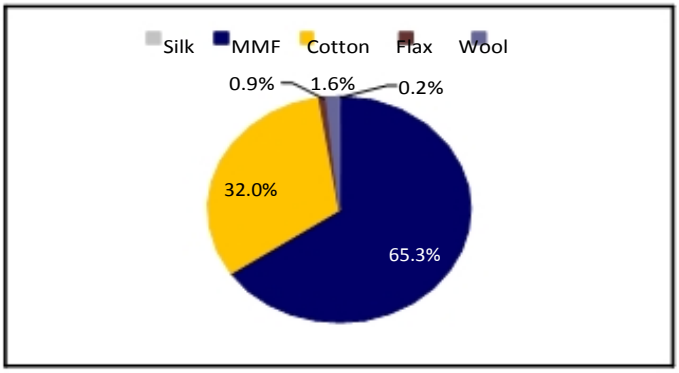
AGENDA NO.- 3

INTERNATIONAL SCENARIO

INTRODUCTION

5.1.1. Wool fibre has a marginal share of 1.6% (2008) in world fibre production. In 2008, world production of greasy wool recorded a decline of 3%. Australia, China and New Zealand are the world's leading producers of wool.

Exhibit 5.1.1: World fibre production: 2008 (% share)

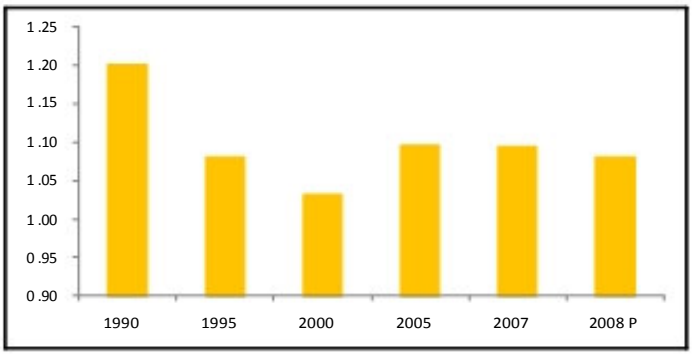


Source: FAO of the United Nations, Poimena/Delta

Sheep population falls in 2008

5.1.2. Globally, the world sheep population has failed to increase. In fact, in 2008, the world sheep population declined by 1.3% to around 1.08 billion sheep. China has the largest sheep population in the world, accounting for close to 13% of total population. In 2008, its sheep population fell by 6.6%. There has been a decline in sheep population in Australia by 10.3% in 2008, over 2007. India has a 6% share in world sheep population (2008). India's sheep population has improved by a marginal 1.1% in 2008, over 2007.

Exhibit 5.1.2: World sheep population (Bn nos.)



Source: IWTO

Exhibit 5.1.3: World sheep population by country (2007)		
Country	**Population (Mn nos.)**	**Share (%)**
China	172.0	15.7
Australia	85.7	7.8
CIS	72.4	6.6
India	64.3	5.9
Iran	52.2	4.8
Others	650.5	59.3
Total	**1097.1**	

Source: IWTO

For detailed list of country-wise sheep population, please see Exhibit 5.A.1. in Annexure - 5.A.1. - International Scenario.

Global wool production on a downtrend

Greasy

5.1.3. World production of greasy wool has been on a downward journey since the past several years. From as much as 3.39 million tonnes in 1990, world wool production (greasy) has come down to 2.11 million tonnes by 2008. Wool production (greasy) in 2008 was 3% lower than production in 2007.

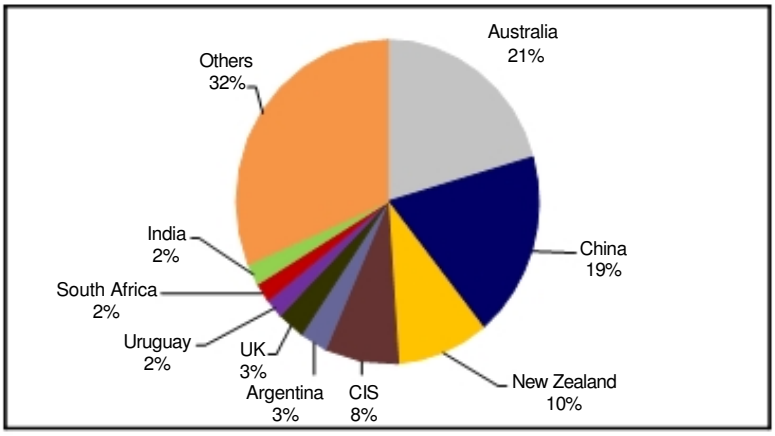
Exhibit 5.1.4: World wool production by country: Greasy ('000 tonnes)							
Countries	**1990**	**1995**	**2000**	**2005**	**2007**	**2008P**	**Change (%)**
Australia	1,100.3	731.0	666.0	520.0	477.0	437.6	-8.3
China	239.5	277.4	292.5	393.2	363.5	405.0	11.4
New Zealand	309.3	288.5	257.4	213.1	217.6	205.1	-5.8
CIS	473.7	237.4	129.0	153.1	165.6	172.1	3.9
Iran	44.6	50.9	53.9	53.9	75.0	75.0	0.0
India	42.7	41.4	47.6	44.9	45.9	46.4	1.1
Others	1,189.0	969.7	836.0	765.5	827.0	765.4	-7.4
Total	**3,399.1**	**2,596.3**	**2,282.4**	**2,143.6**	**2,171.6**	**2,106.6**	**-3.0**

Source: IWTO

Exhibit 5.1.5: Share of countries in world wool production: Greasy (2008P) (%)						
Countries	**1990**	**1995**	**2000**	**2005**	**2007**	**2008P**
Australia	32	28	29	24	22	21
China	7	11	13	18	17	19
New Zealand	9	11	11	10	10	10
CIS	14	9	6	7	8	8
Argentina	4	3	3	4	4	3
United Kingdom	2	3	2	2	3	3
South Africa	3	3	2	2	2	2
India	1.3	1.6	2.1	2.1	2.1	2.2
Others	28	30	32	31	32	32

Source: IWTO

Exhibit 5.1.6: Share of countries in world wool production (2008P): Greasy



Source: IWTO

5.1.4. This decline in production can be attributed to fall in wool production in Australia. During the last two decades (1990-2008), production of wool in Australia has continuously fallen - from 1.10 million tonnes in 1990 to 0.43 million tonnes by 2008. As a result, Australia's share in world wool production has shrunk from 32.4% to 20.8% during this period. China, on the other hand, on the back of a healthy 11.4% growth in wool production, expanded its share in world wool production (greasy) from 17% in 2007 to 19% in 2008. New Zealand's share has more or less remained unchanged at 10-11% since the mid-90s.

For Note on clean wool production, please refer to Annexure - 5.A.1. - International Scenario.

GLOBAL TRADE

Imports decline in 2008

5.1.5. The global financial crisis has resulted in sharp decline in imports of woollen products among countries during 2008. All the product categories recorded lower imports as also lower exports in 2008, over 2007.

Exhibit 5.1.7: Global trade (2008*) in wool & woollen products

Products	Imports		Exports	
	Volume (Tonnes)	Change (%)	Volume (Tonnes)	Change (%)
Wool tops	144,821	-16.7	156,355	-15.5
Wool worsted yarn	94,699	-14.3	87,638	-15.7
Wool woollen yarn	39,433	-5.9	54,611	-5
Wool knotted carpets	45,867	-30.9	42,697	-6.6
Wool woven carpets	47,480	-33.7	42,718	-4.7
Wool tufted carpets	75,143	-21.3	68,140	-11.3

**Provisional; Source: IWTO*

5.1.6. Globally, Italy is the largest importer of wool tops. In 2008, imports of wool tops by Italy declined by 18.3% to 25,340 tonnes. China, the largest importer of wool worsted yarn, recorded 12.9% decline in imports to 18,654 tonnes during 2008. Belgium, which is the largest importer of wool woollen yarn, posted a 10.8% decline in imports during 2008. USA, the world's leading importer of wool knotted carpets, wool woven carpets and wool tufted carpets, witnessed decline in imports of 51.8%, 28.5% and 40.8%, respectively.

Steep fall in exports of woollen products

5.1.7. Exports of various woollen products recorded declines in 2008. The steepest declines in exports were recorded in wool worsted yarn (-15.7%) and wool tufted carpets (-11.3%) during 2008.

Exhibit 5.1.8: Global trading partners in wool & woollen products		
Products	**Major importers**	**Major exporters**
Wool tops	Italy, China, Germany, Turkey, South Korea	China, Uruguay, Argentina, Czech Republic, Germany
Wool worsted yarn	China, Italy, Hong Kong, Germany, Japan	China, Hong Kong, Germany, Italy, Poland
Wool woollen yarn	Belgium, Honk Kong, Australia, Denmark, USA	New Zealand, Belgium, China, Hong Kong, Lithuania
Wool knotted carpets	USA, Germany, Czech Republic, UK, Turkey	India, Iran, Afghanistan, Pakistan, Nepal
Wool woven carpets	USA, UK, UAE, Germany, Russian Federation	China, India, UK, Belgium, UAE
Wool tufted carpets	USA, UK, Germany, Australia, Canada	India, Belgium, New Zealand, China, Netherlands

Source: IWTO

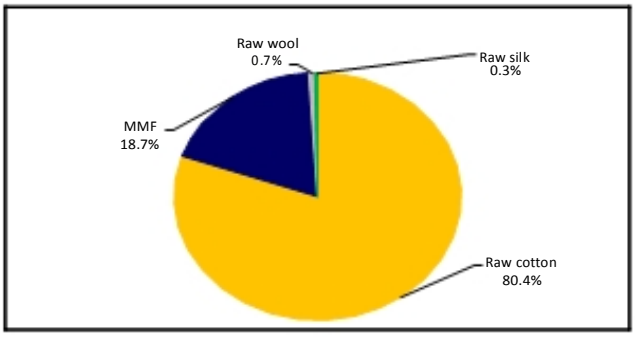
For detailed note on Global Trade, and Country Study, please refer to Annexures - 5.A.2. & 5.A.3.

INDIAN SCENARIO

INTRODUCTION

5.2.1. In line with the trend in world production of different fibres, in India also, of the various fibres produced, raw wool accounts for a marginal share of 0.7% in total fibre production. India is the seventh largest producer of wool and contributes 1.8% to total world production. India ranks among the leading five countries in the world in sheep population, with a population of over 60 million sheep. However, while the world average for wool productivity has been about 2.4 kg/sheep/year, in India the average is 0.8 kg/sheep/year.

Exhibit 5.2.1: Production of fibres in India



Source: www.txcindia.com

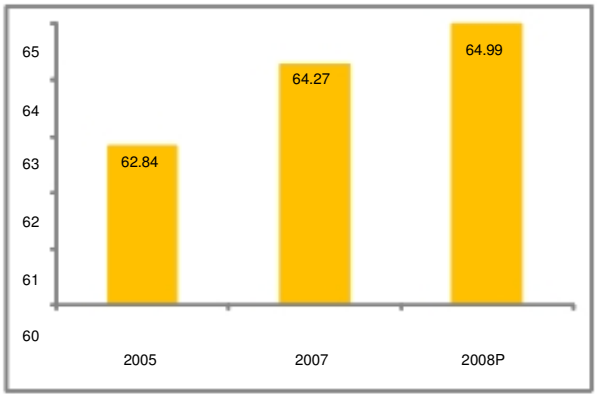
5.2.2. There are around 958 woollen units in the country, majority of which are in the small scale sector. The industry provides employment in the organised wool sector to about 12 lakh persons, with an additional 12 lakh persons associated in the sheep rearing and farming sector. Further, there are 3.2 lakh weavers in the carpet sector. In all, the total employment is about 27 lakh people. *(For installed capacity details of the industry, please refer to Exhibit 5.A.31 in Annexure - 5.A.4. - Indian Scenario).*

5.2.3. The main wool producing states of India are Rajasthan, Punjab, Jammu & Kashmir, Karnataka, Gujarat, Uttar Pradesh, Uttaranchal, Andhra Pradesh, Maharashtra and Haryana. Punjab alone accounts for 40% of the woollen units, while Haryana accounts for 27%, Rajasthan 10% and the rest of the states account for the remaining 32%.

Marginal growth in sheep population

5.2.4. Globally, world sheep population has fallen to 1.08 billion in 2008, to the same level as in 1995. There is a decline of about 10% in sheep population in all major sheep growing countries, except in India where it has gone up, though by a marginal 1%.

Exhibit 5.2.2: Sheep population (Million)



P-Provisional; Source: Wool Research Association

5.2.5. There are different varieties of wool producing sheep grown in the country. These include Chokla, Magra Chokla (Bikaneri), Magra, Nali, Jaisalmeri, Marwari, Malpura, etc. Apart from these wool producing varieties of sheep, there are several other speciality fibre producing animals that are reared, such as the Angora rabbit (mohair), Pashmina goat (cashmere/pashmina), highland sheep (highland wool), etc.

5.2.6. Pashmina is produced by Changra (Pashmina) goat in Ladakh and Chegu breed of goat in the eastern parts of Himalayas in India. There are 2.45 lakh Pashmina goats in Ladakh. Mohair comes from Angora goats. Angora population in the country is around 50,000.

5.2.7. In India, sheep are traditionally reared for production of wool and mutton. Sheep rearing mainly rests with the weaker sections of the society, which either do not possess the land, or their land holdings are so small that crop cultivation does not provide remunerative employment throughout the year. Moreover, in the major sheep rearing areas, particularly in the North-western districts of Rajasthan, grazing and stock watering resources are available only for a few months during the year, forcing the shepherds to lead a nomadic life. Illiteracy and lack of awareness prevents the shepherds form adopting improved sheep husbandry practices, thereby adversely affecting the quality as also the quantity of wool produced. Migration and grazing practices have an impact on the current state of sheep husbandry in the country. Moreover, every year, around 35% of the sheep population is slaughtered for meat purposes. This explains the poor growth in sheep population in the country.

Exhibit 5.2.3: State-wise sheep population (2003)		
States	**Population ('000 nos)**	**Share (%)**
Andhra Pradesh	21,376	34.8
Rajasthan	10,054	16.4
Karnataka	7,256	11.8
Tamil Nadu	5,593	9.1
Jammu & Kashmir	3,411	5.5
Others	13,779	22.4
Total	**61,469**	

Source: Ministry of textiles

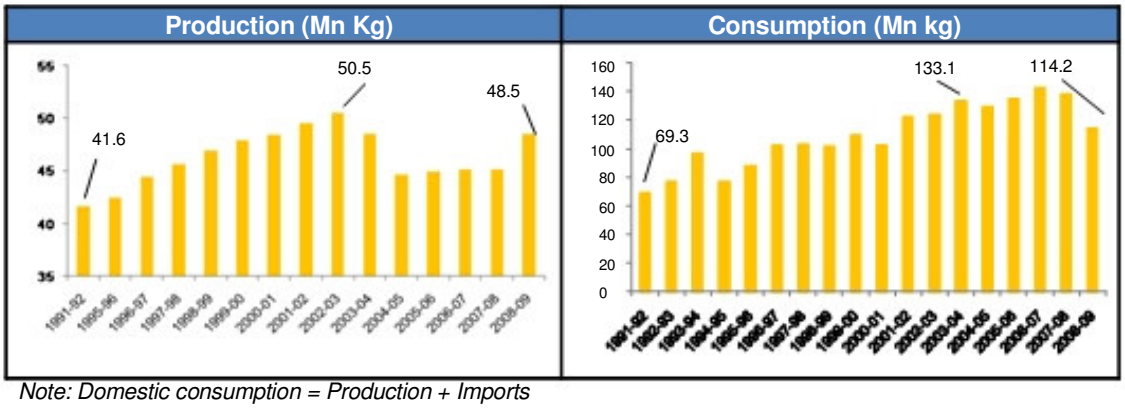
For a detailed list of state-wise sheep population, please refer to Exhibit 5.A.32 in Annexure 5.A.4.- Indian Scenario.

Wool - Domestic production & consumption

5.2.8. Of the total domestic production of wool, around 85% is carpet grade, 10% is coarse grade and the balance 5% is apparel grade. Bulk of the wool produced in India is of coarse quality and used mainly in the manufacture of hand-knitted carpets. The rest are being used for the manufacture of apparel, blankets, finished textiles, garments, knitwear, etc.

5.2.9. Demand for wool outstrips domestic production, since India produces a lot of value added products that are exported. India imports substantial amount of raw wool for this purpose. Consumption, which includes domestic production and imports, recorded a CAGR of 3% during the period between 1991-92 and 2008-09. Decline of 17.3% in consumption during 2008-09, reflects the steep decline in imports during the year, while domestic production grew by 7.5%.

Exhibit 5.2.4: Wool production & consumption trend



Note: Domestic consumption = Production + Imports
Source: Ministry of Agriculture, Department of Animal Husbandry, www.txcindia.com, DGCI&S

5.2.10. After declining by 4% in 2003-04 and by 8% in 2004-05, production of indigenous wool recorded growth of less than 1% during the period between 2005-06 and 2007-08. In fact, indigenous wool production recorded a compounded annual growth rate (CAGR) of a negative 0.4% during the period between 1998-99 and 2007-08. During 2008-09, production grew by 7.5% at 48.5 million kg.

Wool quality & sheep variety

Exhibit 5.2.5: Varieties of sheep and quality of wool produced by them

Sheep variety	Quality	Colour
Chokla	28-32 microns	White/Yellow
Magra Chokla (Bikaneri)	32-36 microns	White/Yellow
Magra	32-36 microns	White/Yellow
Nali	32-36 microns	White/Yellow
Jaisalmeri	32-36 microns	White/Yellow
Marwari (Washed)	36-40 microns	White/Yellow
Marwari (Greasy)	36-40 microns	White/Yellow
Malpura	36-40 microns	White/Yellow

Source: Industry

Exhibit 5.2.6: Sheep variety & micron structure

Sheep breed	Category	Micron structure (Average diameter)
Hissardale crossbred wool, Kashmir Valley wool, Kashmir Valley-Russian Merino crossbred wool	Fine Wools	below 28 microns
Chokla, Rampur Bushir, Gaddi	Medium Wools	between 28 and 34 microns
Marwari, Jaisalmeri, Magra, Pugal	Coarse Medium wools	between 34 and 40 microns
Malpura, Sonadi, Nali, Patanwadi, Hassan	Coarse Wools	between 40 and 50 microns
Mirzapur, Jalauni, Shahabadi, Deccani	Very coarse wools	between 50 and 80 microns
Nellore, Ramnad	Hairy Types	80 microns and above

Source: Wool Research Association

Deccani wool

5.2.11. Certain southern states of the country such as Andhra Pradesh, Karnataka, Tamil Nadu, and Maharashtra produce wool, which is coarse and brittle in nature. Such type of wool is generally black in colour and has average thickness of 32 micron. This type of wool has limited usage, and is used for manufacturing low-quality blankets. Use of such type of wool should be encouraged for manufacture of certain industrial products such as felts, filter materials, etc.

Specialty fibre

5.2.12. There are certain finer varieties of specialty fibre that is produced in small quantities in the country. This type of fibre is apparel grade and come with below 28 micron. These include the fibre obtained from the Angora rabbit and Pashmina goat. Pashmina production is about 32 metric tonnes from the traditional areas and about 5 metric tonnes from some pockets of non-traditional areas. The fineness of the Cashmere/Pashmina fibre ranges from 15-17 micron with 32 to 50 mm length. The average fibre diameter of Changra is 13-16 micron, and that of the Malra is below 15 micron. Approximately 30,000 kg of specialty fibre is produced annually from the Angora rabbit. Kidmohair fibre is fine with micron range of 10-40 microns, and the fibre length is 100 to 150 mm.

Various usages of wool

5.2.13. There are various usages of wool. It can be used in different sectors including medical, architecture, aviation, sports, among others.

Sectors	Usage
Medical	Second Skin Injury Prevention, Medical Sheepskins, Wound Dressings, Pressure Bandages, Bandages
Architecture	Root Insulation, Upholstery, Quilts, Blankets, Drapes, Wall Coverings, Carpets
Protective Apparel	Police Uniforms, Military Uniforms, Socks & Gloves, Children's Nightwear, Firefighters Uniforms, Infant Apparel
Aviation	Interior trimmings, Flight Attendant Apparel, Aircraft Interiors, Interior Sound Proofing
Protection In Industry	Air Conditioning, Sound & Vibration Control, Heat Exchangers, Wool Filters for Dust/Chemical Odours, Electrostatic Filters, Toxic Chemical Filter
Apparel	Sheepskin boots & garments, Pullovers, Hats, Uniforms, Fashion Garments, Waterproof Garments, Machine washable suits, Non-Woven garments, Accessories, Milinery, Flannels, Thermal underwear, Woven garments

Sectors	Usage
Smart Textiles	Vital signs vest, Molecular Templating, Intelligent Knee sleeve, Inherenity conductive polymers
Sports	Ski Wear, Billiard Cloths, Thermal underwear, Baseball Filling, Olympic Uniform, Waterproof Fabrics, Sportwool Clothing
Manufacturing	Piano Felts, Wool filters for dust / Chemical Odours, Gaskets & Washers, Buffering Pads, Air/Dust Filters, Absorbs Toxic Metals, Baby Blankets, Sheepskin Seat Covers

BLENDING OF SYNTHETIC FIBRE WITH WOOL

5.2.14. Blending refers to the sequence of processes required to convert two or more kinds of staple fibres into a single yarn composed of a mixture of the component fibres. Fibres are blended to acquire fabrics with enhanced or unique properties, which cannot be achieved easily with fabrics made from a single fibre type. The synthetic fibre industry is dominated by polyester, nylon, cellulosic fibre such as viscose and rayon, and acrylic fibres with polyester being the dominant fibre.

5.2.15. Pure wool is not always the most preferred among consumers and therefore among manufacturers. In fact, over the years, apparel wool, which was once used only for winter clothing, is finding new use across the world, in blending with cotton and other natural and man-made fibres, which can be worn throughout the year. India imports apparel grade wool, largely from Australia (Merino wool), which is then blended with other fibres for manufacturing woollen and worsted fabrics.

5.2.16. Blended fabrics are more preferred as they offer better styling (good fall and drapes) at a cheaper price. Various man-made fibres are blended with wool. Some of the fibres which are blended with wool include:

a. Polyester
b. Viscose
c. Bamboo
d. Acrylic
e. Lycra
f. Linen

g. Tencel
h. Modal
i. Silk

5.2.17. Wool blended with synthetic fibres is gaining popularity among consumers. This can be attributed to:

8. Lower in price than pure woollen clothing
9. Ease in handling and maintenance
10. More suitable in temperature climate
11. Blended products have better durability. E.g. nylon or polyester blended with wool provides strength and resistance to abrasion, while keep the look of wool intact.

Production trend analysis - Woollen textiles

5.2.18. During 2008-09, production of worsted yarn, wool tops, fabrics (woollen/worsted), shoddy yarn, blankets (shoddy/woollen), shoddy fabrics and knitted goods is estimated to have recorded growth over production in the preceding year. On the other hand, production of woollen yarn and hand-made carpets is estimated to have posted a decline over 2007-08.

Exhibit 5.2.8: Production of woollen textiles

Items	Unit	2003-04	2004-05	2005-06	2006-07	2007-08E	2008-09E	CAGR (%)
Worsted yarn	Mn kg	44	46	53	58	58	60	6.4
Woollen yarn	Mn kg	34	34	34	35	35	30	-2.5
Wool tops	Mn kg	28	30	33	35	35	37	5.7
Fabrics (Woollen/worsted)	Mn mtr	66	70	75	80	81	85	5.2
Shoddy yarn	Mn kg	25	27	32	37	38	40	9.9
Shoddy fabrics	Mn mtr	17.5	20	24	28	29	30	11.4
Blankets (shoddy/woollen)	Mn pieces	11	12	14	16	17	18	10.4
Knitted goods	Mn kg	13	14.5	16	17.5	18	19	7.9
Handmade carpets	Mn sq mtr	8	8	9	10	12	10	4.6
Machine-made carpets	Mn sq mtr	0.5	0.5	0.5	0.5	0.4	0.4	-4.4

E-Estimated ; Source: Indian Woollen Mills Federation

FOREIGN TRADE

5.2.19. In order to meet the gap between domestic production of wool and the demand, the country depends on imports. Australia, New Zealand, Pakistan, China etc are the major countries from which India meets its import requirements for raw wool. The country reported lower imports on a year-on-year basis during the recent two years (2007-08 and 2008-09). On the export front, UK, Italy, USA, Dominican Republic and UAE are the major countries for India's exports of woollen yarn, fabrics and made-ups, while USA, UAE, UK, Germany and France are the leading markets for India's exports of readymade wool garments.

Wool imports fall in 2008-09

5.2.20. India imports raw wool to the tune of around 65.7 million kg (2008-09). During 2008-09, there was a decline in imports. In volume terms, raw wool imports declined by 33.5%, while in value terms they decreased by 5.2% during 2008-09.

Year	Volume (Tonnes)	Value (Rs crore)
2002-03	73,659	801.8
2003-04	84,612	870.6
2004-05	84,753	867
2005-06	90,185	903
2006-07	99,617	1,078.10
2007-08	92,904	1,088.40
2008-09	65,653	1,031.90

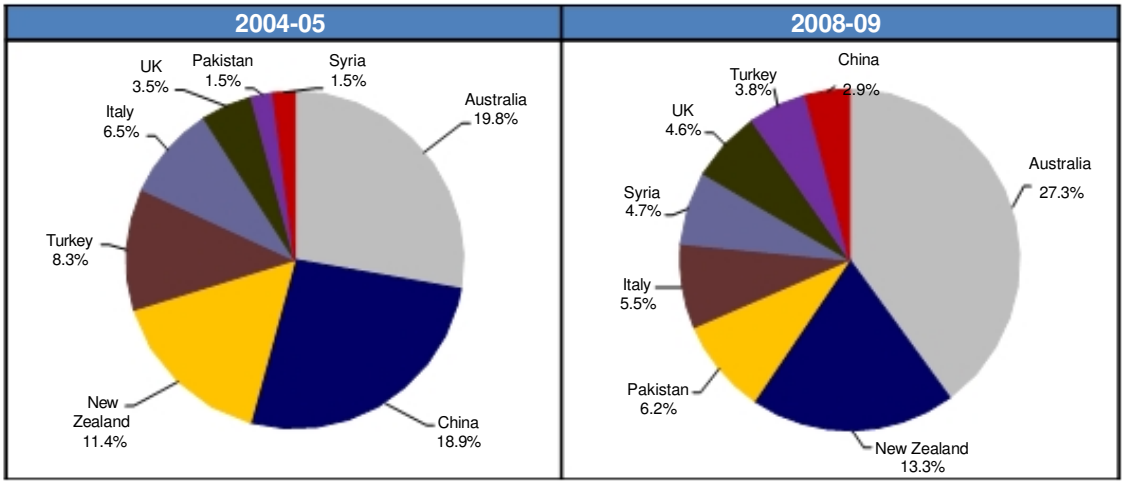
Source: DGCI&S

5.2.21. Since the production of fine apparel grade wool is not adequate in the country, a large quantity of wool is imported from Australia, New Zealand, China, Middle East and other countries. Australia alone accounts for 27.3% of India's total raw wool requirements (2008-09), while around 13% of India's raw wool requirements are sourced from New Zealand.

5.2.22. During the last five years or so, there has been a change in share of countries from which India sources its raw wool requirements. In the last few years, New Zealand has replaced China as the second largest sourcing destination for India's raw wool imports. While New Zealand's share in India's

raw imports (in volume terms) has increased from around 11.4% in 2004-05 to 13.3% by 2008-09, that of China has fallen sharply from 18.9% to a mere 2.9% during the same period.

Exhibit 5.2.10: Change in direction of India's raw wool imports



Source: DGCI&S

5.2.23. There has been a shift from imports of fine wool quality to low quality wool in the recent years. This is on account of consumer preference for hand tufted carpets in the US and other western markets. Cheap wool imports from the Middle East are constantly growing and mainly go into hand tufted carpets mixed with indigenous wool.

Exhibit 5.2.11: Raw wool imports (In tonnes)

Countries	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Share (%)
Australia	20937	16141	16790	19007	20937	18621	17908	27.3
New Zealand	11169	7893	9652	10535	12907	12179	8712	13.3
Pakistan	1094	2459	1270	2721	4716	6061	4045	6.2
Italy	5949	6891	5491	5625	6337	5422	3579	5.5
Syria	1770	1567	1236	1595	3313	4440	3103	4.7
World	**73659**	**84612**	**84753**	**90185**	**99617**	**92904**	**65653**	

Source: DGCI&S

Exports fall in 2008-09

5.2.24. Overall exports of wool and wool blended products are estimated to have declined by 8.4% to around Rs 5,064.3 crore during 2008-09. This largely reflects the 23.2% drop in exports of carpets, rugs and druggets.

Exhibit 5.2.12: Exports of wool & wool blended products (Rs crore)

Products	2006-07	2007-08*	2008-09*
Fabrics	433.23	368.24	442
Yarn woollen/worsted/shoddy	474	426	512
Blankets	77.76	58.32	70
Wool tops	154.08	154.08	185
Shawls/scarves/stoles and mufflers	578.88	619.4	681
Hair belting	12.24	10.4	12.48
Carpets, Rugs, Druggets Including Namdhas	3674.86	3524.73	2708.73
Knitwear	345.18	363.57	451.68
Machine made carpets	1.44	1.44	1.44
Total	**5751.67**	**5526.78**	**5,064.30**

**Estimated; Source: Industry*

Exhibit 5.2.13: Import duties on wool & other fibres used by woollen/worsted textile industry (%)

Item	Basic duty	CVD Ad. Val.	Education Cess @ 3%	Special Addl. CVD @ 4%	Total Duty Ad. Val.
Wool not carded or combed	5	Nil	0.15	Nil	5.15
Fine or coarse animal hair (Cashmere, Angora, Rabbit hair, Mohair, etc)	5	Nil	0.15	4.20	9.35
Waste of wool, including yarn waste, noils of wool but excluding garneted stocks	10	Nil	0.3	4.41	14.71

Exhibit 5.2.13: Import duties on wool & other fibres used by woollen/worsted textile industry (%)					
Item	**Basic duty**	**CVD Ad. Val.**	**Education Cess @ 3%**	**Special Addl. CVD @ 4%**	**Total Duty Ad. Val.**
Woollen & synthetic rags	5	Nil	0.15	4.20	9.35
Wool tops - All microns	20	8.24	Nil	5.2	35.1
Polypropylene staple fibre	10	8.24	0.57	4.78	24.41
Nylon staple fibre	10	8.24	0.57	4.78	24.41
Flax fibre	5	Nil	0.15	4.2	9.35

Note: Flax fibre is a natural fibre & is a basic input for manufacture of flax/linen products

Source: Industry

Exhibit 5.2.14: Excise Duty Structure									
Items	**2001-02**	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**
Wool									
Wool	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Yarn									
Woollen Yarn	16	12	10	*8.16	*8.16	*8.16	* 8.24	# * 8.24/*4.12	# * 8.24/*4.12
Fabrics									
Woollen Fabrics	18.4	18.4	18.4	*8.16	*8.16	*8.16	* 8.24	# * 8.24/*4.12	# * 8.24/*4.12

*Note: * Zero duty without CENVAT facility; # The three major ad valorem rates of CENVAT-14%, 12% and 8% applicable to non-petroleum products have been reduced by 4% each, i.e., to 10%, 8% and 4% respectively and CENVAT on cotton textiles and textile articles has been reduced from 4% to Nil as a measure to stimulate the economy in the context of global economic recession by Government of India on 7th December 2008. However, in Budget 2009-10, the optional CENVAT on Pure cotton textiles restored at 4% and for other textile excluding Man-made filament yarns and fibres at 8%. The mandatory CENVAT on Man made filament yarn & fibres and textile intermediates like DMT, PTA, acrylonitrite etc. have been increased from 4% to 8%;*

Source: Website of Office of the Textile Commissioner

For more statistics on Foreign Trade, please refer to Annexure - 5.A.5.

INDUSTRY SUB-SEGMENTS

Carpet industry

5.2.25. Indian carpets can broadly be classified into knotted, woven and tufted types. Carpets can be hand-made or machine-made. It is a rural-based, labour-intensive and export-oriented sector. It is an employment-oriented sector, providing employment to wool growers, manufacturers, brokers, traders, and exporters. It provides employment to around 2.5 million people in the backward and rural areas of the country.

5.2.26. The Indian hand-knotted carpet industry is essentially a cottage industry in the unorganised sector. It is popular in the states of Jammu & Kashmir, Punjab, Himachal Pradesh, Haryana, Tamil Nadu, Uttar Pradesh, Tamil Nadu and Sikkim.

5.2.27. India exports all the three varieties of carpets - hand-made, machine-made and silk carpets. Hand-made carpets (knotted) account for a lion's share of 75% of the total carpet exports from India. The major export items include carpets made from wool, cotton, silk, jute and coir, cotton, durries, mats and mattings, rugs and druggets. US is the largest export market for carpet made in India, accounting for more than half of India's export earnings.

5.2.28. Of the total carpet exports from India, the Mirzapur-Bhadohi-Varanasi carpet belt accounts for close to 80%. However, in the recent years, slowdown in export demand from the US and Europe, which account for about 85% of exports from this region, has resulted in sharp decline in exports. As a result, half of the units are out of business. In order to help the industry in this region in the long run, the Finance Minister has made announcement of setting up a mega carpet cluster in this belt.

Shoddy industry

5.2.29. The shoddy industry contributes nearly 30% to the woollen industry's turnover. The reclaimed textile fibre is spun on the woollen system to make yarns suitable for making blankets, sweaters, blazer fabrics and heavy woollen jacketing materials. The shoddy industry in India is a major contributor to India's exports from the woollen sector. There are about 500 units engaged in the production of shoddy woollen products by way of spinning, weaving or processing. The industry is not qualityconscious and mostly produces low-end products which are mostly sold in the domestic market as well as exported to poorer countries of Africa and Middle East. On account of the low quality of products manufactured, world buyers of high quality carded wool fabrics and blankets have shied away from sourcing their requirements from India.

Shawl & scarf industry

5.2.32. The origin of the shawl industry in India dates back to 1833, when a large number of famine-stricken Kashmiri weavers came and settled in Amritsar. Presently, Amritsar and Ludhiana in Punjab are the major shawl and scarf manufacturing centres in India. It is a substantial foreign exchange generating segment, with exports to the tune of Rs 400 crore for woollen shawls and scarves, and to the tune of Rs 450-500 crore for man-made and viscose shawls and scarves recorded during 2008-09. The US, Australia, Canada, Europe, etc are the major export destinations for shawls and scarves manufactured in India.

5.2.33. The Indian shawl and scarf manufacturing industry is facing high raw material cost pressure. It is dependent upon import of Merino wool from Australia, and with Australia suffering from drought since the last 3 years, prices of Merino wool have risen sharply. Prices of other inputs such as acrylic, polyester, viscose yarn, etc, have also witnessed sharp increases in the recent past. Thus, while on the one hand, the industry is fighting increased cost pressures, on the other hand it is facing weakening in export demand on account of the global slowdown, and is also facing severe competition from China. The industry is using old/outdated machinery and technology in the processing segment. This results in inadequate quality of finished products.

5.3. INDUSTRY OUTLOOK

5.3.1. For the purpose of forecasting, D&B India has made the following assumptions:

A. Consumption

a. World GDP to grow by 4%

b. Per capita income of India to grow by 6.5%

c. Man-made fibre consumption to grow by 9.5-10% in the next decade

B. Exports

a. World GDP to grow by 4%

C. Domestic Production

a. World GDP to grow by 4%

b. Sheep meat price to grow by 6% in the next decade

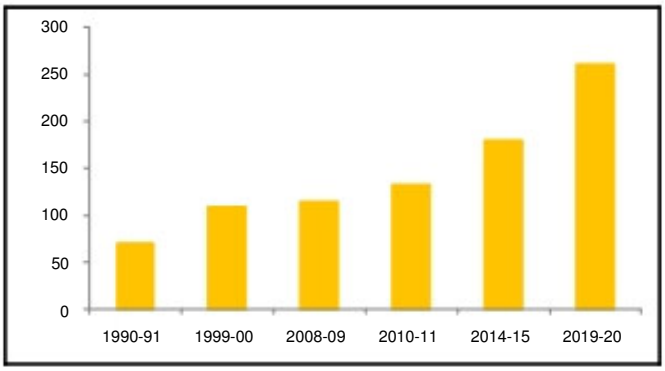
c. MMF production to grow by 9.5-10% in the next decade

d. Sheep population to grow at the rate of 1%

CONSUMPTION

5.3.2. In the next one decade, consumption (production + imports) of raw wool is estimated to double, from 114.2 million kg in 2008-09 to 260.8 million kg by 2019-20. During the period between 2009-10 and 2014-15, raw wool consumption is expected to grow at a CAGR of 7.8%. This growth rate is estimated to be maintained during the period between 2015-16 and 2019-20 as well.

Exhibit 5.3.1: Raw wool consumption* (Million kg)



**Production + Imports; Source: D&B India*

EXPORTS

5.3.3. D&B India expects exports of woollen products to continue with their strong growth. During the period between 2009-10 and 2014-15, exports of woollen yarn, fabrics and made-ups are expected to record a CAGR of 11.6%, while during the period between 2015-16 and 2019-20, exports are likely to post higher CAGR of 13.9%. As per our estimates, the exports of readymade wool garments would post a CAGR of 19.1% during 2009-10 to 2014-15. The growth momentum is expected to accelerate during the following five years, and exports are projected to record CAGR of 21.5% during the period between 2015-16 and 2019-20.

Exhibit 5.3.2: Growth of exports of woollen products (%)

Period	Woollen yarn, fabrics, madeups etc	Readymade Garments Wool
FY10 - FY15	11.6	19.1
FY16 - FY20	13.9	21.5

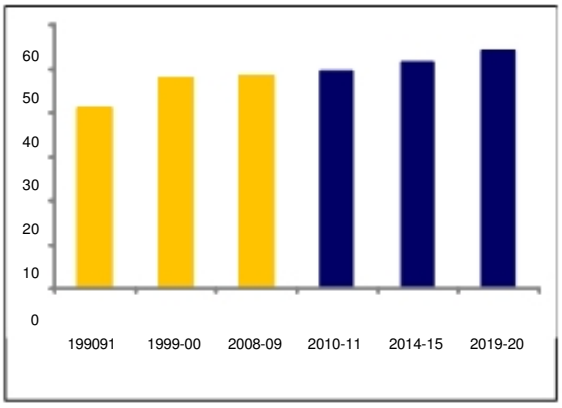
Source: D&B India

Raw wool

Domestic production

5.3.4. D&B India estimates domestic production of raw wool to grow at marginal rate going forward. From a level of 48.5 million kg during 2008-09, we expect production to increase to 54.1 million kg by 2019-20. During the period between 2009-10 and 2014-15, domestic production is estimated to grow at a CAGR of 1%. This growth rate is estimated to be maintained for the period between 2015-16 and 2019-20 also.

Exhibit 5.3.3: Raw wool production (Million kg)

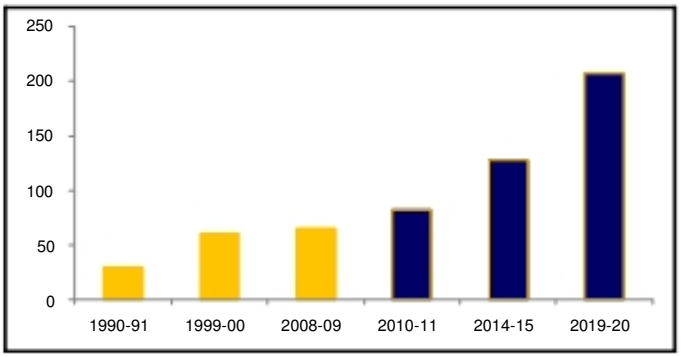


Source: D&B India

Imports

5.3.5. As per the estimates of D&B India, imports of raw wool are expected to increase significantly going forward. From a level of 65.7 million kg in 2008-09, they are expected to increase to 206.7 million kg by 2019-20. During the period between 2009-10 and 2014-15, imports are estimated to grow at a CAGR of 11.7%, and for the period between 2015-16 and 2019-20, they are estimated to grow at a CAGR of 10.1%.

Exhibit 5.3.4: Raw wool imports (Million kg)



Source: D&B India

5.4. Issues and Concerns of Indian Wool Industry

5.4.1. In the previous two sections, we have dealt with the details about the industry dynamics, both from the domestic and international perspective. India ranks among the top 10 wool producing countries in the world. However, there exists huge gap between demand and domestic production. The quality of locally produced wool is also a matter of concern. In this section, we attempt to highlight the three key concerns related to the wool fibre.

1. **Import duty structure**
2. **Availability of wool in desired quality and quantity**
3. **Presence of long chain of intermediaries**

IMPORT DUTY STRUCTURE

5.4.2. The domestic industry is highly dependent upon imports of apparel grade wool as apparel grade of wool of fine micron (24 micron and finer) and other finer animal hair are not indigenously available. This makes the domestic industry dependent on imports from Australia, New Zealand, Uruguay, South Africa, etc. The current import duty structure is depicted in the table below:

Exhibit 5.4.1: Current structure of import duties on raw materials (%)

Sr. No.	Item Description	Basic duty	CVD Ad Val.	Education cess	Special addl. CVD @ 4%	Total duty Ad. Val
1.	Wool not carded or combed	5	Nil	0.15	Nil	5.15
2.	Fine or coarse animal hair (Cashmere, Angora, Rabbit hair, mohair, etc)	5	Nil	0.15	4.20	9.35
3.	Waste of wool, including yarn waste, noils of wool but excluding garneted stocks	10	Nil	0.30	4.41	14.71
4.	Woollen & synthetic rags	5	Nil	0.15	4.20	9.35
5.	Wool tops - All microns	20	8.24	Nil	5.20	35.10

Exhibit 5.4.1: Current structure of import duties on raw materials (%)						
Sr. No.	**Item Description**	**Basic duty**	**CVD Ad Val.**	**Education cess**	**Special addl. CVD @ 4%**	**Total duty Ad. Val**
6.	Polypropylene staple fibre	10	8.24	0.57	4.78	24.41
7.	Nylon staple fibre	10	8.24	0.57	4.78	24.41
8.	Flax fibre	5.0	Nil	0.15	4.20	9.35
9.	Specified machinery & garment machinery (incl. woollen machinery)	5.0	16.48	0.66	4.91	27.07

Source: Industry

5.4.3. Small and medium scale units engaged in the production of low cost woollen fabrics and blankets are dependent on wool waste, woollen and synthetic rags for their raw material requirements (for regeneration into spinable fibre). The industry is dependent upon imports for its raw material requirements. The woollen and synthetic rags that are regenerated into spinable fibres, are in turn used as raw material for shoddy industry in the small and medium size sector. While wool waste attracts import duty of 14.7%, woollen and synthetic rags attract duty of 9.3%. The industry is unable to improve its cost-competitiveness on account of the high duties.

5.4.4. There are certain other raw materials such as polypropylene and nylon staple fibres, used in blending with wool to produce yarn required by carpet weaving industry and for weaving of apparel fabrics, which attract even higher duty rates of 24.41%. Appropriate rationalisation of duties will enable the industry to improve its overall cost-competitiveness.

5.4.5. Also, machinery required for the woollen industry is not manufactured domestically. Hence, to encourage upgradation in the industry, it is important to rationalise import duty on such machinery.

AVAILABILITY OF WOOL IN DESIRED QUANTITY AND QUALITY

Carpet grade wool

5.4.6. Of the total wool produced in India, around 85% is carpet grade wool. Although India is among the top 10 producers of wool in the world, domestic production is not sufficient to meet the entire requirements of the industry (both for domestic and exports). The country imports wool from New Zealand to be used for blending with indigenous wool for the carpet sector. Wool yield in India is low - avg. 0.9 kg per sheep/ year, against a world avg. of 2.4 kg per sheep/ year (Australia: 4.5 kg).

Deccani wool

5.4.7. The kind of wool produced in certain southern states such as Andhra Pradesh, Karnataka, Tamil Nadu, and Maharashtra is coarse and brittle in nature. Also, such type of wool is generally black in colour and has a micron structure of 32. This results in limited usage of this type of wool; it is generally used for manufacturing low-quality blankets.

Inadequate quantity of domestic wool

5.4.8. Domestic production of raw wool has declined since the production levels in the late 1990s. Between 2004-05 and 2007-08, production remained stagnant at around 45 million kg. Production of indigenous wool recorded a CAGR of -0.4% during 1998-99 to 2007-08. During 2008-09, production recorded a growth of 7.5% to 48.5 million kg. In the absence of sufficient domestic production, the wool and woollen products industry continues to depend on imported wool, and the dependency on imports continues to increase.

5.4.9. The low quantity of locally produced wool can be attributed to:

a. Slow growth in sheep population that had grown at a CAGR of 1.1% during 2003-2008;
b. High sheep mortality, with an average annual mortality rate of 12-15%. This is due to inadequate veterinary and healthcare facilities for sheep population, and lack of education/training/awareness of the sheep rearers on disease management and necessary nutrition care and feeding management practices, and lack of shearing facilities;
c. Lack of development of high wool yielding sheep breeds; inadequate cross-breeding and selective-breeding practices;
d. Lack of motivation for adopting modern methods of sheep management, machine shearing of sheep etc due to lack of education and poor economic condition of the wool growers;
e. Wool growers receive non-remunerative prices for their wool, thus making sheep rearing for meat purpose more attractive, thereby reducing the availability of sheep for wool purpose. Shepherds get only 15% of their total earnings from sale of wool. Thus, focus is on meat production, which contributes nearly 75% to their total earnings;
f. Rising preference among sheep growers for heavier sheep for mutton purpose, that has less fleece on it and hence, contributes much less to the overall wool production. Secondly, there is dilution of carpet grade wool producing sheep by inter-mixing with mutton producing animals, such as goats. This has also led to dilution in quality and lower yield of wool per sheep.

Inadequate quality of domestic wool

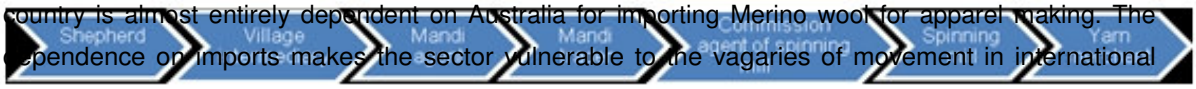
5.4.10. While domestic availability of wool remains a matter of concern, the quality of wool is also not up to the requirements of the Indian wool and woollen products industry, particularly for export purpose. Domestically produced wool is coarse and brittle in nature. Domestic production of wool is almost entirely broader micron wool, with an average thickness of about 36 microns. This makes the wool suitable mainly for the manufacture of carpets, rugs and other coarser products (85% of domestic production is of carpet grade wool).

5.4.11. The low quality of wool can be attributed to:

a. The system of grading is virtually absent at the sheep breeders' level, which affects the quality of the raw material as also the finished product, and impacts better price realisation for the wool growers;
b. Inadequate processing facilities (both pre-loom and post-loom) such as scouring, carbonizing, deburring, dyeing, carding, spinning, handloom weaving and finishing, etc, particularly in the medium and small-scale level; this affects the quality of the finished product
c. The handloom industry uses crude form of carding which results in low productivity;
d. Inadequate testing facilities and quality control measures.

Apparel grade wool

5.4.12. Apparel grade wool has a marginal share of 5% of annual wool production in India. As a result, the country is almost entirely dependent on Australia for importing Merino wool for apparel making. The dependence on imports makes the sector vulnerable to the vagaries of movement in international wool prices and fluctuating exchange rates.



5.4.13. Moreover, there exists inadequate and outdated processing facilities for growers of specialty fibres (e.g. Pashmina, Angora, etc), which affects the quality of the produce. Use of traditional shearing practices (hand shearing) affects the length and quality of fibre.

Use of outdated processing technology

5.4.14. The processing and finishing of wool products is a weak link which requires huge capital investment, particularly in the organised sector. The decentralised sector, although is labour-intensive and requires lower capital investment, uses traditional or outdated technology. Wool processing facilities such as carbonising, scouring, deburring, carding etc are not adequately available to the wool growers and wool users. The industry also suffers from lack of adequate dyeing facilities, as traditional method and equipments are still used in the sector. Thus, lack of proper pre-loom and post-

loom processing facilities, both in the organised and decentralized sectors, ultimately affects the quality of the finished products.

Absence of grading mechanism

5.4.15. Apart from the various reasons discussed above, the inadequate quality is also due to absence of grading mechanism at the sheep breeders' level. In the absence of grading mechanism, shepherds currently earn just Rs 20-25 for per kg of wool, and are also being exploited by various intermediaries. Because of this reason, there is lack of encouragement among wool growers to produce better quality wool.

PRESENCE OF LONG CHAIN OF INTERMEDIARIES

5.4.16. One of the major problems being faced by the wool growers is that they are unable to fetch higher price for the wool produced, as they are being exploited on account of the long chain of intermediaries, sometimes running up to as many as 4-5 intermediaries. Many a times, local wool merchants or middlemen purchase wool from wool growers at 5-10% below the market price. Currently, marketing of wool is a weak link in the wool industry. This is because wool marketing is mainly in the hands of the private wool merchants and traders, and wool passes through various intermediaries before reaching the consumers.

5.4.17. On account of these private middlemen, who exploit the wool growers, the latter are forced to sell their produce at unremunerative prices/below market price. Hence, there is a need to strengthen the current marketing chain and establish proper procurement policy.

For issues and concerns of user industries, please refer to Annexure - 5.A.6. -Issues and Concerns of User Industries.

NATIONAL FIBER POLICY AND ITS RECOMMENDATIONS REGARDING WOOL SECTOR

5.5.1. This section focuses on the policy recommendations for the wool industry towards a sustained long-term growth. The policy recommendations for the wool industry can be broadly classified into two categories -

- Fiscal measures, which mainly includes rationalisation of the import duty structure in wool and woollen products. Duty rationalisation is looked from the perspective to encourage value addition by the domestic industry by importing quality raw material to export woollen products, and in the process earn valuable foreign exchange for the country and generate sustainable employment too; and
- Non-fiscal measures, which are required to provide boost towards improving the quantity and quality of wool in India.

FISCAL MEASURES

Duty structure rationalisation

5.5.2. As discussed earlier, the country is dependent on imports for quality wool to meet domestic as well as export requirements. While India is dependent on Australia for its requirements for apparel grade wool, it is dependent on New Zealand for carpet grade wool. This scenario is expected to continue going forward, as domestic raw wool production is estimated to grow at a marginal CAGR of 1% during 2009-10 to 2014-15. Given the requirements of the Indian wool and woollen products industry for both, domestic and export purposes, D&B India estimates imports of wool to increase at a CAGR of 11.7% during 2009-10 to 2014-15.

Exhibit 5.5.1: Forecast of raw wool production & imports (CAGR %)

Parameter	FY10 - FY15	FY16 - FY20
Domestic production	1.0	1.0
Imports	11.7	10.1

Source: D&B India

5.5.3. Exports of woollen products from India are expected to grow at healthy rates. D&B India estimates exports of woollen yarn, fabrics and made-ups to grow at a CAGR of 19.1% during FY10-FY15 and exports of readymade wool garments to grow at a CAGR of 21.5% during the same period.

Exhibit 5.5.2: Export forecast of woollen products (CAGR %)		
Products/Period	**FY10-FY15**	**FY16-FY20**
Woollen yarn, fabrics, made-ups etc	11.6	13.9
Readymade wool garments	19.1	21.5

Source: D&B India

Following is the argument for duty rationalisation:

5.5.4. **Raw wool & woollen yarn and fabrics** The domestic industry will not be able to produce adequate quantity of raw wool, and the gap between demand and domestic production will have to be met by imports. In this respect, there is a need to rationalise import duty on raw wool, which currently attracts a duty of 5%, and on woollen yarn and fabrics, which attract a duty of 10%.

5.5.5. **Waste of wool** The shoddy industry currently imports waste of wool at a basic customs duty of 10%. It uses wool waste to make yarns suitable for making blankets, sweaters, blazer fabrics and heavy woollen jacketing materials. The wool waste imported is carding waste, combing waste, spinning waste, and weaving waste. The industry mainly depends upon imports for its raw material requirements. This industry mostly employs women folk, and it is also a major contributor to India's exports from the woollen sector. Hence, import duty on the raw materials should be reduced, and brought at par with raw wool.

5.5.6. Rationalisation of import duty on woollen yarn & fabrics and waste of wool to 5% each, and abolition of import duty on raw wool would result in loss to the exchequer.

Exhibit 5.5.3: Duty rationalisation		
Items	**Current duty rate* (%)**	**Proposed duty rate* (%)**
Raw wool	5	0
Woollen yarn & fabrics	10	5
Waste of wool	10	5

**Basic customs duty*

Source: D&B India

5.5.7. However, given the export potential and likely growth opportunity (as revealed by future estimates as above), the amount of direct loss of revenue can very well be over compensated by the rise in exports

of woollen products, due to increased cost effectiveness translated through lower price in the major export markets of Indian woollen products. Moreover, growing export intensive sectors would support employment and livelihood of vulnerable sections of our society.

NON-FISCAL MEASURES

To improve the quality & quantity of wool

Carpet grade wool

5.5.8. The domestic industry has potential in carpet grade wool, and therefore efforts should be concentrated on increasing the production of carpet grade wool to reduce our dependence on imported wool. India has some of the best carpet grade wool producing sheep breeds such as Magra, Chokla, Nalli and Bikaneri. Thus, focus should be laid on these selective sheep breeds.

5.5.9. This should be done through increased thrust on cross-breeding programmes with an aim to bring down the micron structure of the carpet grade wool. At the same time, efforts should be made for selective breeding and for cross breeding of imported sheep breeds with inferior and widespread local breeds, so as to increase the fleece and body weight, resulting into better returns to the sheep rearers.

5.5.10. Selective breeding farms should be encouraged to be set up, preferably in the private sector or as joint ventures towards improving the production and quality of carpet grade wool.

5.5.11. The 'Bikaneri Chokla' wool is considered to be the best indigenous carpet grade wool. With a view to preserve this breed of sheep and improve upon its number, selective breeding programmes should be implemented.

5.5.12. The cross-breeding programmes should be implemented in conjunction with the respective State Animal Husbandry Departments to ensure better synergy and involvement, in order to achieve the laid objectives.

Highland wool

5.5.13. Iran is among the leading exporters of wool knotted carpets in the world. There is rising preference for Iranian carpets, and this can be attributed to use of highland wool in production of their carpets. This kind of wool can be developed in the hilly tracts of India such as Ladakh, hills of Uttar Pradesh and

West Bengal, Sikkim, Arunachal Pradesh and Himachal Pradesh, etc. Efforts should be focused on implementing programmes for producing highland wool in these regions.

Deccani wool

5.5.14. Adequate focus should be laid on implementing long term cross-breeding programmes with an aim of improving the quality of Deccani wool (presently the Deccani wool is generally black in colour), and obtaining finer variety of the wool (less coarse fibre). The ultimate aim of these programmes should be to upgrade the use of the Deccani wool to make them suitable for use in carpet making, as against the current practice of using them in making low-value blankets.

5.5.15. Earlier research towards wool quality development and the existing schemes have not yielded desired results. Thus it would be important to design time bound result-oriented incentivised schemes for better implementation.

Apparel grade wool

5.5.16. Although India has presence in specialty fibre production such as Angora, Pashmina, etc, we have not been able to increase its production. Growers of these specialty fibres should be provided with adequate extension support for marketing to encourage them to take up this activity.

5.5.17. Certain regions in the Southern part of India have climatic conditions which are suitable for production of specialty fibre such as Angora, Pashmina, etc. Focus should be laid on exploiting this opportunity and appropriate schemes should be implemented to produce these specialty fibres, particularly since they have export potential.

5.5.18. To reduce wastage during processing and to improve overall quality, adequate support should be provided for making available modern processing facilities.

Check mortality rate; bring down mortality rate from current 12-15% to 3-5%

5.5.19. Domestic production of wool is not sufficient to meet demand. This is also because of high mortality rate among sheep, which currently is at about 12-15%. This is because of lack of adequate healthcare and veterinary facilities. With proper healthcare facilities, it is possible to bring down the mortality rate to as much as 3-5%. Moreover, with proper nutritional support, an increase in wool yield up to as much as 50% can be achieved. Hence, the government policy should focus on extending proper nutritional support facility, and adequate healthcare and veterinary facilities. Government should also organise healthcare programmes for better management of sheep at farmers' level.

5.5.20. Awareness and training camps should be organised for shepherds for wool improvement, productivity and sheep management. Camps should be organised to educate and train the sheep breeders on the

techniques and advantages of proper rearing practices, nutrition support, healthcare measures (vaccination, etc), disease management, etc.

5.5.21. In areas where acute water and fodder problems exist, subsidy grants for at least three months during lean period in a year may be considered for supply of nutritious fodder and water. One-time grant for construction of water storage tanks could be provided in the necessary areas. This will sustain the shepherds to a great extent during the lean period.

Undertake collaborative research projects with leading wool producing countries in the world

5.5.22. The industry should undertake collaborative research projects with the major wool producing countries, with necessary support from the government. Some of the international organisations with which India could enter into collaborative research projects include Australian Wool Innovation, Wools of New Zealand, Federacion Lanera Argentina, American Wool, South African Merino, British Wool Marketing Board, etc.

5.5.23. The research should be in the areVas of breed improvement, with an aim to increase both, yield and quality of wool. Since Indian sheep lack in producing fine quality wool, the emphasis should be on developing such sheep breeds which can produce finer variety of wool, suitable for apparel making. At the same time, it should also focus on carpet grade wool producing sheep, mainly through successful cross-breeding at 'live' conditions rather than at 'farm' conditions.

5.5.24. Also, since the mortality rate among Indian sheep is high, the research projects should focus on overcoming the diseases in sheep breeds and producing disease-resistant stud rams which are capable of thriving in local conditions.

5.5.25. Foreign collaborations should also be encouraged in designing, as it is a critical aspect. This is especially true in context of the changing fashion trends in the international markets, where there is a need to strengthen this link in the Indian industry. Exchange programmes should be organised between Indian students and students of foreign design institutes. Professors/faculties of foreign design institutions should be invited to teach at Indian design institutes.

5.5.26. Collaborative research in development of highland wool in the Himalayan region should be encouraged by the government in collaboration with the industry.

Database building

5.5.27. There is a need to build a national level database on production, exports and imports. Reliable and timely data will enable the industry to decide, forecast and chalk out necessary plan of action for production programme, based on domestic demand as well as exports, and imports of raw materials.

Setting up common facility centres for pre and post loom processing activities

5.5.28. A basic measure necessary to improve the quality of domestically produced wool is to make available modern pre-loom and post-loom processing facilities. This will help in creating employment opportunities in the sector. At the same time, better quality will enable the wool growers to fetch better prices for their produce, and the wool processors to command higher prices for their finished products, particularly in the international markets.

5.5.29. One-time support could be provided to private players to encourage setting up modern processing facilities. This could include financial assistance to import machinery required for the woollen industry which is not available indigenously.

5.5.30. The shawl industry suffers from poor facilities for dyeing and finishing. Adequate support should be provided to make available modern dyeing and finishing facilities.

Introduction of grading system & marketing support

5.5.31. To incentivise the sheep breeders by way of better wool prices, scientific grading system should be introduced. Awareness programmes should be organised to educate wool growers on the benefits of grading.

5.5.32. To ensure remunerative prices to the wool growing community and to encourage more people to grow wool, an agency could be set up on PPP model. The role of the agency would be to not only ensure providing wool growers with the right price for their produce, but also ensure procuring wool in substantial quality. Such agencies are required to be set up in all the major wool producing centres, so that wool growers are not forced to migrate in search of better markets. The spinning mills, in turn, can procure wool in large quantities from these agencies.

5.5.33. The reach of the proposed procurement agency should be such that within a short span of time, the long chain of intermediaries can be eliminated. Unless this is achieved, wool growers would not get desired realisation; and would remain vulnerable to the lobbying power of the intermediaries.

Strengthening the Central Wool Development Board

5.5.34. There already exist various schemes under the CWDB such as IWIDP, Quality processing of wool & woollen products, and Social Security Scheme for Sheep Breeders, aimed at development of the wool and woollen products industry. (The Wool Research Association's activities are aimed at improving quality of wool through research efforts.) However, these schemes/programmes are not fully able to yield the desired objectives. Thus, there is a need to review and redefine the role of the CWDB to make it more effective and to enable it to perform the tasks assigned to it appropriately. This should be done in close collaboration with wool producers and the user industry. A restructuring of the CWDB

in lines with the Central Silk Board, Bangalore, will help it to implement the various schemes and policies in an effective manner and achieve the desired objectives.

5.5.35. For the 11th Five Year Plan, the CWDB has undertaken various schemes under fully funded Central Sector Scheme with total financial allocation of Rs 67.16 crore. There should be increased allocation of funds to the Board to enable it to achieve its laid objectives in an effective manner.

To summarise …….

5.5.36 The table below summarises the various polices recommendations made by D&B India. The recommendation have been categories into short, medium and long term.

Approach	Recommended measures
Short term	Rationalization of import duties Support for setting up of processing facilities Subsidy grants for supply of nutritious fodder and water Awareness and training camps for sheep breeders
Medium term	Grading system Marketing support Strengthening CWDB Database building Selective and/or cross breeding programme, in conjunction with state Animal Husbandry Departments.
Long term	Agency on PPP model for procurement of wool Collaborative research projects Focus on high land wool, deccani wool and speciality fibres.