



## Cashmere Marketing: A New Income Source for Central Asian Livestock Farmers

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*Native goats of Kazakstan, Kyrgyzstan and Tajikistan produce good quality cashmere that is recently being bought by international processors. Central Asian producers are not equipped to take full advantage of these new marketing opportunities. Lacking prior experience, Central Asian producers are unable to distinguish good from poor cashmere. International markets reward quality with higher prices. Producers and local traders lack global market information on demand and prices. Producers also lack skills in harvesting and sorting cashmere according to international quality standards, and sell individually to traders rather than pooling to gain higher prices. Consequently Central Asian producers receive much lower prices than Mongolians and Chinese. Strong international demand continues for cashmere. Central Asian countries could learn from Mongolia's experience, where herders now gain their main income from cashmere sales. Enabling Central Asian farmers to realize the full value of their cashmere output requires development of missing elements in the marketing chain:*

- *Improved goat breeds and farmers' breeding selection*
- *Updating national researchers and extension agents on international cashmere standards and assessment methods*
- *Develop farmers' capacity to harvest cashmere and assess according to quality*
- *Increase market information flow and improve connections to international markets*
- *Support farmer marketing cooperatives*

### Background

Some indigenous goats of the Central Asian republics produce good quality cashmere (Millar 1986). During the Soviet period in Central Asia, animal breeders crossed native goats with Russian and Angora breeds to raise the output of fiber per animal (Dmitriev and Ernst 1989). The resulting crossbreeds were widely introduced onto state farms. However, the fiber from these crossbred goats is not true cashmere and has a much lower price on world markets. In many regions of Central Asia, the genetic impact of introduced exotic breeds remains.

Raw cashmere requires particular processing techniques by industrial processors who have tight specifications for quality based on a number of parameters. The most important are: mean fiber diameter (fineness), the diameter distribution of fibers in the fleece, degree of crimp and lustre. The finest quality cashmere in demand by international processors has a mean fiber diameter of less than 16.5 microns and length of 28-42 mm post-dehairing (a technical process to remove coarse outer hair from the cashmere down). Average quality cashmere of up to 19 micron is acceptable by some processors, but they will pay up to 3.5 times higher prices for the best quality.

### Major Findings

Starting in 2000, a research investigation has revealed that some indigenous goats in Kazakstan and Tajikistan are still retained by shepherds in remote locations, and these goats produce good quality cashmere, tested by international standards.

Goats from one of the GL-CRSP study areas in Kazakstan have a mean fibre diameter of 15.2 micron, ranging from 14 to 16 micron and good characteristics for processing. Likewise, goats in parts of Tajikistan have cashmere with average mean fiber diameters between 14-15.3 micron and other positive characteristics for processing.

Marketing of cashmere in Central Asia is a new business starting only about five years ago. Buyers from China, Mongolia, Iran and Europe have been purchasing cashmere from Central Asian producers through local traders. Farmers as well as national development workers, livestock specialists and officials do not know what cashmere is or how valuable it is when marketed properly.

Prices offered by traders are quite low in comparison to the neighboring producer countries of Mongolia and

China. In 2004, Mongolian farmers received on average \$22/kg for raw combed and sorted cashmere while in 2003 the price rose as high as \$48/kg by the end of the season. Chinese farmers got on average \$31/kg in 2004.

Until a year ago, producers in the highlands of Tajikistan had been bartering cashmere goatskins for bars of soap. In 2004, Chinese traders started to pay Tajik goat farmers up to \$2.50/kg for combed cashmere while farmers in southern Kyrgyzstan received up to \$7/kg. In southern Kazakhstan, traders searching for combed cashmere offered farmers between \$11-\$19/kg, but few farmers are able to supply this. Combing the fine down out of the rough outer coats is now a virtually unknown practice in many areas of Central Asia. One or two generations ago, women used to comb down from their goats to spin and knit into garments for the family.

Farmers now generally sell the whole sheared fleece, including rough outer hair with cashmere down. In southern Kazakhstan they received from \$2-3/kg and in southern Kyrgyzstan \$1-2/kg for fleeces in 2004, as traders and processors then have to manually sort and extract the cashmere. Local village traders do not know the difference between good and bad quality goat fibre. They just try to buy everything regardless of quality and sell to bigger traders who make more profit by sorting the cashmere before selling to industrial processors. One medium-size trader with experience of the Mongolian cashmere industry remarked about Kazak farmers: "If only they knew how much money we make by sorting their fiber." A farmer who recently emigrated from China to a desert village in Kazakhstan commented, "In China, this goat down is very expensive but here in Kazakhstan people don't know about down so they shear, mix together and sell everything at a low price."

Mongolian goat owners have been trained how to comb and sort their cashmere, and receive information on weekly regional market prices by radio and newsletter, through a USAID-sponsored ACIDI/VOCA programme. That is why they can get much higher prices than Central Asian farmers, though the quality of Mongolian cashmere is not better than the best cashmere in Central Asian countries.

The main reasons why Central Asian farmers receive low prices:

- They are unaware of changing world prices for cashmere and therefore in an extremely weak bargaining position when selling to traders.
- Producers do not bulk up their cashmere to sell collectively, but instead sell individually to itinerant traders.
- Most producers shear their goats and sell the whole fleece to traders. The resulting cashmere fibre length is often too short to be classified as high quality.

- Neither producers nor local traders have the skills to sort raw cashmere into quality classes; the final buyers therefore are not prepared to pay premium prices

## **Goats Assist in Poverty Alleviation**

Central Asian goats reproduce faster than sheep, often producing twins and kidding twice a year. They also cost less to feed over winter than fine wool sheep. Poorer farmers in remote mountainous and desert regions tend to have more goats than sheep. This was also found by earlier Small Ruminant CRSP research in Brazil and Peru. In Kazakhstan, goat populations have been rising over the past ten years since independence, from 700,000 in 1992 to 1.4 million in 2003. Goats are preferred by poorer farmers trying to restock since the reduction of sheep numbers from 34 million in 1992 to 10 million in 2003. Similar trends are noted in the poorest dry mountain regions of Kyrgyzstan and Tajikistan.

Incomes of small-scale livestock farmers can be substantially increased by annually harvesting high value cashmere. This is especially applicable in the upland and desert regions where alternative income sources are extremely scarce. Local goat breeds thrive in the semi-arid low shrub ecology that dominates Kazakhstan's rangelands. If in 2004 Kazak farmers in the semi-arid regions could have sold combed raw cashmere for \$19/kg, this is a sharp contrast with the price of \$0.20/kg for coarse sheep wool produced by the local breeds kept in the same regions.

Based on 2004 prices and the respective amounts of cashmere and wool produced, one Kazak goat could have yielded an income of approximately \$4.75, while income from a coarse-wooled sheep would be \$0.50. A farmer in the semi-arid rangelands would need 90 sheep to gain the same annual income as from ten cashmere goats. In the wetter regions of Kazakhstan and Kyrgyzstan, fine wool sheep can be kept and their wool has recently been selling at over \$1.00/kg, yielding more than \$3 per head of sheep. These more grassy regions are less ecologically suited for goats, and farmers are better off concentrating on fine wool sheep.

## **Demand for Cashmere**

Demand for the best quality cashmere normally exceeds supply. Over the longer term, cashmere prices are volatile, depending on fashion, weather and production trends. China is the world's main source of cashmere, and the main buyer of Central Asian cashmere. Recent Chinese government policies have restricted the populations of goats and removed tax rebates on exporting cashmere. The result has been a rise in the price of non-Chinese cashmere in two other major producing countries, Mongolia and Iran, as well as in Central Asia. China's demand for cashmere is

expected by the World Bank to rise, following entry into the World Trade Organization (WTO) which increases access to developed country markets.

### **Mongolia's Cashmere Development Example**

Mongolia provides a model for how improved cashmere production and marketing can increase incomes for livestock-keepers. The World Bank has concluded that cashmere is "a principal source of livelihood for Mongolia's poor" and that "the best way of improving the livelihoods... and reducing poverty will be by increasing the price margin obtained by herders compared to international prices" (World Bank 2003, i and iv).

The former Soviet states of Kazakstan, Kyrgyzstan and Tajikistan have much in common with Mongolia: extensive rangelands, pastoral populations, indigenous cashmere goats and a shared experience of transition from a central to market economy.

Since market liberalization in Mongolia during the early 1990s, cashmere sales have become herders' main income from livestock. In 2002, sales of raw cashmere by all livestock-owning households averaged \$303 per year or about \$8 per goat given a mean household ownership of 37 goats. For the poorest herders (70%) with less than 100 livestock, income from cashmere sales provided 20% (\$125) of total income with their main sources of income being pensions. For the one third of all livestock owners who have between 100-500 total livestock, 47% of their total income was derived from cashmere sales, yielding \$575 per household in 2002.

Foreign direct investment and donor support, particularly from USAID<sup>1</sup>, has also boosted the Mongolian cashmere industry. The sector has contributed 6.5% of GDP over the past decade and is now the third main export earner after minerals, earning from 9-17% of export earnings per year. USAID and GTZ in Mongolia have supported herder cooperative marketing and training schemes, market information bulletins and local market auctions where cashmere producers and processors can learn about each other's needs and constraints.

### **Practical Implications**

Production and marketing of cashmere in Kazakstan, Kyrgyzstan and Tajikistan is at an early stage at which development lessons can be learned from Mongolia's cashmere industry. Quality of cashmere production is the key to profitable and sustainable sales to world markets for this luxury good. The local research and extension base in Kazakstan, Kyrgyzstan and Tajikistan will need targeted capacity-building to include:

- Breeding improved bucks for sale to farmers

- Technical training on objective laboratory assessment of cashmere to international standards
- Methods of providing extension advice

To be able to take full advantage of the new market opportunities, farmers need:

- To purchase good quality goat bucks.
- To obtain extension advice on breeding selection and management, to improve and stabilize their output based on quality differentials of cashmere.
- To be informed on how and when to harvest the cashmere.
- To be trained on simple subjective methods for manual and visual assessment of quality differences, without access to high technology and expensive testing centers.
- Improved access to market information to be able to respond to signals on world production trends and quality requirements by processors.
- To be supported in creating marketing pools, as bigger traders will pay more per kg for cashmere that is sorted into different qualities and bulked up into larger amounts.

### **Footnotes**

<sup>1</sup>The Competitiveness Initiative (TCI) is a 3-year project funded by USAID in Mongolia to improve the supply of raw materials by providing detailed industry information to herders, with a focus on the quality requirements of cashmere companies, <http://www.tcimongolia.org>. ACIDI/VOCA's *Cashmere Breed Improvement Project*, also funded by USAID, was designed to improve the growth, size and fiber quality of Mongolian cashmere goats. It helped create a national cashmere breed registration system, establish high quality private breeding farms, and train herders in culling, selection, record keeping and cashmere goat marketing. Mercy Corps International (MCI) is also working to improve cashmere goat quality in Mongolia.

## References and Further Reading

Agoes, Clifford. 2002. "Moving at the speed of goat." *Penn State Online Research*, vol. 23 issue 3 (September). Available online at [www.rps.psu.edu/0209/goat.html](http://www.rps.psu.edu/0209/goat.html).

Dmitriev, N.G. and L.K. Ernst, eds. 1989. *Animal Genetic Resources of the USSR*. Rome: Food and Agriculture Organisation (FAO) Animal Production and Health Paper No. 65.

Millar, P. 1986. The performance of cashmere goats. *Animal Breeding Abstracts*, vol. 54 no. 3: 181-199.

PACT. *Gobi Regional Economic Growth Initiative* [online, cited January 2004]. Available online at [www.pactworld.org/programs/country/mongolia/mongolia\\_gobi.htm](http://www.pactworld.org/programs/country/mongolia/mongolia_gobi.htm).

The Schneider Group. Cashmere market reports on China, Mongolia and Iran [online, cited January 2004]. Available online at [www.gschnneider.com/marketreports](http://www.gschnneider.com/marketreports).

World Bank 2003. *Impact of institutional and trade policy reforms: Analysis of Mongolia's cashmere sector*. Available online at [http://poverty.worldbank.org/files/14794\\_Mon\\_Csm\\_Mixed\\_Rep\\_Mar03\\_BBL.pdf](http://poverty.worldbank.org/files/14794_Mon_Csm_Mixed_Rep_Mar03_BBL.pdf).

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The GL-CRSP Capacity Building for Sheep and Fiber Marketing Project (WOOL) was established in 2003 and was developed from research conducted through the GL-CRSP small grants program. The project is gathering information on wool and cashmere marketing chains from producers to international processors in Kazakstan, Kyrgyzstan and Tajikistan. Researchers are providing training to farmers, distributing market information to traders and farmers, and assessing the quality of wool and cashmere. The project is led by Dr. Robert Stobart, University of Wyoming. He can be contacted at [bstobart@uwyo.edu](mailto:bstobart@uwyo.edu).



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East Africa, Central Asia and Latin America.

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