel Exports

T4	Volume	Export e (10,000) Tons)	(Export (US\$ 100)		Jnit Price [US\$/Kg]	
Items	2021	2022	21/22 (%)	2021	2022	21/22 (%)	Share (%)	2021	2022	21/22 (%)
1. Fiber	38.8	32.4	-16.5	5.1	4.4	-13.7	5.0	1.3	1.4	7.7
2. Yarn	42.9	36.5	-14.9	12.8	11.6	-9.4	13.1	3.0	3.2	6.7
3. Fabric	69.7	65.3	-6.3	62.6	63.5	1.4	71.8	9.0	9.7	7.8
4. Apparel	2.2	1.9	-13.6	4.7	4.3	-8.5	4.9	21.5	22.8	6.0
5. Miscellaneous	7.1	7.6	7.0	5.1	4.6	-9.8	5.2	7.2	6.0	-16.7
Total	160.7	143.8	-10.5	90.2	88.4	-2.0	100.0	5.6	6.2	10.7

Source: Compiled by TTF with data from Taiwan Customs Statistics.

b. Major export markets

Taiwan's major export market is Vietnam, which represented 26.7% of the total export value, amounting to US\$ 2.4 billion in 2022, went up by 2.2%; followed by China at 14.3% (US\$1.3 billion), decreased by 14.9%; followed by the United States at 9% (US\$0.8 billion), dropped by 3.7%; followed by Indonesia at 6.1% (US\$0.5 billion), rose by 17.4%, and Cambodia at 4.9% (US\$0.4 billion), went down by 2.3%. The five major export markets accounted for 60.9% of total textile exports. (Table 4)

Table 4 2022 Taiwan's Main Markets of Exported Textile Products – by Country

Country	Volum	Export e(10,000	Tons)	(Export (US\$ 100)		Jnit Pric US\$/Kg)	
Country	2021	2022	21/22 (%)	2021	2022	21/22 (%)	Share (%)	2021	2022	21/22 (%)
Global	160.7	143.8	-10.5	90.2	88.4	-2.0	100.0	5.6	6.2	9.5
1. Vietnam	33.9	31.7	-6.5	23.1	23.6	2.2	26.7	6.8	7.5	9.1
2. China	32.2	25.1	-22.0	14.8	12.6	-14.9	14.3	4.6	5.0	9.1
3. USA	10.9	9.6	-11.9	8.2	7.9	-3.7	8.9	7.5	8.2	9.0
4. Indonesia	5.7	6.0	5.3	4.6	5.4	17.4	6.1	8.0	9.0	11.9
5. Cambodia	4.3	4.0	-7.0	4.4	4.3	-2.3	4.9	10.4	10.8	3.9

Source: Compiled by TTF with data from Taiwan Customs Statistics.

In general, the export value of global textile and apparel decreased by 2% because of the influence of the China's zero-COVID strategy and global inflation resulted from the Russo-Ukrainian War. The area which dropped most was China & Hong Kong, the export value declined by 17.2% to US\$1.5 billion, compared to the previous year; followed by the Middle East, the value amounted to US\$0.3 billion, went down by 5.9%. The export value of Taiwan's biggest export market, the ASEAN 10 countries, increased by 4.2% to US\$4 billion, taking the share of 44.9%. Other main markets such as North America Free Trade Area and Japan & Korea had gained their shares in the export markets in 2022, with the share of 11.1% and 4.5% respectively. (Table 5)

Table 5 2022 Taiwan's Main Markets of Exported Textile Products – by Area

Area	Volum	Export e(10,000	Tons)	(Value million)		Unit Price (US\$/Kg)			
Area	2021	2022	21/22 (%)	2021	2022	21/22 (%)	Share (%)	2021	2022	21/22 (%)		
Global	160.7	143.8	-10.5	90.2	88.4	-2.0	100.0	5.6	6.2	10.7		
1. ASEAN 10	56.2	53.9	-4.1	38.1	39.7	4.2	44.9	6.8	7.4	8.8		
2. China+HK	36.2	27.6	-23.8	18.6	15.4	-17.2	17.4	5.1	5.6	9.8		
3. NAFTA	14.4	14.1	-2.1	9.6	9.8	2.1	11.1	6.7	6.9	3.0		
4. Japan+Korea	10.3	9.9	-3.4	3.9	4.0	2.6	4.5	3.8	4.0	5.3		
5. EU 27*	8.6	7.1	-17.4	3.4	3.3	-2.9	3.7	4	4.6	15.0		
6. Middle East	6.3	5.6	-11.1	3.4	3.2	-5.9	3.6	5.4	5.7	5.6		
5. Others	28.7	25.6	-11.0	13.2	13.0	-1.5	14.7	4.6	5.1	10.9		

Note: Since 31st Jan, 2020, UK had officially left the EU, hence this table uses data from 27 member states. Source: Compiled by TTF with data from Taiwan Customs Statistics.

(C) Taiwan's Textile and Apparel Imports

a. Import proportion

The import value of Taiwan's textile and apparel was US\$4 billion in 2022, increased by 2.3% over 2021. Apparel & accessories, imports amounted to US\$2.1 billion (53.4% of the total), fabric amounted to US\$0.6 billion (share of 14.9%), yarn was US\$0.5 billion (share of 12.2%), miscellaneous textile was US\$0.4 billion (share of 11%), and fiber was US\$0.3 billion (share of 8.4%). (Table 6)

Table 6 2022 Taiwan's Textile and Apparel Imports

Items	Volum	Import ne (10,00			Import (US\$ 100				Jnit Pric (US\$/Kg)	
items	2021	2022	21/22 (%)	2021	2022	21/22 (%)	Share (%)	2021	2022	21/22 (%)
1. Fiber	17.5	12.8	-26.9	3.4	3.3	-2.9	8.4	1.9	2.6	36.8
2. Yarn	13.0	10.1	-22.3	5.9	4.8	-18.6	12.2	4.5	4.7	4.4
3. Fabric	9.0	9.4	4.4	5.7	5.9	3.5	14.9	6.4	6.3	-1.6
4. Apparel	11.6	12.3	6.0	19.2	21.1	9.9	53.4	16.5	17.2	4.2
5. Miscellaneous	8.5	8.5	0.0	4.37	4.35	-0.5	11.0	5.14	5.12	-0.4
Total	59.7	53.1	-11.1	38.6	39.5	2.3	100.0	6.5	7.4	13.8

Source: Compiled by TTF with data from Taiwan Customs Statistics.

b. Major import market

Taiwan's biggest import markets were China (43.5% of the total import, amounting to US\$1.7 billion) and Vietnam (14.7% of the total import, amounting to US\$0.6 billion), with major import items of apparel and made-ups. Other major import sources were the USA (cotton), Italy (apparel), and Japan (fabric). Except Japan, other markets showed a positive trend since the COVID-19 has been controlled. (Table 7)

Table 7 2022 Taiwan's Main Market of Imported Textile Products—by Country

Country	Volum	Import e(10,000	Tons)		-	t Value million)			Unit Prio (US\$/Kg	
Country	2021	2022	21/22 (%)	2021	2022	21/22 (%)	Share (%)	2021	2022	21/22 (%)
1. Global	59.7	53.1	-11.1	38.6	39.5	2.3	100.0	6.5	7.4	13.8
2. China	26.8	26.3	-1.9	17.2	17.2	0.0	43.5	6.4	6.5	1.6
3. Vietnam	9.4	9.0	-4.3	5.4	5.8	7.4	14.7	5.8	6.4	10.3
4. USA	4.3	3.4	-20.9	2.1	2.3	9.5	5.8	4.8	6.7	39.6
5. Italy	0.15	0.10	-33.3	1.8	2.2	22.2	5.6	121.4	213.5	75.9
6. Japan	1.5	1.4	-6.7	2.0	1.8	-10.0	4.6	13.7	13.3	-2.9

Source: Compiled by TTF with data from Taiwan Customs Statistics.

B. Overview of Global Textile and Apparel Industry

After the textile trade was liberalized in 2005, the production was shifted to emerging economies such as China, India, Pakistan, Bangladesh and Vietnam. Meanwhile, the trade of textile and apparel flourished more than in the era of quota restraint. The WTO data reveal that the trade of textile and apparel kept on growing during the past 17 year. The average growth rate for textile and apparel between 2005 and 2021 was 4.4% and 5.7% separately. (Table 8)

Table 8 Growth of Global Textile and Apparel Export

(Unit: US\$ Billion)

Product	2005	2010	2015	2021	2021 Growth Rate	2005-2021 Growth Value	Average Growth Rate
Textile	203	253	289	354	7.6%	151	4.4%
Apparel	278	355	454	549	22%	271	5.7%
Total	481	608	743	903	15.9%	422	5.2%

Sources: WTO.

(A) The Statistics of Global Textile and Apparel Trade

The global textile trade amounted to US\$354 billion, and US\$549 billion for the apparel trade in 2021. The total export value of textile and apparel was US\$903 billion, increased by 16% compared to 2020. (Fig. 4).

Fig. 4 2000~2021 Global Textile and Apparel Exports



Sources: WTO.

(B) The Leading Textile and Apparel Exporting Countries in 2021

a. The leading textile exporting countries in 2021

In 2021 the global trade of textile industry amounted to US\$354 billion, grew by 7.6% compared with 2020. China was the biggest textile exporting country with the export amount of US\$145.6 billion, accounting for 41.1% of the global textile trade, followed by the EU, India, Turkey, and the USA. Compared to 2020, the export value of top 5 Countries showed a positive signal, except China. Vietnam ranked sixth, and the export value increased by 17%; Pakistan has surpassed South Korea, and placed seventh. Taiwan was the 9th biggest country with the export amount of US\$8.6 billion, and plays a key role in functional and Eco-friendly textiles. (Fig. 5).

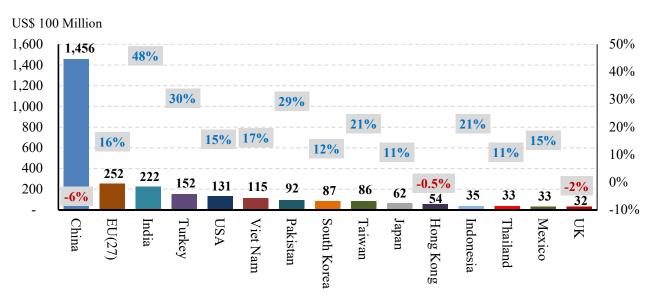


Fig. 5 The Leading Textile Exporting Countries in 2021

Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states. Sources: WTO.

b. The leading apparel exporting countries in 2021

In 2021 the global trade of clothing industry amounted to US\$549 billion, increased by 22% compared to the previous year. China remained the biggest apparel exporting country with the export amount of US\$176.1 billion, accounting for 32.1% of the global apparel trade, followed by the EU, Bangladesh, Vietnam, and Turkey. Taiwan was the 35th leading apparel exporting countries. Export-oriented apparel producers have advantages of yarn and fabrics with good quality and competitive prices, and produce apparels for orders of small quantity and complex style or orders with short delivery time in Taiwan. (Fig. 6).

Fig. 6 The Leading Apparel Exporting Countries in 2021

US\$ 100 Million 2,000 60% 1,761 47% 1,600 40% 37% 30% 27% 22% 24% 24% 24% 24% 20% 1,200 18% **14%** 11% 8% 4% 800 0% 430 358 **56** 312 400 -20% 187 162 145 86 -30% 85 8 -40% Malaysia China Pakistan USA Sri Lanka India K Bangladesh Hong Kong Extra EU(27 Vietnam Turkey Indonesia Cambodia Thailand Taiwan-3:

Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states. Sources: WTO.

(C) The Major Textile and Apparel Importing Countries in 2021

a. The leading textile importing countries in 2021

The USA, the EU and Vietnam were the three major leading textile importing countries in 2021, and took share of 10.2%, 9.6%, and 4.8% respectively. Except the USA and the EU, the import value of the rest of the top 5 countries rose in 2021; especially, Bangladesh had largest level of growth. Taiwan was the 30th leading textile importing country with the importing amount of US\$1.7 billion. (Fig. 7).

US\$ 100 Million 500 70% 61% 396 54% 373 400 50% 33% 300 30% 23% 21% 22% 22% 18% 200 10% $\bar{1}\bar{4}\bar{6}$ 8% 3% 188 93 62 100 -12% 71 63 -13% -10% 64 62 50 53 55 -26% -21% -28% -30% Turkey Taiwan Mexico Extra EU(27 Viet Nam China Japan K South Kore Canada Cambodia India Hong Kong Indonesia Bangladesl

Fig. 7 The Leading Textile Importing Countries in 2021

Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states. Sources: WTO.

b. The leading apparel importing countries in 2021

The EU, the USA and Japan were the three major leading apparel importing countries with the aggregated import amount of US\$230 billion in 2021, accounting for 40% of the global apparel import. On the other side, since apparel consumption markets in some emerging economies, such as China, are growing rapidly, it caused the increasing imports. Moreover, with the consumer purchasing power in these areas continue to rise, it is expected to have diversified import markets of apparel across the world in the near future. Taiwan imported apparel worth of US\$2.2 billion and was the 19th leading apparel importing country in 2021. (Fig. 8).

US\$ 100 Million 1,250 50% 46% 1,063 42% 40% 40% 967 1,000 30% 29% 30% 30% 750 20% 18% 12% 10% 8% 9% 500 0% 1% 232 250 123 119 114 91 -10% 89 87 84 53 265 -11% 47 43 31 22 -20% Australia China Hong Kong Mexico Chile Taiwan-19 USA Japan K Canada Russian Federation South Korea Saudi Arabia Switzerland United Arab **Emirates**

Fig. 8 The Leading Apparel Importing Countries in 2021

Note: Since 31st Jan, 2020, UK had officially left the EU, hence WTO only uses data from 27 member states. Sources: WTO.

C. The Vision of Taiwan Textile Industry

In 2022, the world experienced the Russian-Ukraine war, and was under the pressure of hiking inflation and interest rate. Because of these, after the COVID-19, the effect of global economic recovery lasted only half of year, and the consumer demand for Textile products weakened, it resulted in excess inventory, a sharp drop in sales, and a decrease of orders to international brands. As the global economy turned from prosperity to weakness, the export value of Taiwan's textile and apparel industry declined by more than 20% after a positive trend during the first three quarters of 2022, and it brought on the annual export value dropped by 2% compared with 2021, to US\$8.84 billion.

Looking ahead, in this year, the global economy will still be affected by uncertain factors such as inflation, interest rate hikes, the U.S.-China trade war, and the standoff between Russia and Ukraine, which will highly influence Taiwan's export performance. Most domestic textile industry players expect that brands' inventory adjustments will continue until the first half of this year, showing that it is hard to see a significant rebound in the exports in the short term. However, Taiwan's textile industry is not without room for development, and still has its advantages. It is recommended to develop towards the following points:

(A) Creating high-value and differentiated products

In recent years, Taiwan has successfully differentiated its textile products with their outstanding quality and added value which helped to enhance its global image. Taiwan's products have far surpassed the products made in other Asian countries, keeping pace with those of Europe, the United States and Japan, etc. Taiwan's textile manufacturers can further differentiate themselves by creating added value from selection of unique materials through technology and alertness to fashion trends to develop functional materials and apparels for more business opportunities.

(B) Developing Supply Chain for Eco-Friendly Materials

Global warming continues to threaten our ecosystem, forcing governments to take measures to address the issues. Eco-friendly textile products are becoming a mainstream in the market. Numerous manufacturers in Taiwan have increasingly invested in the development of such materials, including recycling nylon, dope dyed fiber, bio-based Eco-Textiles, waterless dyeing processes, marine yarns, and more. Among these, renewable PET fabrics made by recycled plastic bottles have become well recognized. As preservation of our earth is a common goal, eco-friendly materials will

continue to be a major trend. Taiwan's textile industry should master the trends in global business and environmental regulations to consolidate and strengthen a global production-distribution supply chain.

(C) Developing Textiles for Function plus Fashion

Consumers become more discerning to quality of textiles, the rising trend in sports and growing extreme weather which contribute to open up market potential for functional textiles. At the same time, consumers are also more alert to fashionable taste. The customer preference is inclined to a lifestyle in a combination of sports, work and quality of life. As the result, the demand for the textiles with function and fashion continues to grow. Taiwan has already established itself as the main base for R&D and the production of global functional textile products. In view of the growing number of international major brands introducing sportswear, Taiwan's textile industry should leverage on the opportunity to further expand its market.

(D) Enhancing the capacity for design and branding

Taiwan's yarns and fabrics are highly recognized in the global market. Leading international brands have already placed orders on textile materials from Taiwan, in particular functional products. However, it still requires more work in developing fashion items and branding to get higher profit from the consumer goods. In addition to better monitor fashion trends to further enhance the quality of design, branding is also an important direction to take. Branding not only can create synergy for better business opportunity, but also to enhance the quality and innovation of yarns and fabrics. In order to detonate again its growth potential, the Taiwan textile industry has to consolidate the overall production and supply chain from materials and brands for a long term success.

(E) Developing high-potential smart textiles

Smart textiles and wearable technology have been emerging as one of the development priorities in the textile industry in recent years, and the future of this sector looks highly promising. In addition to the demand from the sports and fitness wear, market potential of smart textiles in the health care field is also set to grow in response to the aging populations around the world. Smart textiles featuring multiple functions such as performance, comfort, sensing and monitoring, and intelligent interpretation will be the key products and technologies. While backed by advanced IT industry and innovative biomedical industry, along with advantages in component manufacturing, Taiwan's future success will depend on the ability to innovate through cross-

disciplinary collaboration.

(F) Intellectualizing textile supply chain

Industrial upgrading and transformation, corporate social responsibility and business sustainability are the major concerns today of Taiwan textile industry for further development and higher competitiveness. With the support and assistance from the government, the industry intends to develop lean manufacturing, maximize production efficiency and productivity by bringing in IoT (Internet of Things), Big Data and cloud technologies.