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# Characteristics of the Textile Industry of Two Asian Powers: China and India. Prospects for their Further Development on Global Markets

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## Abstract

*The aim of this study is to characterise the textile industry of the two global giants in this field – China and India and to discuss the impact they exert on the global economy. For centuries the fibre and textile industry has played a key role for humanity. The study also draws attention to international arrangements for trade in textiles and its liberalisation. This allowed for further development of this branch of the economy and participation in the global market of developing countries.*

**Key words:** textile industry, fibre industry, China, India, trade liberalisation in textiles.

## Introduction

Clothing undoubtedly has an important place in human life, from historical times to the present day. The textile industry has become an essential part of the global economy, providing employment to tens of millions of people. This industry is experiencing production and organisational changes on a global scale, and the deepening trade activity changes the attitude of employers and employees both in mutual relations as well as in relation to the importance of this industry. In the last three to four decades, trade restrictions, i.e. price, and finally quality, have played a significant role in shaping the development patterns of this sector [3-5].

Traditional giants in the production of textiles and clothing are primarily China, India, Pakistan and Vietnam. Although the industry is geographically dispersed around the world, China is the dominant world player today, being the largest producer and exporter of textile products. Immediately behind it is India, which is undoubtedly causing the Asia-Pacific Region to grow into a new center of the global economy. This region is under-

going dynamic and long-term economic development in various sectors, including, inter alia, standard textile technologies. This is mainly due to the fact that the region invests considerable financial resources in global companies, including banks. In addition, there are favorable internal factors based on the support of native governments, as follows:

- low-interest loans and tax credits;
- support for entities starting a business;
- training and consulting.

In addition, the following are contributing factors:

- cheap workforce and better trained staff;
- the latest western technology is reconstructed.

Not caring about the ecology of the product nor compliance with working time laws, countries of Asian region under the leadership of China and India generate huge profits. They produce standard products – from an economic point of view – at low cost and on a large scale, but of increasingly better quality. This allows them to stay in global markets.

In this situation, it would be advisable to trace and analyse the textile industry of two Asian powers: China and India as guides in the Asia-Pacific region also in the context of development perspectives. This is the main goal of the study. The sub-objectives of the study comprise describing the specificity of both textile powers:

- in China – through the silk industry;
- in India – by emphasising the role and importance of textile industry development in the aspect of the so-called “complete supply chain”.

Both China and India are moving towards a presence in the global economy as well as towards modernity and competitiveness through traditional sectors.

## Characteristics of the textile market in China

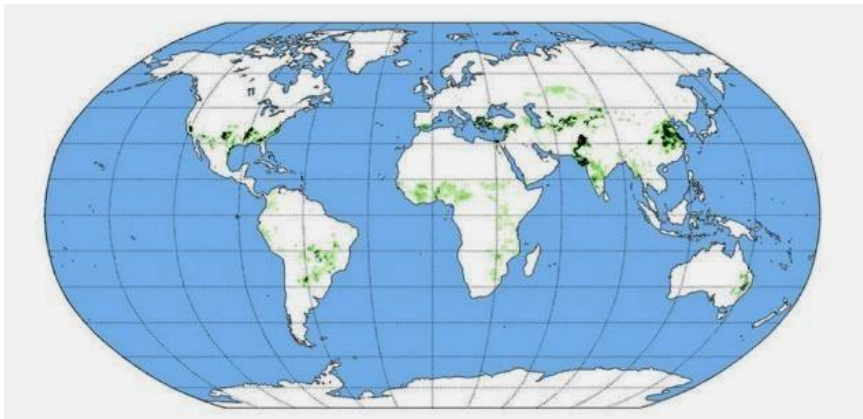
### A bit of history

China is a country in Central and Eastern Asia, whose population is over 20% of the world's population [12], and the Chinese economy is currently one of the fastest growing on the global market. In 1978, economic reforms began, which caused transformation and transition from a centrally planned economy to an economy termed as “a market economy with a Chinese specificity”. The average rate of economic growth in this period was over 10% in the GDP. In 2010, China overtook Japan and became the second largest economy in the world in terms of nominal GDP. In 2015, China's GDP amounted to USD 11.1 trillion and was more than twice as high as Japan's GDP. This dynamic development has been made possible by creating favorable conditions for foreign investments, such as low labour costs and taxes as well as the transfer of new technologies [15]. According to the latest forecasts by the Standard Chartered Bank, Chinese GDP will overtake the USA in 2022. Currently, China's economy amounts to 68.5% of the American economy [11].

Traditional branches of light industry are fibres and textiles, which are also the largest in the world, both in production and export. The first textile factories appeared on the Chinese coast (including Shanghai) at the end of the 19th century. In 1872, the first weaving factory was



**Figure 1.** Main centers of the textile industry in China. **Source:** own elaboration based on Google Maps, 20.04.2018.



**Figure 2.** Main areas of world cotton production. **Source:** [9].

established, and in the early eighties of the last century, mechanised factories appeared. The interwar period saw intensive development of the textile industry in China, with a simultaneous decline in the share of this branch of industry in Western European countries. In 1927, the number of mechanical spindles in China was almost 5 million, of which half belonged to foreign capital. Subsequent changes in the textile industry took place after the Second World War, when the construction of numerous factories began in China and the production potential in Hong Kong increased [4]. The textile industry has become a key branch of the Chinese economy since the introduction of economic reforms in 1978, when China evolved from an exporter of textile raw materials to that of textile products, mainly cotton. At the turn of the eighties and nineties, this sector accounted for 30% of Chinese exports, which was mainly due to the very cheap but well-educated workforce as well as

the ever-improving technology that made China products the cheapest in the world. It was calculated that exports of Chinese textiles are growing at a rate of 20-30% per year.

**China as the 'cotton power'**

In the beginning, Chinese products were associated with very low quality, and their export caused numerous conflicts and accusations of illegal practices and anti-dumping proceedings. Currently, while maintaining low prices, China has seen improved quality and become a global leader in the textile sector [16]. In 2004, Chinese textile exports to the European Union amounted to almost EUR 2 billion. Clothing worth almost 13 billion euros was also exported. The constant trend of export growth is about 10% per year [18].

Key centers of the Chinese textile industry are focussed on the Yangtze estuary (Shanghai, Zhuzhou, Hongzhou) and

the lower reaches of Huang He (Beijing, Tianjin, Qingdao). In north-west China, the main textile centers are located in the province of Xinjiang – Urumqi, Kashgar and Hotan [12]. **Figure 1** presents the distribution of these centers.

Currently, the cotton industry, which is the core of the textile industry, accounts for about 95% of Chinese textile production. China, alongside India, is one of the largest producers of this raw material, and they together account for over half of the world's cotton production. In **Figure 2**, the main areas of world cotton production are marked, which, as is evident, are in the region of Southeast Asia.

Over the years, China has been first in cotton production, but it has recently been gently overtaken by India. The majority of cotton production in these countries is not intended for export, but – interestingly – for internal use. China's demand for cotton is even greater than domestic production, which also means that China is also the largest cotton importer in the world, mainly due to the internal policy pursued. In China, this raw material is treated as a component of reserves. As a result, Chinese cotton stocks account for 60% of the total global stocks of this raw material. The cotton harvest, like every agricultural commodity, depends on weather conditions; however, in recent years the weather has had less and less influence on changes in cotton prices. China's policy towards cotton reserves, which in recent years have significantly increased, reaching a record level, has a much greater impact on the prices of this commodity [9].

**China as a 'silkworm power'**

Another important branch of the Chinese textile industry is the silk industry, which dates back to the the third millennium BCE. The discovery of silk in China initiated the famous historical Silk Road, which connected China with the Middle East and Europe. Silk has become the symbol of China, which excels in the production of this, the most luxurious natural fibre in the world. Silk stands out from other natural textile materials in its lightness and durability. Today, it is widely used in clothing, furniture and upholstery, and is also mixed with other fibres in the production of fabrics. The silk industry in China employs over one million employees. Chi-

na dominates the global silk industry as the world's largest silk producer, exporter and consumer at the same time. Currently, Chinese production is still more than 70% of the world's silk production and 90% of exports. **Table 1** lists the major global silk producers alongside China and India.

In recent years, the economic growth in the Chinese silk industry has slowed down slightly due to international and domestic factors. According to statistics published by the National Cocoon Silk Office, in 2014 China produced 146 000 tonnes of silk, which is a decrease of 13.64% compared to 2010. Chinese exports also fell. According to China Customs, in 2014, the total value of exports of natural raw materials from China was USD 3.388 billion, which is a decrease of 8.32% compared to 2010. In 2014, the value of natural silk and satin exports amounted to USD 908 million, which is a drop of 9.62% compared to 2010. In turn, the value of exports of clothing and silk products in 2014 amounted to USD 1.616 billion, which is a decrease of 2.59% from 2010. The reasons for this phenomenon should be seen primarily in the reduction of silk prices in China, in the fall in demand from abroad and in the lower prices of cocoons on the domestic market [8].

### Characteristics of the textile market in India

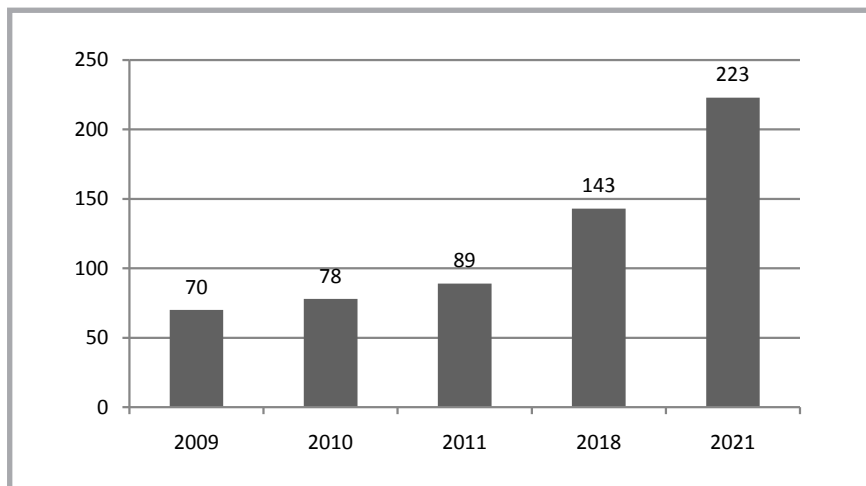
#### A bit of history and specificity of the “completion of the implementation of the supply chain” industry

India is second after China as the most populous country in the world, with over 1.3 billion inhabitants. The country is located in South Asia and occupies the majority of the Indian subcontinent. India is one of the fastest growing countries in the world in terms of so-called emerging economies. The average annual economic growth in the fiscal year 2015-2016 was 7.6%, and the revised subsequent-year forecast assumes an increase of 7.1% in GDP [14]. Undoubtedly, India's economy is moving towards modernity, but without forgetting its traditions, an example of which may be the textile sector, which is of key importance in the Indian economy.

The textile sector in India is one of the oldest branches of Indian industry and at the same time one of the largest co-cre-

**Table 1.** Global production of silk in tonnes. *Source:* [8].

Country \ Year	2010	2011	2012	2013	2014	2015
Bangladesh	40	38	42.50	43	44.5	44
Brazil	770	558	614	550	560	600
Bulgaria	9.4	6	8.5	8.5	8	8
<b>China</b>	<b>115000</b>	<b>104000</b>	<b>126000</b>	<b>130000</b>	<b>146000</b>	<b>170000</b>
Colombia	0.6	0.6	0.6	0.6	0.5	0.5
Egypt	0.3	0.7	0.7	0.7	0.82	0.83
<b>India</b>	<b>21005</b>	<b>23060</b>	<b>23679</b>	<b>26480</b>	<b>28708</b>	<b>28523</b>
Indonesia	20	20	20	16	10	8
Iran	75	120	123	123	110	120
Japan	54	42	30	30	30	30
North Korea	0	300	300	300	320	350
South Korea	3	3	1.5	1.6	1.2	1
Philippines	1	1	0.89	1	1.1	1.2
Syria	0.6	0.5	0.5	0.7	0.5	0.3
Thailand	655	655	655	680	692	698
Tunisia	0.12	3	3.95	4	4	3
Turkey	18	22	22	25	32	30
Uzbekistan	940	940	940	980	1100	1200
Vietnam	550	500	450	475	420	450
Madagascar	16	16	18	18	15	5
<b>Total</b>	<b>139158.02</b>	<b>130285.8</b>	<b>152910.14</b>	<b>159737.10</b>	<b>178057.62</b>	<b>202072.83</b>



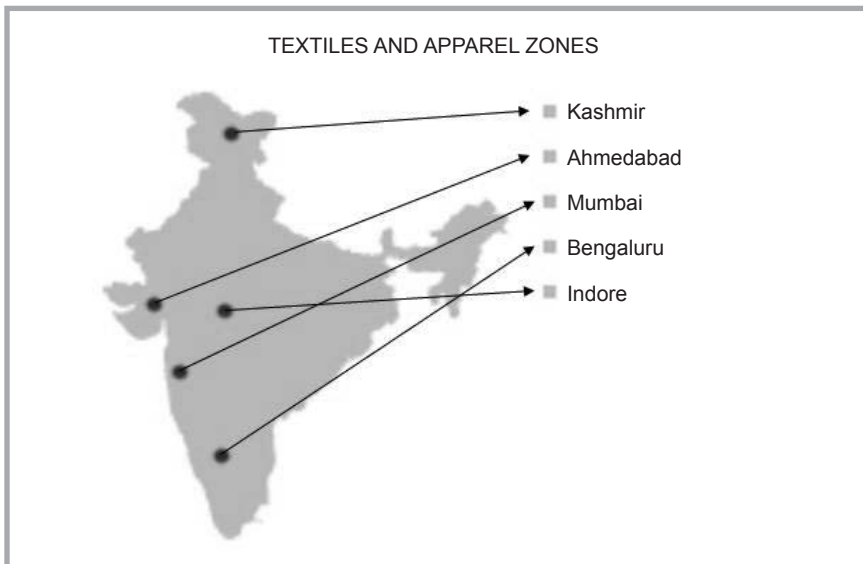
**Figure 3.** Size of the Indian textile sector (in billion dollars). *Source:* own elaboration based on “A brief Report on textile industry in India, ASA& Associates LLP, July 2015” [1].

ators of Indian exports, as the total export of textiles accounts for about 11% of total exports [13] (in 2015-2016 it amounted to USD 40 billion). India is the world's second textile manufacturer after China and the world's third largest producer of cotton (after China and the USA). The Indian textile industry is very diverse. On the one hand, there is a passion for traditions and old times, hence there is the so-called ‘unorganised sector’, including manual craft, operating on a small scale, using traditional tools and methods. On the other hand, you can see modernity and technology, that is, the ‘organised sector’, using modern machines and techniques.

Currently, the value of the Indian textile industry is estimated at about 180 billion dollars, with the prospect of reaching 223 billion dollars by 2021 (**Figure 3**). This sector is the second largest employer, immediately after agriculture, providing direct and indirect employment to approximately 105 million people. It creates jobs both within its own industry and in related sectors. It accounts for 5% of GDP in India and 14% of the general industrial production index (IIP).

What distinguishes the Indian textile industry is the fact that very few countries can boast its so-called complete supply chain [2] – from natural and synthetic





**Figure 4.** Key centers of the Indian textile industry. *Source:* [13].

fibres to the production of finished products.

Ever since ancient times, India has been well-known for textile products. Unfortunately, in the colonial period, the traditional textile industry in India actually ceased to exist. It was not until 1818, when the first textile production plant in Fort Gloster near Calcutta was established, that we could talk about the rebirth of a modern textile industry. However, the real cotton industry began in Mumbai, when in 1854 a merchant set up the first cotton mill to start trading internally and abroad. A significant part of the early factories dealt with the trade of yarns and textiles on the home, Chinese and African markets. Another important date in the modern history of the textile industry was in 1861, when a cotton mill was built in Ahmedabad, quickly becoming the biggest rival of the factory in Mumbai. In the second half of the nineteenth century, the Indian textile industry made rapid progress, as evidenced by the fact that by the end of the century, 178 cotton factories had been created. Unfortunately, during the 1900s, many of these plants were closed both in Mumbai and Ahmedabad due to the famine that hit India [7].

The Second World War and the Swadeshi movement were a great stimulus for the development of the cotton textile industry<sup>1)</sup>. It was during the war that imports of fabrics from Japan were completely stopped, which undoubtedly influenced the growth of this industry. The number of plants increased from 178 to 249 in 1901. Twenty years later, this number was

already 396 factories, and by 1945 it had increased to 417. In addition, the cotton industry is called the Swadeshi industry, because it was developed with local entrepreneurship and capital, and in pre-independence times, this movement stimulated demand for Indian fabrics in the country.

The declaration of independence also had a large impact on the current appearance of the textile industry. India kept 409 out of the 423 textile factories, with the remaining 14 going to Pakistan, along with 22% of the land for growing cotton. However, some plants have been closed. For several years after the declaration of independence, Indian factories had to import cotton from Pakistan and other countries. Soon, however, between 1951 and in 1982 the number of spindles doubled from 11 million to 22 million, while in subsequent years 1989-1990, it increased by over 26 million [7].

In 2000, the National Textile Policy was announced and adopted, the main purpose of which was to provide materials of acceptable quality at reasonable prices, which would contribute to the increase in the competitiveness of Indian products on the world market [7].

The textile industry occupies an important place in the Indian economy and contributes significantly to the creation of budget revenues from exports. It is unique because it is an independent industry – it has the basic requirement of raw material, manufacturing everything right up to the final product. It has enormous potential to create new jobs not

only in the sector itself but also in others, including agriculture, among others.

### Segments of the Indian textile industry

The Indian textile industry can be divided into several segments, such as [1]:

- cotton;
- silk;
- wool;
- synthetic fibres;
- jute.

The map above (**Figure 4**) presents the key centers of the textile industry in India. The textile industry in the Kashmir region is primarily based on cashmere wool and silk. In turn, Ahmedabad and Indore are the leaders in the cotton industry. Mumbai's cotton industry is the traditional and oldest branch of the manufacturing industry in Mumbai, with the largest concentration of cotton plants. In the Bengaluru region, silk reigns.

The Indian government is trying to develop the textile sector by undertaking a series of actions aimed at attracting investors and encouraging growth and development in this sector. Key initiatives adopted in the budget for 2017-2018 to create new jobs and, consequently, increase textile exports are as follows:

- encouraging new entrepreneurs to invest in such sectors as knitwear, and increasing the allocation of funds from USD 20.4 billion to USD 36.6 billion;
- raising the qualifications of the workforce by co-financing to the amount of USD 330 million;
- plans to introduce the so-called mega package for the sector, including, among others, the modernisation of obsolete looms, tax breaks and marketing support [13].

Additionally, the Clothing Manufacturers Association of India (CMAI) signed a memorandum in consultation with the Chinese Chamber of Commerce regarding the import and export of textiles in order to explore potential areas of cooperation in the growth of clothing exports from India. The Indian government has also started the promotion of the "India Handloom" initiative, and thus the promotion of high quality handmade products, on social media such as Facebook, Twitter and Instagram, in order to establish contact with clients, especially young people.

## International arrangements for trade in textiles and its liberalisation

Until recently, in the years 1974-1994, world trade in textiles was based on principles that were rather contrary to the spirit of liberalisation. It was regulated by bilateral agreements between importers and exporters, or by the individual actions of states. Restrictions mainly concerned the setting of quantitative quotas for textile imports from individual countries, where the main determinant for these activities was the Multi-fibre Arrangement agreement, existing since 1974<sup>2)</sup>. The first breakthrough was the signing of the Agreement on Textiles and Clothing (ATC) [20] within the framework of the WTO in 1994, where all WTO member states undertook to reduce existing barriers to trade in textiles. The aim of this ten-year program was to gradually reduce trade restrictions and, as a result, to fully impose global rules on global trade and the total liberalisation of trade in textiles. All was to be carried out in four stages, under which the previously determined percentage of products was to be subject to the GATT/WTO rules. This meant that previous restrictions in the form of quotas had to be abolished. Importantly, each state could independently decide on the quantity of products that would be covered by the lifting of restrictions in a given liberalisation phase. The only caveat was that each stage should contain products from each of the four groups:

- yarn
- fabrics,
- clothing,
- other textile products.

With the expiration of the agreement in January 2005, trade in textiles was completely liberalised. In addition, it is worth mentioning possible measures to protect the market against excessive imports. According to the WTO rules, it is possible for the state to initiate anti-dumping, anti-subsidy and safeguard proceedings [6]. The first two measures are connected with proving unfair behaviour of the country which exports, for example, selling the product below its production costs. In turn, protective measures (applied much less frequently than anti-dumping measures) are intended to prove that the increase in imports has deteriorated the functioning of domestic producers and is a threat to them, because it may cause their total collapse.

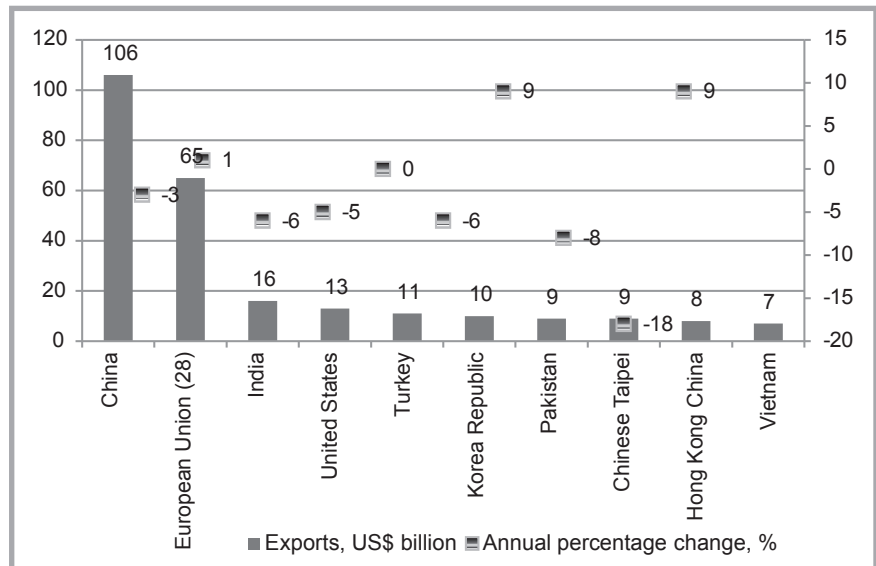


Figure 5. Ten main textile exporters in 2016 (US \$ and annual percentage change). Source: [17].

Currently, the World Trade Organization (WTO), which is a continuation of the General Agreement on Tariffs and Trade (GATT), comprises 164 member states (including China and India) that manage the global system of trade rules, acts as a forum for negotiating trade agreements, settles disputes trade between its members, and supports the needs of developing countries.

## Conclusions

The textile industry is probably one of the most important branches of the global economy. In 2016, global textile exports reached the value of USD 660 billion [19]. This industry plays a significant role in industrialised countries, but it is of the greatest importance for the economies of developing countries. Both producers with the main advantage of cheap labor – this can be observed in countries such as India, China and Bangladesh, and those who base their work on developed technology and design are present in this market. Thanks to the liberalisation of trade in textiles, developing countries have easier access to the markets of developed countries, which makes it easier for them to participate in world trade. In turn, developed countries have received new opportunities to access service markets. Of course, as happens when introducing new solutions, many side effects had not been foreseen, which caused that not for all members was world trade liberalisation a beneficial move. Current information on the main textile exporters is provided in the figure below (Figure 5).

In the case of China, the decision to liberalise trade in textiles turned out to be a so-called “bullseye”, allowing to increase the volume of exports from year to year. A cheap but educated workforce and the development of technology undoubtedly effects a reduction in production costs and, consequently, an increase in exports to global markets. In a sense, China has earned the nickname of “world factory” in the textile sector.

On the other hand, in the case of India, the close relationship of the textile industry with agriculture and ancient culture and traditions makes this sector one of a kind compared to other countries. Thanks to this, the Indian textile industry has the ability to produce a wide range of products suitable for various market segments, both in India and around the world. As a country with high development potential<sup>3)</sup>, India has a chance to become the third largest economy in the world, but to achieve this, the government has to deal with many challenges, including problems of poverty and illiteracy<sup>4)</sup>, through bureaucracy, corruption, high income taxes on companies overseas, to deficiencies in the economic infrastructure.

The future of these countries in the global economy undoubtedly depends largely on their specialisation in specific products and the choice of production systems. Among the developing countries, it is China and India that are the most important employers in the textile industry. How their economy will develop, within

which the textile and clothing industry, will probably show in the next few years.



### Editorial notes:

1) Part of the Indian independence movement aimed at removing the British Empire from power and economic improvement in India, applying the principles of "swadeshi" (self-sufficiency). The Swadeshi movement strategies included, among others, boycotting British products and reviving domestic production.

2) An international trade agreement on textiles and clothing that was active in 1974-2004. Under the agreement, developed countries could impose quantitative restrictions on imports of textiles and clothing from developing countries.

3) The second largest consumer market in the world (just after China), created by about 1.3 billion inhabitants, generates increasing internal demand with each passing year, along with a dynamic increase in the affluence of the middle class.

4) Three in ten Indians live on less than \$ 1 a day.

### References

1. A brief Report on textile industry in India, ASA& Associates LLP, July 2015. [www.cci.in](http://www.cci.in)
2. Belemkar S, Ramachandran M. Recent Trends in Indian Textile Industry- Exploring Novel Natural Dye Products and Resources. *International Journal on Textile Engineering and Processes* 2015; 1, 3.
3. Divatia P.J. *Indian Industries in the 21st Century* p46, Deep & Deep Publications Pvt Ltd, New Delhi, 2003.
4. Marszał T. Przestrzenne aspekty rozwoju przemysłu włókienniczego na świecie do połowy XX w. *Acta Universitatis Lodziensis. Folia Historica* 24, Łódź 1986.
5. Nordas HK. *The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing*. World Trade Organization, Geneva, Switzerland, 2004.
6. Raulin A. Instrumenty ochrony rynku, POLSKA IZBA ODZIEŻOWO-TEKSTYLNA.
7. Ruddar Datt, Sundharam KPM. *Indian Economy* p 658, S.Chand & Company Ltd, New Delhi, 2006.
8. [www.bizvibe.com](http://www.bizvibe.com)
9. [www.bossafx.pl](http://www.bossafx.pl)
10. [www.chiny24.com](http://www.chiny24.com)
11. [www.encyklopedia.pwn.pl](http://www.encyklopedia.pwn.pl)
12. [www.ibef.org](http://www.ibef.org)
13. [www.newdelhi.msz.gov.pl](http://www.newdelhi.msz.gov.pl)
14. [www.pekin.msz.gov.pl](http://www.pekin.msz.gov.pl)
15. [www.psz.pl](http://www.psz.pl)
16. [www.shenglufashion.com](http://www.shenglufashion.com)
17. [www.trade.ec.europa.eu](http://www.trade.ec.europa.eu)
18. [www.wits.worldbank.org](http://www.wits.worldbank.org)
19. [www.wto.org](http://www.wto.org)

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