

OVERVIEW OF SHEEP POPULATION AND WOOL PRODUCTION

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ABSTRACT

The sheep population, sheep breeds, classification of sheep, based on the type of wool, Sheep Distribution, sheep population World Wide, Sheep population and wool production in India and quality of wool, wool trading partners are discussed.

KEYWORDS: Sheep Population, Breeds, Wool Production, Quality of Wool

INTRODUCTION

Sheep were among the first animals to be domesticated by mankind, sources provide domestication of sheep date between nine and eleven thousand years ago in Mesopotamia. Initially, sheep were kept mainly for meat, milk and skins. Archaeological evidence found at sites in Iran, the selection for woolly sheep may have begun around 6000 BC.

Sheep Breeds

Several distinct types of sheep breed and more than 900 breeds of domesticated sheep have been developed. The Sheep are adapted to environments that range from desert to tropical conditions. In general the sheep are classified as follows, based on the physical structures and also the basis of the type of their wool.

Classification of Sheep Based on the type of their wool

Fine wool sheep: Produces very small fiber diameter, usually 20 microns or less. These breeds account for more than 50 percent of the world's sheep population. Found in Australia, South Africa, South America, and the Western United States, most sheep of this type belong to the Merino breed or its derivatives.

Long wool sheep: Produce long stapled wool with a large fiber diameter, usually greater than 30 microns. Long wool sheep are best adapted to cool, high rainfall areas with abundant forage. They are commonly raised in England, Scotland, New Zealand, and the Falkland Islands.

Medium wool & meat sheep: Meat or "mutton-type" sheep produce wool, mostly medium or long, but are raised more for their meat qualities. Medium wool sheep account for about 15 percent of the world's sheep population. The most popular meat breeds in the U.S. are Suffolk, Dorset, and Hampshire.

Carpet wool sheep: The coarsest, lowest grade wool (usually over 38 microns) is used in the manufacture of carpets. They have generally adapted to extreme environments. Carpet wool breeds found in the U.S. include Icelandic, Karakul, Scottish Blackface & also in India.

Hair Sheep: Some breeds lack wool and are covered with hair instead, like their wild ancestors. Found mostly in Africa and the Caribbean, but are also raised in temperate climates, such as the U.S. and Canada. Hair sheep account for about 10 percent of the world's sheep population

SHEEP DISRIBUTION WORLD WIDE

Geographical Distribution of Sheep: Density in heads per km²

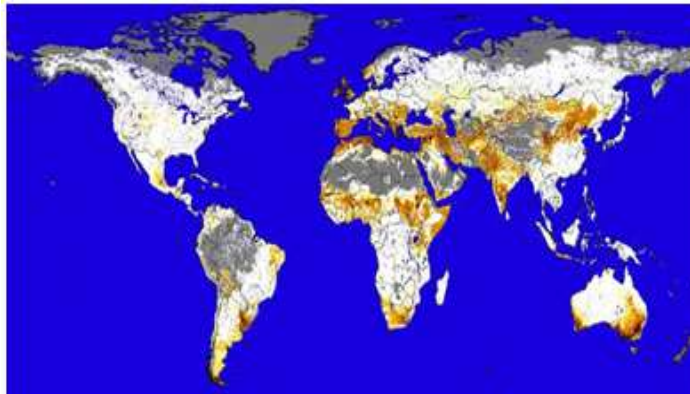


Figure 1: Sheep Distribution world wide

Table: 1

Unsuitable for Ruminants		Sheep	
	Unsuitable	<1	20-50
		1-5	50-100
		5-10	100-250
		10-20	250+

Source: FAO (2005) Global live stock distributions, Data archive produced by Environmental research group Oxford Ltd for the Food & agriculture organization (FAO) of the United Nations.

THE WORLDWIDE SHEEP POPULATION

Table 2: Worldwide Sheep Population

Country	In Millions	In % age
Republic of China	157.9	14.91
Australia	101.3	9.56
India	62.5	5.90
Iran	54.0	5.10
Sudan	48.0	4.53
New Zealand	39.2	3.70
United kingdom	35.8	3.38
South Africa	25.3	2.39
Other countries	535.0	50.53

WORLDWIDE SHEEP POPULATION In Millions

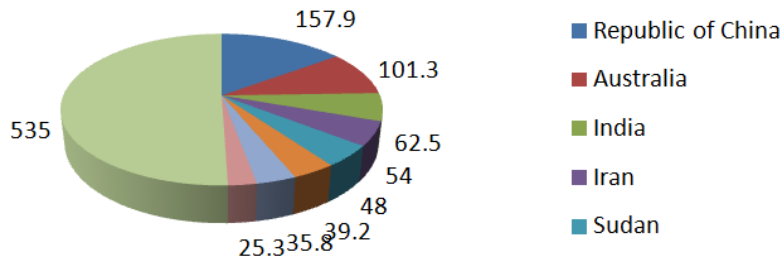


Figure 2: Worldwide Sheep Population

World Sheep Population Growth by year wise

In 2008, the world sheep population is declined by 1.3% to around 1.08 billion sheep. China has the largest sheep population in the world.

Table 3: World Sheep Population Growth by year wise

	Year	Sheep population in Billions
1	1990	1.20
2	1995	1.07
3	2000	1.03
4	2005	1.09
5	2007	1.09
6	2008	1.08

Source: IWTO

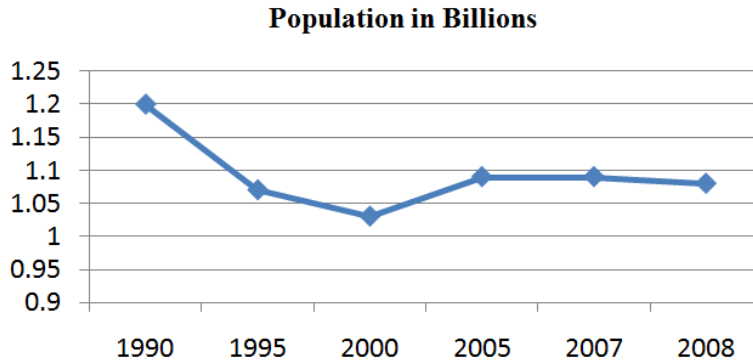


Figure 3: World Sheep Population Growth by year wise

Share of Wool Fiber in the World Fiber Production (2008)

The wool fiber has the share of 1.6 % in the World fiber production. In 2008, world production of greasy wool declined by 3%.

Share of wool in World fiber production in %

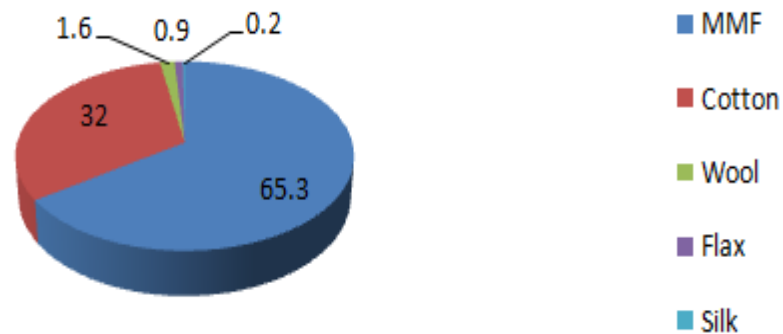


Figure 4: Share of Wool in World Fiber Production in %

Wool (Greasy) Production by Countries (, 000 Tons)

Table 4: Wool (Greasy) Production by Countries (, 000 Tons)

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
N.Zealand 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

World wool production (1990) in ,000 tons

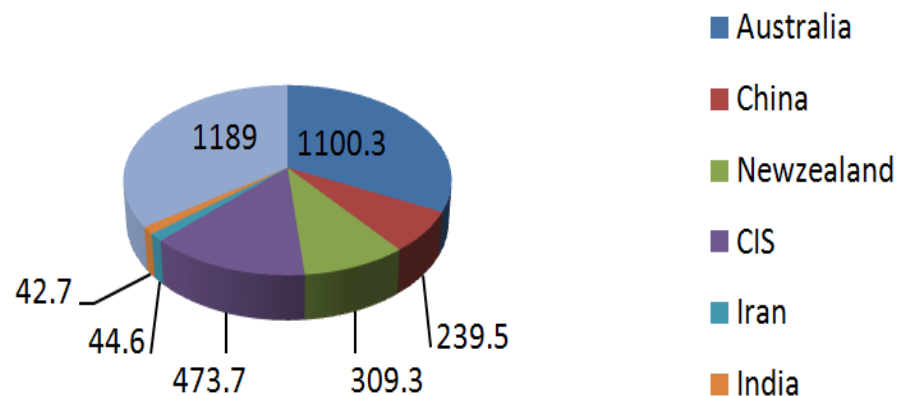


Figure 5: World Wool Production (1990) in, 1000 tons

World wool production (2008) in ,000 tonnes

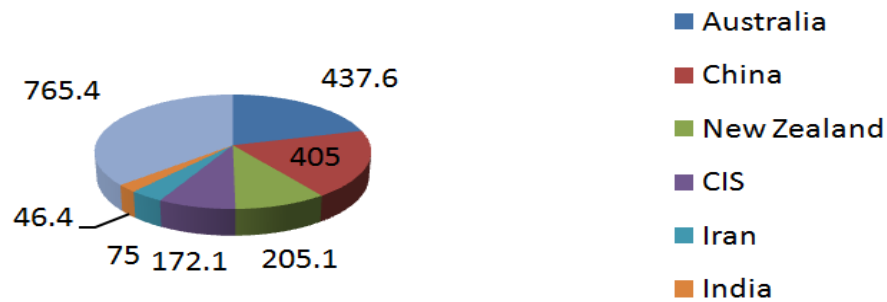


Figure 6: World Wool Production (2008) in, 1000 tons

Sheep population, India ranks among the leading five countries in the world. But India is the 6th largest producer of wool and contributes 1.8% to the total world population. It is due to the production of wool of Indian sheep at 0.8 kg/sheep/year, whereas 2.4 kgs/ sheep/ year of the world average.

GLOBAL TRADING PARTNERS IN WOOL & WOOLEN PRODUCTS

Table 5: 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 wollen yarns	Belgium, Hong 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

Production of Fibers in India

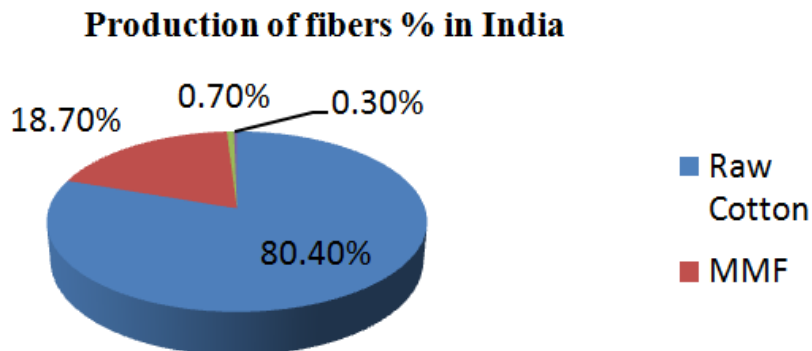


Figure 7: Production of Fibers in India

Source: www.txcindia.com

SHEEP BREEDS IN INDIA

India has vast genetic resources and has 40 breeds of sheep. In the strict sense, there are no specific breeds, since the majority of them do not have specified defined characters. Most of the breeds of sheep in India have evolved naturally through adaptation to agro-ecological conditions. These breeds have generally been named after their place of origin or on the basis of prominent characteristics. Breeds like Hissardale, Kashmir Merino and Nilgiri, are cross-breeds involving native and exotic fine/dual/mutton breeds.

State Wise Sheep Population in India

Table 6: State Wise Sheep Population in India

States	Population in,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
Maharashtra	3,094	5.02
Others	10,685	17.38
Total	61,469	

Source: Ministry of Textiles

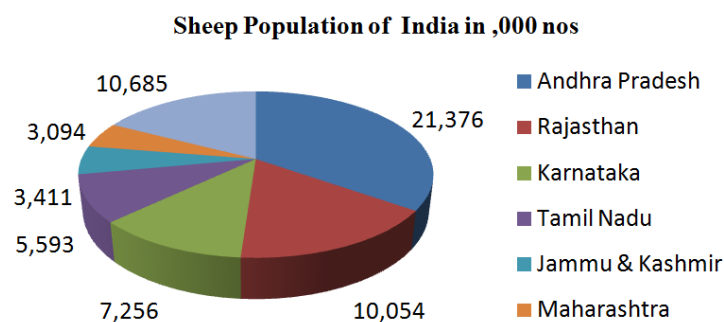


Figure 8: Sheep Population of India in,000 nos

THE QUALITY OF WOOL IN INDIA

The Quality of wool produced in india in %

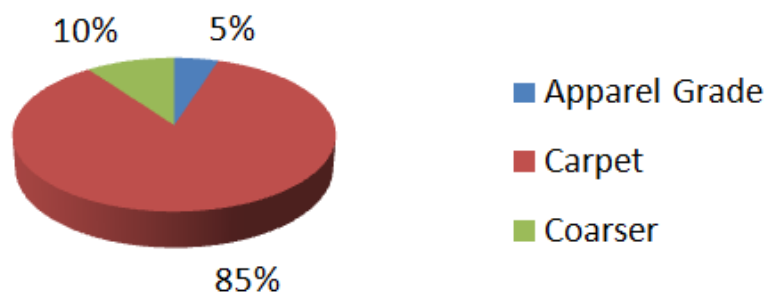


Figure 9: Quality of Wool in India

Greasy Wool Production in India (, 000 Tonnes)**Table 7: Greasy Wool Production in India (, 000 Tonnes)**

Year	1990	1995	2000	2005	2007	2008P
Quantity	42.7	41.4	47.6	44.9	45.9	46.4

Import of Raw Wool by India**Table 8: Import of Raw Wool by India**

Year	Volumes in Tons	Value in 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	1078.10
2007-08	92,904	1088.40
2008-09	65,653	1031.90

Source: DGCI &S

Export of Wool & Wool Blended Products by India in Rs Crores**Table 9: Export of Wool & Wool Blended Products by India in Rs Crores**

Products	2006-07	2007-08*	2008-09*
Fabrics	433.23	368.24	442
Yarn/Woolen/Shoddy	474	426	512
Blankets	77.76	58.32	70
Wool tops	154.08	154.08	185
Shawls/Scarves/Stoles/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
Knit wear	345.18	363.57	451.68
Machine made carpets	1.44	1.44	1.44
Total	5751.67	5526.78	5,064.30

SUMMARY

Sheep Population declined worldwide in 2008. The World sheep Population declined by 1.3% to around 1.08 Billion sheep. China has the largest Sheep population; India is in 4th Position and has a share of 6 % of the world sheep population. Population of sheep in India is increased marginally 1.1% in 2008.

World production of greasy wool has been on a decline since the past several years, with the production having fallen from 3.39 million tons in 1990 to 2.11million tons by 2008. Australia, China, and New Zealand are the world's leading producers of wool.

Sheep population in India ranks among the leading five countries in the world. But India is the 6th largest producer of wool and contributes 1.8% to the total world production. It is due to the production of wool of Indian sheep at 0.6-0.8kg/sheep/year, whereas 2.4 kgs/sheep/ year of the world average.

Most of the wool produced in India, is of Coarser quality and used mainly for the manufacture of Carpet & Blankets. Demand for wool exceeds domestic production, since India produces a lot of value added products that

are exported. Thus Substantial amount of raw is imported.

Most of Indian Woolen industries are located in Northern states of Punjab, Haryana, & Rajasthan. Three states alone Accounts for More than 75% of the Production.

Indian Woolen Industry Provides an Employment of Approximately 1.2 Million people.

The reasons for decline in wool production India is due to decline in sheep population, sheep rearing communities facing lot of problems, adequate policy intervention, lack of Scientific & technological developments, Etc.

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