

Importance of Pashmina Goat Rearing in Ladakh

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SUMMARY

The Pashmina internationally known as “Cashmere” a fine luxury fibre, is the prince of the speciality fibres obtained from domestic goats known as “capra ibex”. The origin of the word “pashmina” is from Persian “pashm” meaning wool which is the finest fiber obtainable from wool goat breeds, three times more insulating than sheep wool, although weaker and more absorbent, taking dye well. Ladakhi Pashmina fibre is relatively longer and finer, which aids the Kashmiri weavers to spin easily for preparing various winter garments. Ladakh is a world leader in producing the finest Pashmina (fibre diameter less than 12μ) and a store house of the best germplasm with potential to exploit the superior genetic material for improvement of a whole range of pashmina producing goats in the world. Pashmina is unique among the animal fibres for its warmth, lightness and better ability to absorb dyes and moisture compared to mohair and wool. In addition to pashmina, this goat is also reared for chevon, milk, manure, pelt and even carriage.

INTRODUCTION

Pashmina wool is fine cashmere, traditionally derived from the Changthangi breed, also called Changra (*Chang* relates to its native region, the Changthang, and *ra* means goat), and known internationally as the Pashmina goat. Changthangi goats have roamed the northern and western zones of the Tibetan Plateau for centuries. There may be some influence from the markhor in their ancestry, giving rise to their twisted horns. Similarly, there is evidence of domestication of the wild goat in the Indus Valley, where the Sindh ibex still maintains a wild population that may have contributed to the Changthangi gene pool. Compared to merino and mohair wool, Pashmina fibre has three times insulating values on weight basis and also possessing (90% of the strength of merino wool and 60% strength of mohair). The importance of this valuable fibre was discovered by the people of Europe during 17th century. Each village appoints shepherds to migrate their mixed goat and sheep herd over a long-established route of 6–9 miles (10–15 km), although further for some villages. The routes are agreed between villages to avoid depletion of pastures. Permanent tents, called *Rebo*, are sited along the way for human shelter. Goats are corralled overnight in paddocks bordered by stone walls. During the day, goats roam the arid valleys and scarce pastures afforded by melted snows. As forage declines herds move to the next camp. This traditional way of life has shown little change or increase in production. The land is too inhospitable for agriculture or other human use. In the 1990s, there was a large increase in demand for Pashmina goat wool to service the knitwear industry in Kashmir as Pashmina shawls became popular. However, the rarity of true Pashmina fiber and the expertise required to create the shawls meant premium prices. Soon cheap imitations using wool from other cashmere goats and blends of cashmere, sheep wool, silk, and viscose were marketed under the Pashmina name. Government initiatives aim to encourage the development of the fiber industry, including the improvement of breeding and management practices, and conservation of the breed.

According to some beliefs, Pashmina garments are as soft as baby skin and provide warm to hatch an egg. The craftsmen in Kashmir developed their own technique to process the raw material and used it for the manufacture of shawls. Thousands of Kashmiri artisans get involved in this art industry thereby sustained the economy of their families as well as the nomadic families of Changthang as the possibilities for agriculture farming in Changthang is quite low. The origin of cashmere goats has been traced to *Capra falconeri* by some authors (Harris 1962, Epstein 1969, Roberts 1969). The cashmere breeds of goats are distributed throughout the world and the important breeds are, Tan goats of China, Markhore and Raini of Iran, Kurdi of Iraq, Vatani of Afghanistan, Don, Orenberg and Altai mountain of Russia, Feral goats of Australia, Chegu and Changthangi goats of India. The three major producers of cashmere wool are China, Mongolia and Iran in their order. India contributes 1% of the world Pashmina production which amounts to 45,000 kgs of raw Pashmina fibre produced every year from about 2.34 lacs of Changthangi goats of Ladakh. Ladakh is a world leader in producing the finest Pashmina (fibre diameter less than 12μ) and a store house of the best germplasm with potential to exploit the superior genetic material for improvement of a whole range of pashmina producing goats in the world. Changthangi goats are sometimes also called as Changra goats which are primarily used for Pashmina production

and secondarily for meat purpose. Pashmina goats are of great importance for vitalizing the economy of poverty stricken region of Changthang as well as Leh district of Ladakh. The Changthangi goats are reared by the tribal Changpa nomads of Changthang region of Ladakh who remain in migration in the vast barren land of Changthang (Indian side) for good pasture throughout the year.

Some facts about Pashmina Goats

Biodiversity: Although a varied gene pool still exists, the results of inbreeding present a risk as the population declines.

Description: Small- to medium-sized with large curved or twisting horns and long coats. Convex face with short, straight ears and no wattles. A thick undercoat keeps goats warm in cold weather.

Coloring: White is most prevalent and desirable for fiber. Common are various shades from gray to black and cream to red-brown, sometimes with white markings.

Height to Withers: Yearlings average 20 in. (52 cm).

Weight: Females reach 29 kg by four years old, while males achieve this weight by three years old. Growth is insignificant during the winter due to extreme cold and poor grazing. Yearlings average 16–20 kg. Meat is generally harvested from adult animals 2–5 years of age.

Popular Use: Their undercoat provides a soft, light, ultra-fine cashmere averaging 12-13 microns thick and about 2 inches (4 cm) long. It is the finest fiber obtainable from wool goat breeds, three times more insulating than sheep wool, although weaker and more absorbent, taking dye well. It is harvested by combing or shearing in late spring and is sold to supply the textile industry. For family consumption, herders milk does during the summer, and some animals are used as pack goats or for meat.

Productivity: Average (250 g) of fiber per animal per year, ranging from (50-650 g), increase as goats mature. Adult males produce most, averaging (500 g).



Housing of Pashmina goats in changthang region



Doe



Buck

Adaptability: Through centuries, Changthangi goats have adapted in harsh conditions and high altitude pasture, withstanding extremes of temperature of (-5°C to -35°C), long winters, and high winds at altitudes of 10,000–17,000 feet. From July to September, they survive entirely on highland grazing. In winter, they dig roots from

under the topsoil, and lick snow or ice to hydrate, while shepherds supplement their diet with dry fodder. Grain is supplied only in the most severe conditions. Bucks breed from two years old and does from 18 months between July and November. A doe may give birth 6–8 times in her lifetime. Twinning is rare and the mortality rate in young is high. Abortion and still birth are infrequent, but young often die of respiratory or nutritional disorders, or due to predation or exposure. Although kids are sheltered in corrals or dug into holes in the mountainside, the severe cold, drought, and shortage of forage pay their toll.

CONCLUSION

The Changthangi goats adapted in harsh conditions and at high altitude pasture, surviving in an extreme temperature of (-5°C to -35°C), long winters, and high winds at altitudes of 10,000–17,000 feet is the major source of income for the changpas who reared the animal for chevon, milk, manure, pelt and even carriage which directly or indirectly contribute a major role in the economy and biodiversity of our country. Thus there is a need to preserve and improve the pashmina goat breed through scientific, institutional and government initiatives.

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