



## Cashmere in Kazakhstan: A Marketing Update

Carol Kerven, Berik Aryngaziev,  
Hilary Redden, Aidos Smailov  
WOOL Project

Research Brief O6-O1-WOOL

August 2006

*Marketing of cashmere – the fine downy undercoat produced by goats in climates with cold winters – has progressed rapidly in Kazakhstan since 2004 (see Kerven et al. 2005). In the semi-arid southwest rangelands, local goats yield quality cashmere comparable to the world standard of Chinese and Mongolian. But the quality of cashmere varies across the country. The high quality of cashmere available is a strong basis on which to expand processing and improve producer prices. European buyers have already expressed interest in purchasing this premium material.*

*The increase in cashmere prices from 2004 to 2005 suggests that the income from cashmere sales will have been proportionally greater for poorer households that have more goats than sheep in this region. Improvement of cashmere marketing is a development instrument:*

- *Driven by commercial interests for profit, and requires a minimum of government inputs*
- *Targeted at the poorest people in the most geographically-marginal regions*
- *Diversifies income sources for people with few alternative income streams apart from livestock*
- *Adds value in processing, benefiting the wider economy*

### Background

Livestock owners from southwest Kazakhstan have recently received higher prices for their cashmere from traders, who are paying more for superior quality. The first cashmere processing factory in the country started in 2005. International organisations are seeking ways to support cashmere development as a niche commodity. Cashmere sales bring much-needed income to the poorest rural households - with few animals, no cropland or employment options. The structure of livestock ownership and sales in these dryland areas indicates that goat ownership, and the income from their cashmere, is particularly significant for the poorest households as defined by livestock wealth.

In the international cashmere industry, fiber diameter of less than 16.5 micron is considered best and is in demand, with very fine cashmere attracting higher prices. Livestock owners in Mongolia in 2005 sold raw cashmere of less than 15.5 micron diameter for \$33 per kg compared to \$21 per kg for cashmere between 17.6 and 19 micron (Lecraw 2005). Upscale European fashion houses seek alternative sources of quality material in short supply worldwide.

### Major Findings

**Quality of cashmere from southwest Kazakhstan.** Cashmere has been sampled from goats in four different regions of Kazakhstan. Goats (72) sampled in 2005

in the southwest districts of Zhane Kurgan and Shieli in Kyzl Orda Oblast (province) produced high quality cashmere with a mean fiber diameter of 15.4 micron (The Fibre Lab, Aberdeen, 2005).

Ten samples from neighbouring south Kazakhstan Oblast were coarser with a mean fiber diameter of 16.8 micron and 40% were classified as greater than 16.5 micron diameter, with lower international prices (ST Group Laboratory 2006 and The Fibre Lab 2006). Twenty goats from two regions in the southeast (Almaty Oblast) had mean fiber diameters of 16.8 micron and 18.2 micron; the latter would attract much lower prices – about 30% of the price for cashmere under 16 micron. Samples from the southern Oblast of Jambul and from northwest Kostanai Oblast were of inferior quality, below the international standard.

In 2004, Kazakh cashmere exporters reported that a constraint was the absence of technical equipment and skills in Kazakhstan for assessing cashmere quality and thus setting price brackets. However, a new animal fiber analysis laboratory, with staff trained in analyzing cashmere, began operating in 2005 in Almaty at ST Group, a Kazakh wool and animal fiber company.

The first Kazakh cashmere processing factory started scouring (washing) and dehairing<sup>1</sup> raw cashmere in 2005, in Chimkeynt city, south Kazakhstan. The factory

processed material from southwest Kazakhstan and from surrounding countries of Iran, Afghanistan, Uzbekistan and Kyrgyzstan. According to the factory owner, buyers in China prefer cashmere from southwestern Kazakhstan provinces of Aral and Kyzl Orda as it is finer (less than 16.2 micron) compared to the other regions of Kazakhstan and neighbouring countries. After the final dehairing stage carried out in China, this Kazakh cashmere is bought by Chinese factories at \$60 per kg, \$10/kg more than Afghan cashmere.

**Prices have risen as traders compete and pay more for better quality.** In 2005, producers in southwest Kazakhstan received an increase of up to 140% over prices in 2004. Small-scale rural traders are now competing for market share of this business. They bid up prices offered to producers as the cashmere harvesting season advances, increasing prices by 20% to 80% between the beginning and end of the season. The market is relatively open, limited only by access to a mode of transport (including motorbikes) and sufficient liquidity to buy from villagers before selling onto large-scale wholesalers in the Kazakh trading city of Turkistan. The first level of traders has learned that certain types of cashmere are more highly sought after and will receive better prices from wholesalers. Prices offered to producers now vary according to the amount of contamination with vegetable matter and by the color and quantity of cashmere within the fleece. However, small-scale traders are not yet able to distinguish the fineness or other quality criteria of cashmere. They are keen to learn.

**Contribution of cashmere sales to poorer livestock-owning households.** A household survey was conducted in 2004 of 50 randomly-selected livestock producer households in three villages in Zhane Kurgan district, Kyzl Orda Oblast in the semi-arid rangelands (precipitation of less than 150 mm/year) set back from the irrigated rice-growing belt along the Syr Darya River. The questionnaire covered 2003-2004 with questions on income obtained from sales of live animals and livestock products.

Half the survey households owned less than 40 smallstock, while one-third of these poorer households owned only goats, compared to the richer households, among whom 11% have only goats. Overall, goats made up 22% of the smallstock in the three sampled villages. The mean number of sheep owned by households was 67, with a median of 25 head and a maximum of 600 head. Mean numbers of goats owned was 27 with a median number

of 20, and a maximum of 120 head. Households in these drylands cannot grow any crops. Employment is limited to a few local government positions as teachers or village administrators. Remittances and state pensions are an important source of income for the poorest households.

The poorest households with between 1-20 smallstock obtained 32% of their livestock cash income from goats, with 11% (mean \$21) of cash income from selling cashmere. Seventy percent of households had medium-sized flocks with 21-100 smallstock and obtained 38% of their cash income from goats, with \$63 from cashmere sales. Large flock owners with 101-500 smallstock obtained the bulk of their cash income - 60% - from selling sheep, and a mean of \$49 from selling cashmere. Households with the largest flocks of more than 500 smallstock gained 74% of their income from selling sheep and \$154 from cashmere sales.

**Value of goats to rural economy.** Goats are important to poorer rural households quite apart from cashmere income. Goat populations are increasing faster than other livestock species, as people are restocking after great losses of livestock in the mid 1990s following privatization of state farms. Current smallstock numbers in Kyzl Orda are 10% of the population in the early 1990s. Goats reproduce faster - kidding twice a year and often producing twins - than the other livestock species, and are therefore a means of building livestock holdings. Sheili district in 2005 had 60,000 goats compared to 50,000 sheep, according to the district agricultural office, with around 74,000 people. Nationally, as Figure 1 shows, the trend since 1998 has been for a much steeper rise in the numbers of goats compared to sheep.

**The scale of Kazakhstan's cashmere production.** Development of a new manufacturing industry must be based on the quality and quantity of the raw material. Cashmere from southwest Kazakhstan is of world

Figure 1. National trend in sheep and goat populations since 1992 (on two different scales)

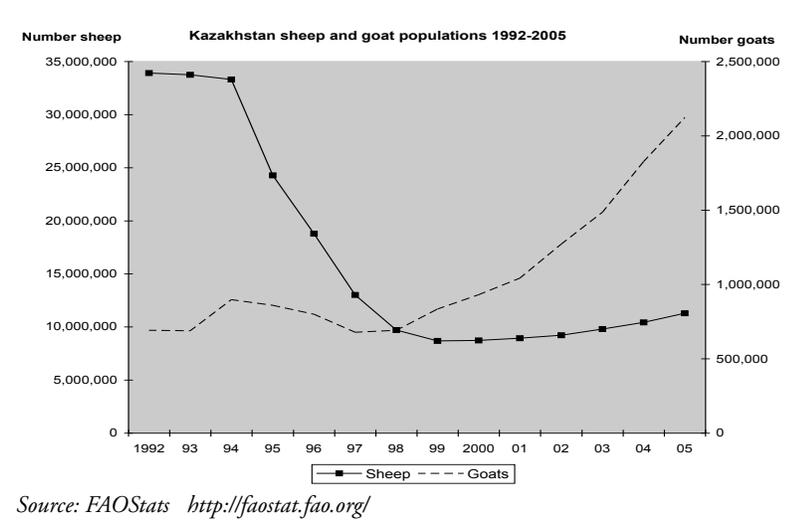


Table 1. Potential value of Kazakh cashmere to the economy.

**Kazakhstan 2005 prices (Kyzl Orda and South Kazakhstan)**

	Output price/kg	Value added/kg
Raw/greasy	\$9-23	
Scouring/dehairing (50% yield; one kg greasy gains \$5-13 after this process)	\$22-57	\$7-10
Dyeing/spinning (95% yield)	\$66-90	\$8-16
Knitting	\$80-150	\$12-40
Total value added to knitted garment stage per kg		\$27-66
Percent value increase over raw price of \$9 or \$23/kg = 17% - 633%		

standard. But private investors and development agencies also require assurance that sufficient quantity is available, before embarking on new ventures.

It may be assumed that of the country's present population of 2.2 million goats, one million produce cashmere that meets the international standard (personal communication, S. Aryngaziev, 2005). Each goat produces on average 170 gm cashmere (Mynbaevo Sheep Breeding Institute cashmere flock data). Therefore current annual cashmere production from one million goats is an estimated 170 tonnes. Much of the coarser quality from the remaining 1.2 million angora crossbred goats is also sold to China. This places Kazakhstan among the largest cashmere producers after Afghanistan and Iran, the biggest producers following China and Mongolia (UNDP 2005). Cashmere from Afghanistan and Iran is generally of lower quality than Kazakh cashmere. It can be predicted that goat numbers will continue to increase in Kazakhstan, in part due to attractive prices for their cashmere. This happened in Mongolia, where goat numbers more than doubled since 1991, in response to rising demand for cashmere.

**Potential added value and contribution to the national economy.** Until very recently, Kazakhstan's cashmere production was exported raw, as there were no processing facilities in Kazakhstan. In 2005, the factory in South Kazakhstan exported about 70 tonnes of Kazakh washed and partly dehaired cashmere. Exporting raw or partially processed materials represents a loss of added value, employment and export revenue from high-value finished goods. Knitted cashmere sweaters made in Mongolia sell for \$70 to several hundred dollars each and are mainly exported to the USA. Cashmere processing factories in Mongolia employ several thousand skilled and unskilled workers. What might be the trajectory of developing a Kazakh cashmere industry?

Producer prices in Kazakhstan in 2005 were \$9 to \$23/kg. The total value of producer sales of 170 tonnes at \$9,000 - \$23,000 tonne would be \$1.53 million to \$3.91 million,

accruing directly to livestock-owners mostly located in southwest Kazakhstan.

The potential added value if all the raw cashmere was scoured, dehaired, dyed and knitted in Kazakhstan would be 17% to 633%, equal to \$1.79 million to \$24.75 million (based on figures from Mongolia in Lecraw 2005). Investment in processing cashmere to the final stage, as is done in Mongolia, would give an annual value to Kazakhstan's national economy (to producers plus added value) of between \$3.32 to \$28.66 million.

**Practical Implications**

- In a global competitive market for cashmere, Kazakhstan has an advantage of already producing high quality material from unimproved local goats.
- Information about the quantity and quality available must be spread to domestic and international investors and buyers.
- Village-based livestock owners require training and market information in order to reap their share of benefits from higher prices in future.
- Policy-makers in Kazakhstan must be alerted to the potential for cashmere development to alleviate poverty among some of the most geographically-marginalized rural families, who lack alternative livelihood options.

**Footnote**

1. Mechanically removing the coarse outer goat hair from the fine cashmere down.

**Acknowledgements**

The GL-CRSP project work on cashmere has also been supported by the British Embassy Kazakhstan and Kyrgyzstan, and by The Macaulay Institute, Aberdeen, UK.

## References and Further Reading

Aryngaziev, Serik 2005. Personal communication. Deputy Director and chief goat scientist, Mynbaevo Sheep Breeding Institute, Kazakh Scientific Centre for Livestock and Veterinary Research, (Almaty Oblast), Ministry of Agriculture, Kazakhstan.

FAO Statistics (Food and Agriculture Organisation) Rome. <http://faostat.fao.org>

Kerven Carol, Serik Aryngaziev, Nurlan Malmakov, Hilary Redden and Aidos Smailov 2005. Cashmere Marketing: A new Income Source for Central Asian Livestock Farmers. GL CRSP Research Brief 05-01-WOOL.

Lecraw, Donald 2005. Mongolian cashmere industry value chain analysis. For the Economic Policy Reform and Competitiveness Project (USAID), Ulan Bataar, Mongolia. Chemonics International (Washington D.C.) email: [fbertoli@eprc-chemonics.biz](mailto:fbertoli@eprc-chemonics.biz)

ST Group Wool and Fiber Company, Almaty 2006. Test results on Kazakh cashmere. [www.wool.kz](http://www.wool.kz)

Macaulay Institute Animal Fibre Evaluation Laboratory 2004. Test results on Kazakh cashmere. Macaulay Institute, Aberdeen, UK.

The Fibre Lab, 2006. Test results on Kazakh cashmere. Hilary Redden, Aberdeen, UK. Email: [hilary@thefibrelab.co.uk](mailto:hilary@thefibrelab.co.uk)

UNDP (United Nations Development Programme) 2005. Market Sector Assessment: SME Development, prepared by Altai Consulting, Kabul, Afghanistan. [http://www.undp.org.af/media\\_room/archives/key\\_docs/docs/Final\\_Report\\_MSA\\_SME\\_Altai\\_Cons\\_July\\_14th\\_2005.pdf](http://www.undp.org.af/media_room/archives/key_docs/docs/Final_Report_MSA_SME_Altai_Cons_July_14th_2005.pdf)

*About the Authors:* Carol Kerven is a Research Associate at The Macaulay Institute, UK. She is a socio-economic anthropologist specialising in marketing of livestock products from pastoral regions. She can be contacted through her email address, [Kerven\\_Behnke@compuserve.com](mailto:Kerven_Behnke@compuserve.com). Berik Aryngaziev is a goat researcher and head of the Wool Laboratory at the Mynbaevo Sheep Breeding Institute, Scientific Centre for Livestock and Veterinary Research under the Ministry of Agriculture, Kazakhstan. Hilary Redden is an animal fiber specialist who directs a testing company, The Fibre Lab, in Aberdeen, UK. Aidos Smailov is the project's liaison manager in Kazakhstan and also works as a community development project manager at the Eurasia Foundation, Kazakhstan.

The GL-CRSP Developing Institutions and Capacity for Sheep and Fiber Marketing in Central Asia 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 Kazakhstan and Kyrgyzstan. Researchers are providing training to farmers, distributing market information to farmers and traders, 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.

*This publication was made possible through support provided by the Office of Agriculture, Bureau of Economic Growth, Agriculture and Trade, under Grant No. PCE-G-00-98-00036-00 to University of California, Davis. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.*

*Design by Susan L. Johnson*