



COMMON MAN'S CLOTHING-EFFECTS OF TAXES AND TARIFFS

January 2016

ABSTRACT

The discriminatory tax policies and the higher tariffs imposed on Man Made Fibres (MMF) in India compared to cotton, have resulted in the availability of MMF to the manufactures at non-competitive prices, compared to the competing countries. This has also resulted in restricting the growth and investments in the industry as well as constraining the country's textile exports. The paper posits the need for reducing the cost of production of the manmade fibres through implementing a fibre neutral policy, like it has been done in competing countries such as China. This can encourage more players to the MMF industry, given the rising clothing requirements in the country and will increase the export price competitiveness of MMF-based textile items.

Lekshmi R Nair and D Dhanuraj
Centre for Public Policy Research

Acknowledgement

The Centre for Public Policy Research (CPPR) team is extremely thankful to all those who contributed towards developing the ideas in the report. The authors specifically acknowledge Laura Liu (Trade and Economic Policy Advisor, ATLAS Network) for her feedbacks which helped in developing the final report. We also thank friends of CPPR team for their contributions to developing this report into its final form.

Executive Summary

The discriminatory tax policies and the higher tariffs placed on Man-made fibres (MMF) products in India compared with cotton have resulted in restricting the growth and investments in the MMF industry. The high excise duties on MMF and yarn, high customs duties levied on the raw materials and additives used towards its production, and the high capital investment required in the production of the fibres have resulted in making production of MMF accessible to a few big players. This has resulted in the creation of a non-competitive market for MMF production.

In India, MMF is available to manufactures at non-competitive prices, compared to its competing countries such as China, creating excessive bias towards production of cotton. Consequently, 60 per cent of the fibre consumption in India is accounted for by cotton, while only 40 per cent is accounted for by MMF, unlike the global trends which are dominated by MMF.

Textile exports in India are constrained by anomalies in excise duty and customs duty between cotton and MMF textiles. The high excise and customs duties of MMF have caused significant decline in the MMF's export price competitiveness. This has resulted in making India's textile exports mainly cotton based, unlike elsewhere in the world.

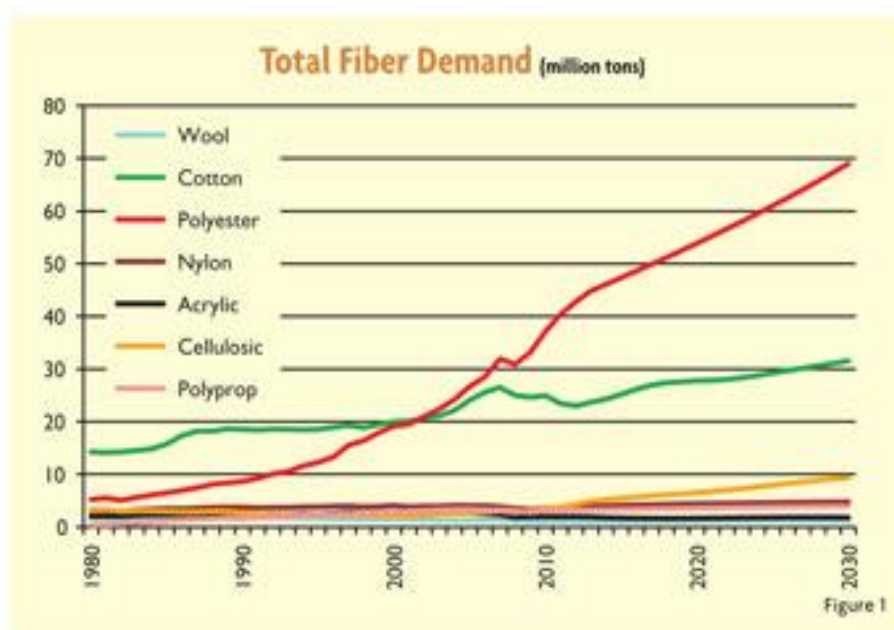
The share of India in the global textile exports is only 5.2 per cent while that of competing countries, such as China is 39 per cent. Thus, China has become the largest textile exporter by pushing the exports of MMF textiles.

This paper posits that more players need to be encouraged to produce MMFs and enter the market by making it more affordable. This should be done by reducing the high excise duties on MMF and high customs duties on its raw materials. The capacity utilization can thus be encouraged leading to high growth in the industry. Likewise, the consumption of MMFs can be encouraged by making them more affordable. For this, the cost of production for it needs to be reduced through implementing a fibre neutral policy, like it has been done in competing countries such as China. The export price competitiveness of MMF-based textile items needs to be increased through reducing the internal cost of production.

1. Introduction

Textile and garment industry with a market size of around US\$ 3000 trillion has served as growth engine for many nations, especially the developing and the least developed nationsⁱ. There are two main groups of fibres used in the manufacture of modern textiles namely naturalⁱⁱ and manmadeⁱⁱⁱ fibres. Natural fibres include cotton, wool, silk and flax, and Man-Made Fibres (MMF) consist of viscose or rayon, nylon, polyester, acrylic, and polyolefin.

Figure 1: World consumption of Apparel Fibre (In Million Tonnes)



Source: Textile World, 2015^{iv}

Globally, cotton was the most in demand fibre until 2000. However, figure 1 shows that the demand for polyester soon superseded the demand for cotton in 2000 (it has a higher projected demand until 2030 compared to cotton). The main reasons for this shift include the easy care and durability of MMF products, low input costs and changing consumer tastes^v. Polyester accounts for 55 per cent of the total consumption of MMFs at present followed by nylon, with a share of 9.4 per cent and viscose with 7.7 per cent share, while cotton constitutes only 28 per cent of global fibre consumption^{vi}. The global textile trade is focused on and is dominated by MMFs which occupy a share of 60 per cent^{vii}.

In India, the textile industry which has an estimated market size of \$108 Billion is the second largest provider of employment after agriculture^{viii}. The sector accounts for around 4 per cent of GDP, 14 per cent of industrial production and 17 per cent of gross export earnings^{ix}. The production of MMFs like viscose and acetate started in India since the early 1950s, followed by polyester in the early 1960s. At present, India ranks second among the countries producing man-

made fibres textiles and constitutes 8 per cent of world production, after China which contributes to 60 per cent of world production^x.

India's textile's policy framework is predominantly biased towards cotton which has an optional excise duty of only 6 per cent, while a high mandatory excise duty of 12.5 per cent is levied on manmade fibre and yarn^{xi}. The assumption is that cotton is the fabric of the common man and manmade fibre a luxury item has found enunciation in the government's policies namely the discriminatory tax policies and the higher tariffs being levied on MMF products in India. The idea behind this is to protect the agricultural sector producing cotton^{xii}. The high excise duties also meant higher revenues for the Government^{xiii}. However, in countries such as China, Indonesia, Pakistan, Bangladesh, Sri Lanka and Thailand which are major textile exporters, tax equality has been established between cotton and MMF.

Table 1: Excise Duty Differentials between cotton and MMF in leading textile economies in 2014-15

Parameters	India	China	Pakistan	Bangladesh	Sri Lanka	Indonesia	Thailand
Cotton	6% (optional)	17%	Nil	Nil	20%	10%	7%
MMF	12%	17%	Nil	Nil	20%	10%	7%
Cotton Yarn	6% (optional)	17%	Nil	1.5 Tk/kg	20%	10%	7%
MMF Yarn	12%	17%	Nil	1.5 Tk/kg	20%	10%	7%

Source: Textile India Progress (2015)^{xiv}

On some raw materials and additives used for producing man-made fibres like rayon grade wood pulp for viscose manufacture, Purified Terephthalic Acid (PTA) as well as Monoethylene Glycol (MEG) used for manufacturing polyester and Acrylonitrile used for manufacturing acrylic fibre a customs duty of 5 per cent is imposed. Caprolactam, used for the manufacture of Nylon fibre, has a customs duty of 8 per cent imposed on it in India. In competing nations such as China, Thailand, Vietnam and Indonesia, these materials are either exempted from customs duties or have lower duty structures for the raw materials^{xv}. Along with this, antidumping duty within the range of \$23.75 and \$117.09 was imposed by the Government on the imports of purified terephthalic acid, used in the production of polyester, from China, Korea, Thailand and the EU, thereby increasing the cost of raw material. It is important to add here that, in spite of the recommendation made by the Ministry of textiles in the National fibre policy 2010 for taxation

neutrality to be maintained on different fibres and the demands made by different industry associations, the anomalies in taxation and tariffs continue to plague the sector.

Market studies show that the assumption that MMFs are a luxury item and that cotton is a common man's fabric in India is baseless^{xvi}.

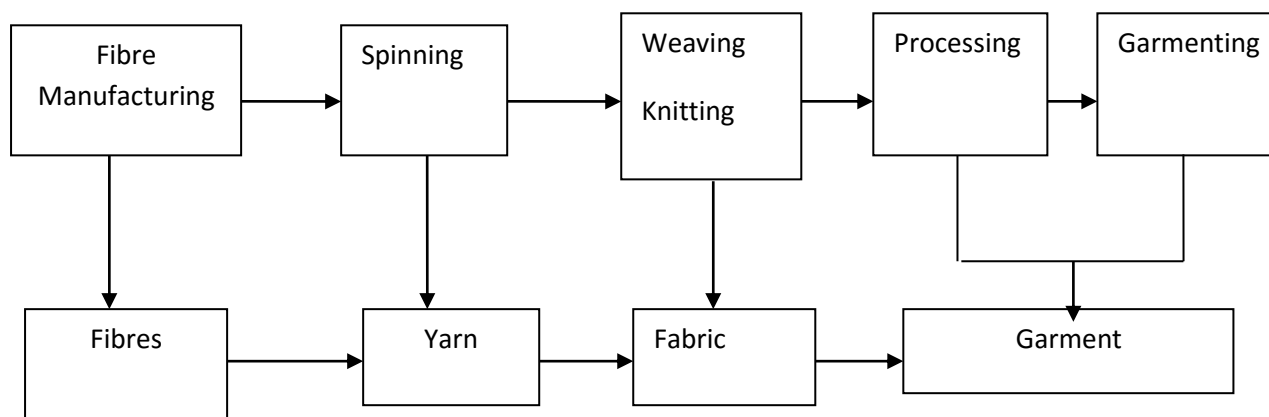
The discriminatory tax policies and the higher tariffs have resulted in the restricting availability of MMF to the manufactures at non competitive prices, compared to the competing countries, creating excessive bias towards cotton. This has also resulted in restricting the growth and investments in the MMF industry. In India, 60 per cent of the fibre consumption is accounted for by cotton, while only 40 per cent is accounted for by MMF, unlike the global trends^{xvii}.

Given the high demand for the MMF and the blended textiles in both urban and rural parts, more than cotton textiles, as well the global shift towards MMF textiles^{xviii}, the growth of the MMF industry in India is required to meet the growing demands for it, especially in the apparel sector. Studies show the per capita apparel consumption has increased by 50 per cent in India from 2010 to 2012^{xix}. It is evident, thus, that MMF will be a choice of fabric to meet this demand.

Textile exports in India are constrained by excise duty and customs duty anomalies between cotton and MMF textiles. The consequence is that India's textile exports are mainly cotton based, while the global textile exports are MMF based. Owing to this, the share of India in the global textile exports is a mere 5.2 per cent. The competing country, such as China has a share of 39 per cent in the global textile exports, and thus is the largest textile exporter. And China has been able to do this by giving a big push to MMF textile exports^{xx}. It is vital to note that, since the textile sector is perhaps the only sector in which the creation of global competitiveness is possible within short time and within a limited cost^{xxi}, it can be a focus sector for increasing overall exports of the country. And MMFs can play a decisive role in achieving this.

2. Value Chain and Stakeholders of MMF industry in India

Figure 2: Value Chain of Indian MMF



There are two types of Man-Made Fibres namely cellulosic, which are made from cellulose and synthetic fibres which are made from petrochemicals. In India, while the cellulosic fibre/yarn industry falls under the Ministry of Textiles, the synthetic fibre industry is under the Ministry of Chemicals and fertilizers. Along with these two Ministries, manufacturers, spinners, weavers, fabricators, exporters, industry associations, export promotion councils and consumers form the stakeholders of the sector.

Synthetic fibre manufacturing is dominated by big players, mainly Reliance industries and Bombay Dyeing followed by Indo Rama Synthetics and Indian Acrylics. Cellulosic manufacturing from cellulose is dominated by Aditya Birla Group, followed by SIV Industries Limited. Among the synthetic fibre manufacturers, Reliance industries and Bombay Dyeing have in-house facilities for raw materials production while all the others depend on imported raw materials. Among the cellulosic fibre manufacturers, both the big players partly have in-house facilities for producing the raw material namely rayon wood pulp and partly imported from foreign countries. The fibres are converted into yarn by the spinning process, mainly carried out in the organized mill sector consisting of 1960 spinning mills and Milling Associations. The man-made fibres manufactured are thus consumed by the organized mill sector for man-made filament yarn manufacturing in the country.

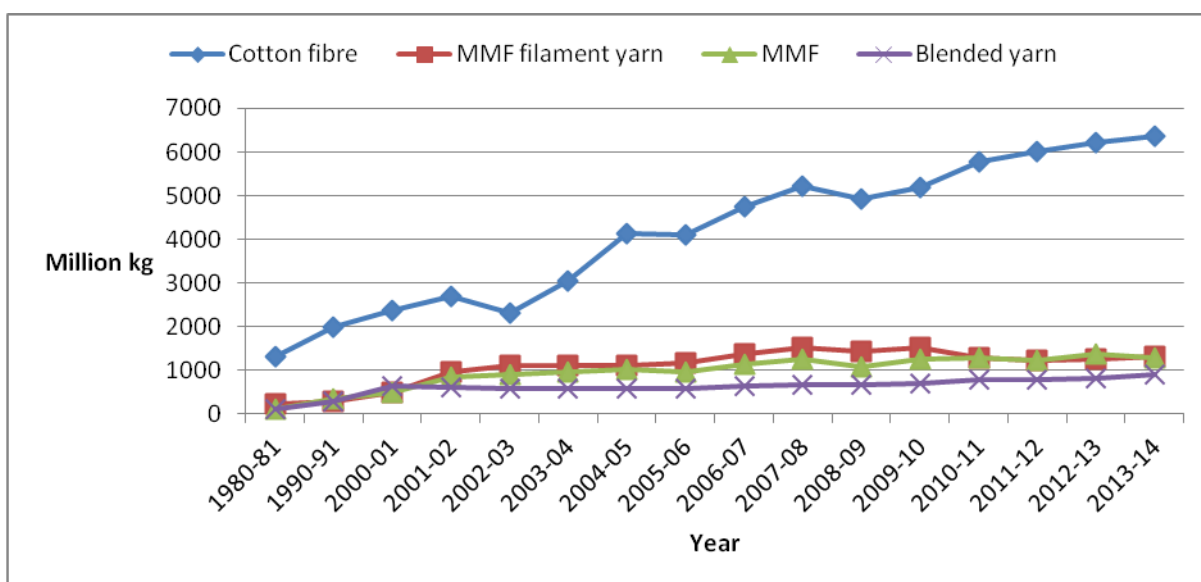
From the man-made filament yarn, fabric is manufactured. It is mostly done in the unorganized segment comprised in the power loom sector (2.43 million registered looms, 6.1 million workers, weaving industry associations, Power Loom Development and Export Promotion Council) and

knitting sectors. Fabrics are converted into the finished products called garments. In the garment manufacturing sector, the main stakeholders are decentralized small scale units including 48,000 fabricators, 27,000 domestic manufacturers, 2,000 manufacturer exporters, MMF industry associations, clothing manufacturers associations and Export Promotion Councils. This is unlike the competing countries like China, where there are huge capacities for the manufacturers of fabrics and garments^{xxii}.

The overall value chain of MMF industry thus shows a distorted organizational structure with the monopoly of the big players at the fibre level and a fragmented status at the fabric and garment level.

3. Lack of competitive market

Figure 3: Production of Cotton and Man-made fibres



Source: Office of Textile Commissioner (2014)

Figure 3 shows that the production of cotton has increased from 1,326 million kg in 1980-81 to 6,375 million kg in 2013-14. At the same time the production of man-made fibres and MMF filament yarns have increased from 115.2 million kg to 1,294 million kg and from 235 million kg to 1,307 million kg respectively in the same period. The relative growth of MMF is thus less compared to cotton in India. Polyester dominates the MMF sector with 67 per cent share in the fibre capacity and 94 per cent share in the yarn capacity^{xxiii}. Polyester is followed by Viscose with 24 per cent share in the fibres capacity and 3 per cent share in the yarn capacity. Blended yarn which includes the combination of cotton and MMF yarns as well as the combination of different varieties of MMF yarns has increased its production from 98.7 Million kg to 897 Million kg in India. Among the blended yarns, the combination of cotton and polyester has

the highest share (44 per cent) followed by the combination of polyester and viscose (33 per cent)^{xxiv}. The growing production of blended yarn shows the need for making it more competitive through minimizing the excise and customs duties on Man-made fibres and Man-Made filament yarn. The cotton sector also will be positively affected through making the blended yarns more competitive.

The lack of a competitive market for the production of MMF can be considered as a main reason for the low growth of MMF production compared to cotton in the country. MMF production is monopolized by certain few big players namely Reliance, Aditya Birla, Bombay Dyeing, and Indo Rama Synthetics. The monopoly of the big players has adversely affected the small and medium players in the industry which showed poor financial performance, resulting in the acquisition of the medium players like Raymonds, ICI and DCL Polyester by Reliance Industries, the big player^{xxv}. Our interviews with the stakeholders also confirm this. The existing reports^{xxvi} and our interviews with the stakeholders show that the current demand requirements for the MMF fibre and yarns will not be met by the existing MMF production levels.

The high excise duties on MMF and the high customs duties on the raw materials and additives, used for producing manmade fibres, along with the requirement for very high capital investments in the production of the fibres have resulted in making the MMF production affordable to only very few big players.

Table 2: Capacity utilization of Synthetic Fibres

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Capacity (in thousand MT)	3223	3570	3220	3266	3459	3674	3823	3784
Production (in thousand MT)	2321	2648	2469	2819	3083	3042	3056	3084
Capacity Utilization (%)	72	74.2	76.7	86.3	89.1	82.8	79.9	81.5

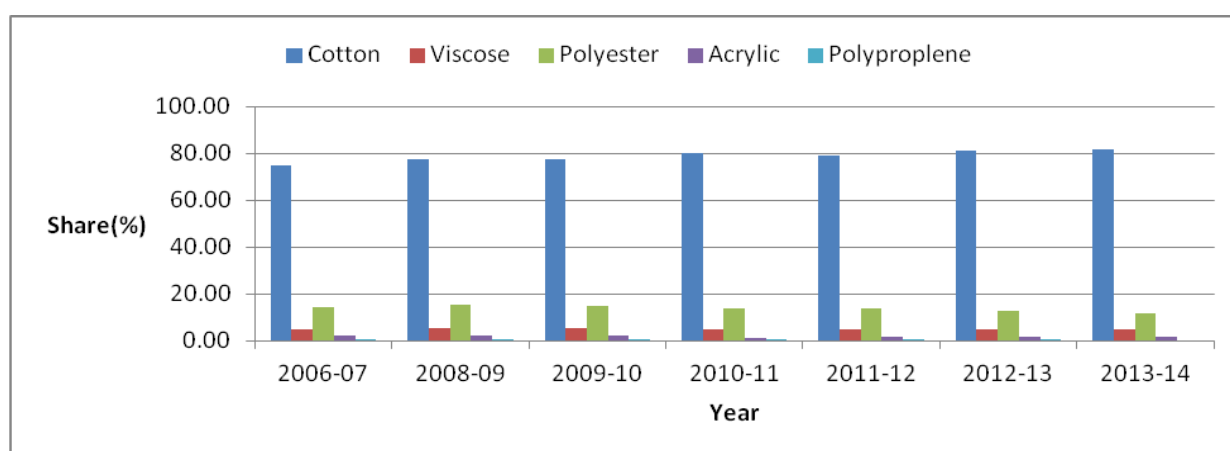
Source: Govt of India (2014)^{xxvii}

Table 2 shows that the capacity utilization of Synthetic fibres in India had been in the range of 72 to 86 per cent. There is around 20 per cent capacity which remains unutilized in the industry. The refining capacity of India is very high given that it assumes the fifth position in the world. In spite of the high capacity, there are only four big players in the synthetic fibre industry. There is thus the need for the entry of new players to the industry for utilizing the remaining

capacity considering the current demand requirements and the global shift towards man-made fibres. Moreover, in spite of having huge potential, various specialized man-made fibres like acetate/ tri-acetate, cup ammonium filament yarn, nylon 66, nylon 11, spandex, etc are not being manufactured in India and thus have to be imported by the weavers^{xxviii}. By reducing the anomalies in excise and customs duties between cotton and MMF in India, MMF can be made more affordable, which will result in increased capacity utilization through the entry of more players in the market.

4. Consumption of MMF

Figure 4: Mill Consumption of Textile Fibres in India



Source: Office of Textile Commissioner (2014)

The share of cotton consumption has increased from 75 per cent to 81 per cent in the period 2006-07 to 2013-14. At the same time, the share of manmade fibre consumption has declined from 21 per cent to 18.19 per cent in the same period. Among the manmade fibres, share of polyester declined from 14 per cent to 11.62 per cent, followed by a decline in share of viscose consumption from 4.94 per cent to 4.67 per cent and acrylic from 2.23 per cent to 1.90 per cent. The decline in the man-made fibres consumption by the mill sector is the consequence of the policy anomalies between cotton and MMF.

Table 3: Excise Duties on MMF, Cotton and blended fabrics in India

	2006 -07	2007 -08	2008 -09	2009 -10	2010 -11	2011 -12	2012 -13	2013 -14	2014 -15	2015 -16
MMF (mandatory)	8	8	8	8	10	10	10	12	12	12
MMF filament yarn (mandatory)	8	8	8	8	10	10	10	12	12	12
Cotton Yarn/fabrics/made	4	4	4	Nil	4	4	5	6	6	6

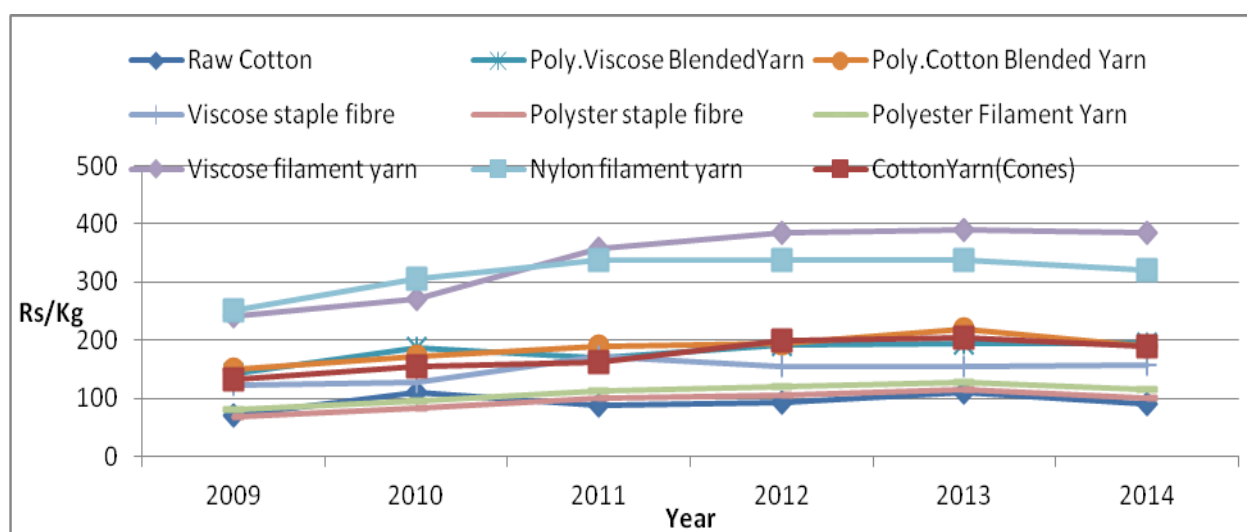
ups, garments (optional)										
Blended and mixed Yarn/fabrics/made ups, garments (optional)	8	8	8	8	10	10	10	12	12	12

Source: Textile India 2015

Table 3 shows that there had been a gradual rise in the mandatory excise duties on Man-made fibres and Man-Made filament yarn in the same period from 8 per cent to 12 per cent. The rise in excise duties along with the high customs duties on raw materials has resulted in rise in the cost of production of MMF in this period making it unaffordable to consume by the mill sector in India.

5. High Duties and Prices of MMF

Figure 5: Prices of Textile Items



Source: Ministry of Textiles, 2015

The price of raw cotton increased from 71.01 ₹ per kg to 91.29 ₹ per Kg while that of polyester staple fibre increased from 68.73 ₹ per kg to 99.78 ₹ per kg in the period 2009 to 2014. The price of viscose staple fibre had been the highest increasing from 122.31 ₹ per kg to 156.19 ₹ per kg in the same period. Among the yarn varieties, the cotton yarn's price increased from ₹ 133.34 per kg to 188.83 ₹ per kg while that of polyester yarn increased from 79.66 ₹ per kg to 116.21 ₹ per kg in the period 2009 to 2014. The prices of Viscose and Nylon yarns had been the highest which increased from 242 ₹ per kg to 385.68 ₹ per kg and 251.02 ₹ per kg to 319.58 ₹ per kg, respectively, in the same period.

Reports^{xxix} show the pricing policy of the MMF industry as import parity pricing^{xxx} at landed cost. Hence, along with the high mandatory excise duties on MMF fibre and yarn, the high customs duties on raw materials have resulted in the increased cost of production, translated into high non competitive prices. The customs duties for importing the raw materials for the production of the viscose fibre namely rayon wood pulp is very high in India, compared to the other countries. The total contribution of the raw materials to the total operating cost of the MMF industry is around 75 to 80 per cent^{xxxi}. Exempting the raw materials from customs duties will not hurt the domestic manufacturers since these are imported due to the clear shortage of the raw materials namely titanium dioxide, spin fish oil and rayon wood pulp for the manufacture of polyester and viscose inside the country^{xxxii}. At the same time, the excise and customs duties on cotton yarn/ fabrics is very less compared to MMF while it is also optional.

Though there can be a revenue loss through the reduction of the excise duties on the MMF and MMF filament yarn and the customs duties on the imports of raw materials and additives, this can be balanced by the growth in the industry, according to our interviews with the stakeholders. Table 4 clearly shows the high demand for manmade and blended textiles in both rural and urban areas compared to cotton. The per capita purchase of manmade and blended textiles is higher than that of cotton textiles in rural and urban India in both quantity and value terms, as shown in the table.

Table 4: Per Capita Purchase of Different Fibres Based Textiles in India

		Area					
		Urban		Rural		All India	
		2011	2012	2011	2012	2011	2012
Cotton	Quantity in Metres	13.7	14.4	8.9	9.3	10.4	10.9
	Value in ₹	1550.8	1950.7	628.7	790.9	916.02	1152.3
Pure silk	Quantity in Metres	0.42	0.45	0.05	0.06	0.17	0.18
	Value in ₹	299.2	318.7	51.84	55.2	128.9	137.3
Woollen	Quantity in Metres	0.1	0.11	0.05	0.06	0.07	0.08

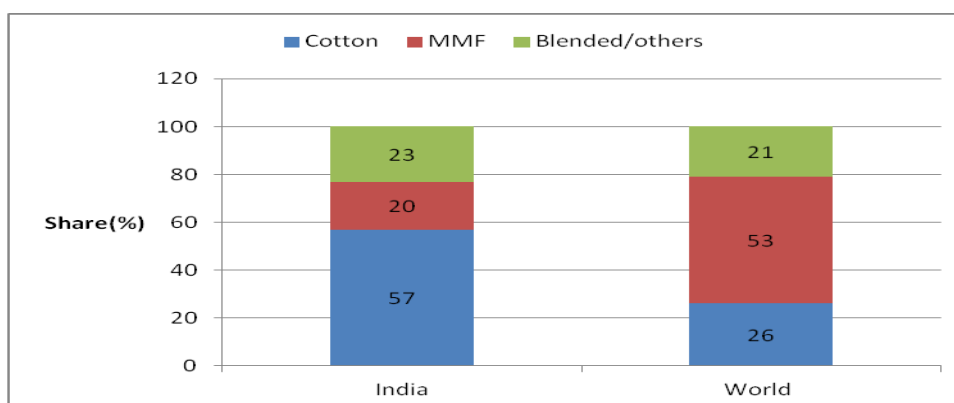
	Value in ₹	65.64	69.41	29.17	30.85	40.53	42.9
Manmade and blended	Quantity in Metres	15.8	16.3	13.3	14.1	14.06	14.8
	Value in ₹	1891.4	2085.3	1160.4	1279.3	1388.2	1530.5
All textiles	Quantity in Metres	30.1	31.2	22.3	23.5	24.7	25.9
	Value in ₹	3807.0	4424.04	1870.1	2156.2	2473.6	2862.9

Source: Office of Textile Commissioner, 2014

Through making the MMF and MMF filament yarn more affordable, the consumption of the fibres namely Polyester, viscose, acrylic fibre and nylon by the mill sector can be increased. The rising demand for the man made and blended cloth in both rural and urban areas can be satisfied by this, which in turn can balance the revenue loss through reduction in excise duties and exemption from customs duties.

6. Export Competitiveness of MMF Products

Figure 7: Fibre wise Textile exports - India Versus World

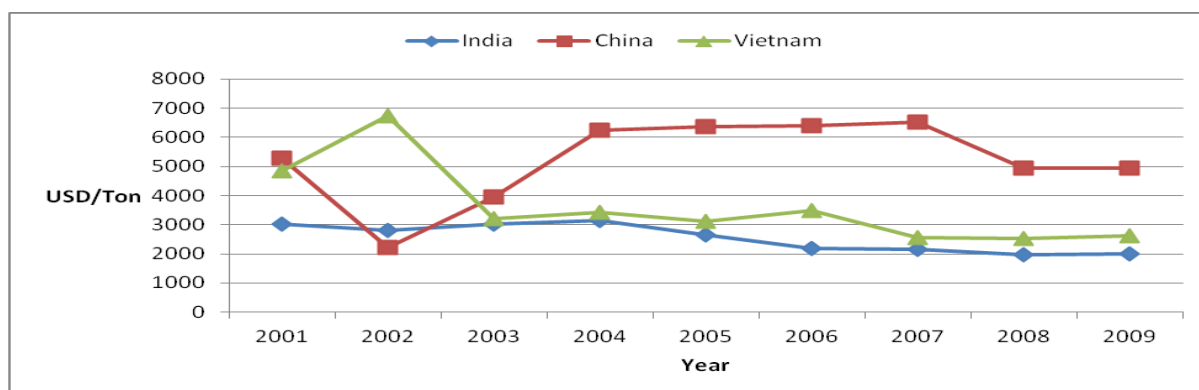


Source: Confederation of Indian Textile Industry (2013): Textile Statistics

Worldwise share of MMF and cotton exports is 53 per cent and 26 per cent respectively while India's share of MMF and cotton exports is 20 per cent and 57 per cent respectively, according to figure 7. The Indian textile exports are thus mainly cotton based while world textile export are MMF based. India's share in the top traded commodities, which are based on manmade textiles is very negligible, according to the data shown by UN Comtrade.

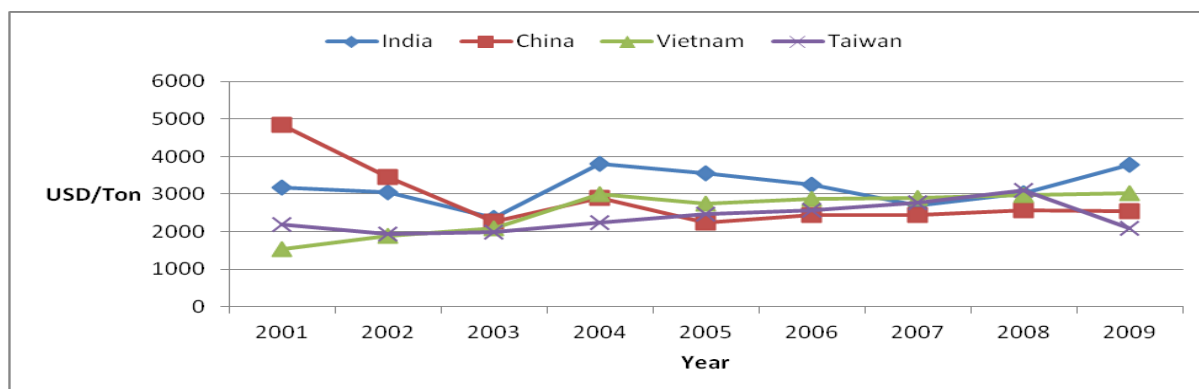
The negligible share of India in the exports of MMF textiles is due to the low price competitiveness^{xxxiii} of Indian MMF exports compared to the Asian counterparts. India's export prices of cotton are lower than those of competing nations while India's export prices of MMF products are significantly higher than those of the competing nations in Asia, as shown in figure 8 and figure 9.

Figure 8: Cotton Export Prices of India and Competitor Nations



Source: Department of Scientific and Industrial Research (2013)^{xxxiv}

Figure 9: MMF Export Prices of India and Competitor Nations



Source: Department of Scientific and Industrial Research (2013)^{xxxv}

There is thus, significant disadvantage for the MMF textile exports against the cotton textile exports from India. This is mainly due to the high cost of production for the MMF products in India resulting from the high mandatory excise duties along with the customs duties on the raw materials and the additives, according to our interviews with the stakeholders. The antidumping duties on the imports of MMF raw materials also have contributed to the high costs of production resulting in the low price competitiveness of MMF exports.

7. Conclusion and Recommendations

The government policies in India biased towards the cotton sector in the form of high excise duties on man-made fibres compared to cotton and high customs duties for the imports of raw

materials for MMF have resulted in restricting the growth of the man-made fibres industry in India. Given the changing consumer pattern globally in favour of man-made fibre based textiles, the demand for man-made fibres/ filament yarns in FY15 is projected between 4.1 Billion kg and 4.4 Billion kg and in FY20 projected between 6.1 Billion kg and 6.9 Billion kg. The current level of existing capacities of all man-made fibres is only 3.5 Billion kg^{xxxvi}, which would be insufficient to meet the future demand and hence there is the need for capacity additions by manufacturers. More players need to be encouraged to the market through making the market more affordable by reducing the high excise duties on MMF and high customs duties on the raw materials. The capacity utilization can thus be encouraged leading to high growth in the industry.

The consumption of the man-made fibres can be increased through making them more affordable. For this, cost of production for the man-made fibres need to be reduced through implementing a fibre neutral policy as in the competing countries like China. The excise duties on man-made fibres and their raw materials and man made filament yarn need to be made equal to cotton for making them available at competitive prices. Through increasing the mill sector consumption of the MMFs, the per capita availability of man made cloth can be increased. The reduction of excise duty at the primary stage would help across the entire value chain to increase consumption right from the fibre stage to the garment stage thus resulting in more revenues for the government. The revenue losses to the government through reduction in the duties can be compensated through the revenue growth in the industry. The export price competitiveness of man-made fibres based textile items can be increased through reducing the internal cost of production in terms of by reducing the high excise duties on MMF and high customs duties on the raw materials. India's share in world textile exports can be increased through improving our MMF textile exports.

ⁱ Euler hermes.com(2015): Global Textile Report, <http://www.eulerhermes.com/economic-research/sector-risks/Global-Textile-Report/Pages/default.aspx>

ⁱⁱ Natural fibres are nature provided and those in fibrous form, which is ready made. They are subdivided into vegetable, animal and mineral fibres according to their sources.

ⁱⁱⁱ Man-made fibres are those which are not in the readymade fibrous form and are generated by man in the form of fibre. They are classified into natural polymer fibres and synthetic polymer fibres. Natural polymer fibres are made by the transformation of natural polymers like cellulose (eg:viscose). Synthetic fibres are those made into fibres from chemicals like coal or oil(eg:polyester).

^{iv} http://www.textileworld.com/Issues/2015/_2014/Fiber_World/Man-Made_Fibers_Continue_To_Grow

^v Shui S and A Plastina (2013): World Apparel Fibre Consumption Survey, FAO.

^{vi} Euler hermes.com(2015): Global Textile Report, <http://www.eulerhermes.com/economic-research/sector-risks/Global-Textile-Report/Pages/default.aspx>

- vii Carmichael A(2015) : Man-made fibress Continue to Grow,
http://www.textileworld.com/Issues/2015/_2014/Fiber_World/Man-Made_Fibers_Continue_To_Grow
- viii India Brand Equity Foundation(2015) : Textile Industry in India, <http://www.ibef.org/industry/textiles.aspx>.
- ix Corporate catalyst India(2015) :A brief report on textile industry in India, <http://www.cci.in/pdfs/surveys-reports/Textile-Industry-in-India.pdf>.
- x Ministry of Textiles , Textile Statistics
- xi Textile IndiaProgress (2015):Pre Budget Memorandum 2015-16
- xii Mazumdar D (1988): Import *Substitution Industrialisation and Production on.the Small Scale: The Indian Experience in the Textile Industry*, The Economic Development .Institute of the World Bank, p.9.
- xiii Office of Textile Commissioner(2014): Compendium of Textile Statistics 2013-14.
- xiv Textile India Progress (2015):Pre Budget Memorandum 2015-16
- xv WTO Tariff database
- xvi 80 percent of the customers purchasing the MMF products earn income less than Rs 40,000 Rs 40,000 a year while 50 percent earn less than Rs 20,000 a year(Tata Economic Consultancy Services, 1973;)
- xvii Ministry of Textiles , Textile Statistics
- xviii Table 2 and field visits
- xix Textile Committee(2013) :National Household Survey 2012-13,Market for Textile and Clothing
- xx Office of Textile Commissioner(2014): Compendium of Textile Statistics 2013-14
- xxi Planning Commission(2011) :Report of the Working Group for Textile and Jute Industry for the Twelfth Five Year Plan, Retrieved from http://planningcommission.gov.in/aboutus/committee/wrkgrp12/wg_jute1101.pdf
- xxii DSIR(2013) :Textiles and Garments: Executive Summary, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_0.pdf
- xxiii Office of Textile Commissioner(2014): Compendium of Textile Statistics 2013-14.
- xxiv Office of Textile Commissioner(2014): Compendium of Textile Statistics 2013-14.
- xxv ICRA(2005) : Man-made fibress:"The Indian Man-made fibres Industry" Retrieved from <http://www.icra.in/Files/Sectorreleases/Manmade%20Fibres-200509.pdf>.
- xxvi Planning Commission(2011) :Report of the Working Group for Textile and Jute Industry for the Twelfth Five Year Plan ,Retrieved from http://planningcommission.gov.in/aboutus/committee/wrkgrp12/wg_jute1101.pdf
- xxvii Govt of India(2014) :Chemicals and PetroChemicals Statistics at a Glance 2014", Ministry of Chemicals and Fertilizers, New Delhi
- xxviii Kalkotwar, D(2014): Textile industry in India and present scenario of polyester industry of India, irja-indian research journal, volume: 1, series: 5, 1-8.
- xxix DSIR(2013) :Textiles and Garments: Executive Summary, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_0.pdf
- xxx The price that a purchaser pays or can expect to pay for an imported good, thus the c.i.f. import price plus tariff plus transport cost to the purchaser's location(<http://www-personal.umich.edu/~alandear/glossary/i.html>)
- xxxi DSIR(2013) :Textiles and Garments: Executive Summary, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_0.pdf

^{xxxii} DSIR(2013) :Textiles and Garments: Executive Summary, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_0.pdf

^{xxxiii} The export price competitiveness indicator relates export price of the reference country to export prices of its competitors(Coe Rexecode, 2009). Higher the export prices of a country in comparison to the counterparts, lower is the export price competitiveness

^{xxxiv} DSIR (2013) : Textiles and Garments: Export Price Comparison, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_8.pdf

^{xxxv} DSIR (2013) : Textiles and Garments: Export Price Comparison, Retrieved from http://www.dsir.gov.in/reports/isr1/Textiles%20and%20Garments/2_8.pdf

^{xxxvi} SRETPC statistics