Trip Report

Project:
Developing institutions and capacity for sheep and fiber marketing in Central Asia

Traveler: Carol Kerven, consultant to University of Wyoming

Location(s): Kazakhstan
Dates of Travel: 5-26 February 2006
(report includes project activities from Nov 2005-Jan 2006)

Purpose of Trip:

Activity 1: Promoting Market Competitiveness in the Fiber Pipeline
- Arrange commercial purchasing of cashmere from Kyzl Orda project site
- Visit project site and non-project site to assess impacts of 2005 farmer training
- Prepare market information materials and video for distribution to farmers and traders

Activity 2: Training on Fiber Quality Handling
- Train project team member Berik Aryngaziev on cashmere sampling methodology
- Assess quality of cashmere from project site, non-project site and research flock

Activity 3: Finding New Market Options: From Producer to Processor
- Inform national buyers of the quality and quantity of cashmere available

Summary

Meetings were held with the Director of Mynbaev Institute, together with the project partner Serik Aryngaziev (deputy director of the institute). The Director was informed that the CRSP project will be reviewed in late May and the reviewers wished to visit the institute.

Discussions were held with the Kazakhstan World Bank representative for rural development and with the World Bank manager for a new ecological/livestock project in Kyzl Orda province. A meeting was held with the USAID Central Asian agricultural officer, Dave Besch. Current prices and cashmere developments in Kazakhstan were presented.

Training and equipment was given to project partners for the methods and logistical arrangements for obtaining 300 cashmere samples from four provinces in March 2006.
Arrangements were made with the commercial project partner, ST Group (principal wool and animal fiber processors for Kazakhstan and Kyrgyzstan) to purchase fine quality raw cashmere at above-local prices from the project areas of Kyzl Orda province in April 2006.

Twenty five samples of cashmere were collected from nine flocks in four villages, and analysed at ST Group laboratory in Almaty. Cashmere from the Kyzl Orda project area was found to be finer and higher-priced than from neighbouring South Kazakhstan.

A 6-day field trip was taken to the project sites of Shieli and Zhane Kurgan districts in Kyzl Orda province, and to neighbouring Turkistan district in South Kazakhstan province. The trip included project partners Serik Aryngaziev and Aidos Smailov, with Murat Otynshiev of ST Group accompanying the team for the first 2 days.

A control assessment of the project’s impacts in Years 1 and 2 (publicity, two farmer training workshops, cashmere assessments) was carried out. Goat owners and traders were interviewed in the neighbouring province of South Kazakhstan, where project activities have not been carried out.

An article in Russian on the new opportunities for cashmere market development was written for the Ministry of Agriculture monthly journal “Agro Inform”.

800 copies of the cashmere information brochure for farmers were printed for distribution in south and west Kazakhstan and in Kyrgyzstan through KSBA.

A video was completed on “Training farmers to prepare cashmere for improved marketing” (17 minutes). The video is based on the 2004 farmer (Year 1) workshop in Kyzl Orda, with Russian commentary and English subtitles. Project partners in Kazakhstan and Kyrgyzstan will show the video in cashmere-producing regions.
FIBER PRODUCED BY CASHMERE GOATS

Cashmere goats are double-coated. They have a coarse outer long hair in the primary hair follicle and in winter, produce a fine down undercoat from secondary skin follicles. This down naturally molts each spring, when it can also be manually combed out. The down is cashmere. The outer coarse hair has little commercial value.

The proportion of down to coarse hair in a coat is of commercial significance. Kazakh goats measured produce from 100-300 grams of down per goat. The whole shorn fleece of one goat weighs about 0.8 kg. The ratio of down to coarse hair in a fleece is from 12% to 40%. Throughout this field report, “goat fiber” refers to the whole shorn fleece that contains both outer coarse hair and down. “Down” or “cashmere” refers to the fine down within the fleece. Prices paid per kg therefore are much less if the whole fleece is sold, containing outer coarse fiber as well as down (see Table 1 later).

Livestock keepers in south and west Kazakhstan usually shear the entire coat of their goats in spring. This fleece contains both coarse outer hair and the downy cashmere. They sell this whole fleece to traders, but only the cashmere down is of interest to commercial companies.

![Shearing the coarse outer guard hair](image1)

Coarse and down fiber in cashmere goat skin

![Combing out the fine cashmere down](image2)

Shearing the coarse outer guard hair

Combed cashmere down
Activity 1: Promoting Market Competitiveness in the Fiber Pipeline

- Provide market information on global prices and demand for cashmere to producers and traders in cashmere goat regions of Kazakhstan

During the field trip to Kyzl Orda and South Kazakhstan provinces, information was given to villagers, local traders and government officials that combed cashmere was in demand by processors and more profitable for farmers to sell, as compared to shorn goat fiber. Posters from the 2005 information dissemination were given to the people interviewed.

Eight hundred copies of the information brochure (4 pages in colour) in Russian were made. Five hundred copies will be distributed by Berik Aryngaziev throughout four provinces of south and western Kazakhstan on his cashmere sampling trip in March. Three hundred copies will be given to Akylbek Rakaev, the project partner in Kyrgyzstan. The number of cashmere-producing goats in Kyrgyzstan is estimated at about 60% that of Kazakhstan.

- Assess impacts of farmer training workshops in Kyzl Orda province of Kazakhstan

The largest-scale trader in Shieli district, Rahat Kamzat, said that there was an effect of the CRSP workshop there in April 2005. After the workshop which took place before the buying season started, producers demanded higher prices when he sought to buy their goat fiber, as they told him they had learned at the CRSP workshop that their cashmere was expensive on the international market.

Interviews were conducted with two of the three district-level collectors of goat fiber in Shieli, as well as with the main collector in Zhane Kurgan district and a village collector in the same district. None of these traders had been invited to the CRSP workshop in April 2005, though Carol Kerven had requested the district administration and project partners to ensure that local traders were invited. One trader commented that they do not have any connection with local government authorities as the latter “think about their own pockets”. The traders had learned about the workshop from the producers during the 2005 April-May buying season, who showed them the combs that the project distributed and told the traders they had been taught how to comb goats.

All of the traders interviewed said that people did not comb the down off their goats for sale following the April 2005 workshop. We met several producers who had tried to comb, but it was either too early in the season (prior to moulting) or too late, when most down had already moulted and been lost. The reason producers did not comb was because the Turkistan wholesalers and their agents did not propose a higher price for combed down versus shorn fiber. However, the Turkistan wholesalers employ 100 women to hand-separate the coarse outer fiber from the down, and some sold this for $18/kg to the Sharambek processing factory in Chimkeynt.
The mayor of Enbekshe village (269 households, 25 km from district centre) in Shieli district had attended the April 2005 workshop. He said that people in the villages got excited as they were told at the workshop that they had high quality cashmere goats, with similar value to Chinese cashmere. However, in his opinion the workshop should have been followed by practical steps of buying cashmere. (Efforts were made in late April 2005 to arrange buying of cashmere by the ST fiber group, but most of the cashmere had already been purchased by local traders by that time). Only one person from Enbekshe village got combs at the workshop, but that person and his brother are two of the largest goat-owners in the village, with 500 goats each. The village as a whole has 4,000 goats and 10,000 sheep. The mayor noted that the district administration was very interested in developing cashmere marketing as it brings income for people.

In order to assess the effectiveness of the workshops in two districts of Kyzl Orda province (2004 and 2005), a separate visit was made to several villages and towns in Turkistan district, a cashmere-producing region in South Kazakhstan province, where no project activities have been undertaken. In one village of Abai, five producers were interviewed on their knowledge of cashmere combing and marketing. The largest-scale local fiber trader in nearby Babai Kurgan village was also interviewed, as were the main goat fiber collectors for the district, based in the town of Kentau. None of the people interviewed had heard about the CRSP workshops in 2004 and 2005, in the adjoining province of Kyzl Orda.

Villagers in the district also farm wheat, maize and cotton on irrigated land. The villagers each own from a few goats up to six hundred, and goats have been increasing in numbers faster than sheep, as they kid twice a year and often produce twins. One of the villagers interviewed had over 300 goats and many fewer sheep, as he said goats give an income from cashmere fiber as well as having a faster reproductive rate. He received a cash advance from the district trader in goat fiber to secure purchase of goat fiber at a pre-set price. Another villager interviewed had 20 goats and 4 sheep, and grew wheat and maize as well. A widow who was interviewed owned only goats and no sheep, and did not grow any crops. The only agricultural cash income she obtained in 2005 was from selling goat fiber to the local trader.

Samples of cashmere were obtained from the Turkistan district of South Kazakhstan province, to compare with samples from the project area of Shieli and Zhane Kurgan. The results are shown in Annex 1. Cashmere from the South Kazakhstan samples was of lower quality, at about one micron greater in diameter than in the project area. A trader who bought goat fiber from Suzak district in South Kazakhstan province, paid a much lower price in 2005, at 100 t/kg ($0.75) as he said the quality is not as good as in Shieli district.
Activity 2:  Training on Fiber Quality Handling

- Provide training video to farmers on how to prepare raw cashmere to increase market prices

A short video was completed (17 minutes) showing footage from the 2004 farmer training workshops in the Kyzl Orda project site. An explanation of cashmere prices in the world markets is also provided. The video commentary is in Russian, which is also used in Kyrgyzstan, with English subtitles. One week was spent on video editing in Almaty.

At the completion of the field trip, the digital computer version was ready and is being transferred to videocassette format for showing on village equipment and TV monitors. The video will be screened for farmers at the beginning of April, prior to the cashmere harvesting and selling season.

- Representative regional sampling of cashmere quality in areas previously identified as likely to have good quality indigenous goats (Kazakhstan)

Several meetings were held with project partner Berik Aryngaziev and Mukhan Nuraliev, head of the Goat Department at Mynbaevo Institute. We discussed the methodology for sampling cashmere in south and west Kazakhstan in February and March 2006. Materials for sample collection (scissors, bags and labels) were given to the partners. They will collect 300 cashmere samples to be assessed by Hilary Redden. The sampling method is:

- 20 samples from 40 villages in 15 districts (3 different villages in each district) in the following 4 provinces:
  - Eastern Kazakhstan (Almaty Oblast): 1 district, 20 samples from 3 villages
  - South Kazakhstan: 5 districts, 100 samples from 13 villages
  - Kyzl Orda (not Sheili or Zhane Kurgan): 4 districts, 80 samples from 12 villages
  - West Kazakhstan (Mangistau, Atrau, Aktubinsk, Uralsk): 6 districts, 90 samples from 12 villages

During this field trip, 25 samples of staples with coarse fiber and cashmere were taken from goats as follows:

- Turkestan district, South Kazakhstan province:
  - 4 Abai village
  - 6 Babaikurgan village

- Shieli district, Kyzl Orda province:
  - 8 Enbekshe village
  - 7 Gigant village

These 25 samples have been analysed on the OFDA 4000 at ST Group textile company in Almaty, and will be re-analysed by The Fibre Lab (UK) director Hilary Redden, project partner. The results from ST Group are summarised in Annex 1. The mean fiber diameter
of the 15 Kyzl Orda samples was 15.88 micron compared to 16.86 micron from 10 samples in Turkistan.

We reviewed the quality of cashmere from the Mynbaevo-British Embassy goat flock, which contains 74 goats, purchased from three provinces (including Kyzl Orda) as well as hybrids from wild goat (Capra falconeri) crossed with Kazakh goats, and crossbreds from Scottish cashmere frozen semen inseminated to Kazakh goats. Two bucks from the Scottish line have been placed in a shepherd’s flock in the project area of Zhane Kurgan, Kyzl Orda in October 2005. We visited this shepherd and the bucks have done well over the winter. The British Embassy Kazakhstan and Macaulay Institute UK have supported the Mynbaevo flock for the past four years.

The Director of Mynbaevo Institute was met and informed that the CRSP project will be reviewed in late May and the reviewers wished to visit the institute. The Director was interested in obtaining frozen semen of Angora mohair-producing goats from South Africa, Texas or Australia, as the quality of Soviet mohair goats had been reduced. The institute expects to have funds from the Ministry of Agriculture for purchasing frozen semen by April 2006.

**Activity 3: Finding New Market Options: From Producer to Processor**
- Inform international and domestic buyers of the quality and quantity of cashmere available

A cashmere processing company in Italy, Cariaggi Lanificio Spa., was contacted through the auspices of the Rural Development specialist of the World Bank office in Kazakhstan. The company requested samples of raw cashmere from the Kyzl Orda region of the GL CRSP project. 10 samples were sent by Carol Kerven to the company in November 2005. The company responded that the type of cashmere was not suited to their purposes, but did not explain the reason. The World Bank representative is following up with the company.

Discussions were held in November and December 2005 with a well-established British fashion house, “Katharine Hamnett” (London, Hong Kong), which is seeking an alternative source from China to purchase fine quality cashmere for a new fashion line. The company wishes to buy cashmere that is ethically produced by family farms using environmentally-safe methods. Carol Kerven sent 15 samples of Kyzl Orda cashmere to a German fiber processing company on behalf of the Katharine Hamnett company, which is planning to purchase cashmere from Kyzl Orda in 2006.

A field trip to South Kazakhstan and Kyzl Orda provinces was undertaken with Murat Otynshiev, a project partner and general director of the Tokmok wool processing factory in Kyrgyzstan, part of the ST Group animal fiber commercial company based in Kazakhstan. ST Group is the largest wool and animal fiber processing organisation in the two countries.
Arrangements were made for the ST company to purchase high quality raw cashmere from the Kyzl Orda project area in April 2006. The company buyers will offer a higher price to producers and local traders for combed or hand-separated cashmere, which is sorted and of good quality. The company is planning to dehair and start spinning cashmere yarn this year, for the first time. No other processor in these countries produces cashmere yarn or garments.

An article in Russian was prepared for publication in the monthly Kazakh journal “Agro Inform”. The journal now has over 4,000 subscribers of which 75% are private farmers and agri-businesses, and the remainder are government agricultural offices. The 3-page article entitled “Opportunities to Develop a New Sector in Cashmere (Goat Down)” by Carol Kerven, Serik Aryngaziev and Aidos Smailov (project partners) will be published in early March 2006, prior to the beginning of the cashmere marketing season in April.

A World Bank official in Astana (capital city) is preparing a new environmental project for Kyzl Orda province and contacted project partners Serik Aryngaziev and Carol Kerven about including a cashmere component in this new project. The World Bank official, Bolat Otkelov, had learned about the market potential for cashmere in Kazakhstan from the Agro Inform article published by project partners in May 2005.

Development of cashmere marketing and processing, 2005-2006

We visited the first cashmere scouring and dehairing plant to have started operating in the country, located in Chimkeynt city (South Kazakhstan province), which began in 2005. Mr. Sharambek, a Kazakh businessman who repatriated from China to Kazakhstan in 1992, owns the plant. The ST Group company director accompanied us in the tour of the factory.
The plant processed 700 tonnes of goat fiber in 2005, of which 100 tonnes came from western Kazakhstan and the remainder from neighbouring countries of Iran, Afghanistan, Uzbekistan and Kyrgyzstan. Mr. Sharambek explained that buyers in China prefer cashmere from western Kazakhstan as it is finer – generally less than 16.2 micron compared to other surrounding countries’ cashmere. The finest quality comes from the western Kazakhstan provinces of Aral and Kyzl Orda and is usually light grey in color. After the final dehairing stage (carried out in China), Kazakh cashmere is bought by Chinese factories at $60 per kg, which is $10/kg more than Afghan cashmere.

The Sharambek plant buys shorn unsorted goat fibre from large-scale Kazakh middlemen in Turkistan city (South Kazakhstan province), who originate from Iran. These middlemen collect most of the goat fiber in western Kazakhstan, and also receive goat fiber from Iran and Afghanistan. In 2005 the Sharambek plant also bought from the Iran-Kazakh middlemen 50 tonnes of down which had been hand-separated from the coarse outer fiber.

The equipment at the plant was purchased from China. There is one large scourer, bought for $120,000 and seven dehairing machines which cost from $5,000 to $8,000 each. The factory is situated in a former Karakul lamb pelt processing plant. In 2005 the machinery was operating from March to November and will start again in March 2006 when the new season’s goat fiber becomes available.

The yields obtained from processing are as follows:
- First stage; scouring (washing) = 85%
- Second stage; dehairing = 50%

One tonne of raw goat fibre yields 350 kg of dehaired down. However, further dehairling is required in China to remove more coarse fibers. This yield rate suggests that the shorn goat fiber processed at the factory (which includes fiber from Afghanistan, Iran and other countries), contains on average 65% down. When very good Kazakh cashmere is dehaired at this factory, the down yield is 15-20% of whole fiber.

According to Mr. Sharambek, there are very good prospects for developing the cashmere industry in Kazakhstan, as the basis of good quality goats is present. He recommends that producers be taught how to comb raw cashmere and sort by quality, as this would be more profitable for everyone. In Aral province, producers have started to comb rather than shear their goats. He commented that if producers would comb and sort down, buyers would offer higher prices for sorted down, which would motivate producers. He also said that efficiency and profitability would increase if a laboratory in Kazakhstan could assess raw cashmere. Mr Sharambek was able to discuss future laboratory testing with Murat Otynshiev of ST Group who accompanied us. Mr Sharambek commented that even someone like himself who has been buying cashmere for ten years cannot always judge the quality and sometimes pays more than the international market price, if the quality turns out to be less good than they guessed.
Quantities produced and prices for goat fiber, down and goat skins

According to the Shieli district government agricultural officer, there are an estimated 60,000 goats in the district (more than the number of sheep at 50,000). One Shieli trader stated that Shieli region produces from 45-50 tonnes of shorn goat fiber each year. As each goat yields on average 0.8 kg of shorn fiber, this would be equivalent to 48 tonnes. At the yields obtained from the Sharambek factory in Chimkeynt, this amount would yield 31.2 tonnes of raw cashmere and 16.8 tonnes of scoured and dehaired down.

*Goat skins with cashmere 2005-2006*
This past year (2005-6) there has been an increasing demand for goat skins which contain cashmere down. In February 2006 the farm gate price per skin was $5 in Shieli and $3.8 in Zhane Kurgan. A trader in Zhane Kurgan was selling goat skins in February 2006 to Turkistan at $6 each. By May when the down has moulted off goats, the price of goat skins drops to $0.75.

*Selling prices in 2005*
Producers sell whole shorn fleeces in the Kyzl Orda project area and in the neighbouring Turkistan district of South Kazakhstan. In the Turkistan region, local traders hand-separate the cashmere down from the fleeces and sell this on to large-scale wholesalers in Turkistan city. From there some of the down is sold to the Chimkeynt processing factory, or directly to China and other countries. Graph 1 below shows the prices received for down (equivalent) by each level of seller. This assumes that each kg of whole fleece contains on average 200 gm of down. It can be seen that the greatest margins occur when the down is exported to China. Local traders make rather modest profits.

**Graph 1:** Seller prices for one kg cashmere down (equivalent) in 2005, Kyzl Orda province (Sheili and Zhane Kurgan districts)
Table 1: 2005 prices for goat fiber and down, Kyzyl Orda and South Kazakhstan province (US $ at 2005 exchange rate when purchased)

<table>
<thead>
<tr>
<th>Location and seller</th>
<th>Fleece (shorn with coarse and down) per kg.</th>
<th>Hand-separated down</th>
<th>Goat skin with down</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kyzyl Orda province</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Shiei district trader paid producers ¹</td>
<td>$1.5 to $2.7</td>
<td>$15.00 to $23.00 (combed)</td>
<td>$5 (Feb 2006)</td>
</tr>
<tr>
<td>2nd Shiei district trader paid producers</td>
<td>$3.0 to $4.20</td>
<td>not bought</td>
<td></td>
</tr>
<tr>
<td>Shieli district, Enbekshe village Producers sold to traders</td>
<td>$2.70 to $3.00</td>
<td>not sold</td>
<td></td>
</tr>
<tr>
<td>Zhane Kurgan district trader paid producers</td>
<td>$2.25 to $3.80</td>
<td>not bought</td>
<td>$3.80 (Feb 2006)</td>
</tr>
<tr>
<td>Zhane Kurgan district, village trader in Kruash sold to Turkistan wholesalers</td>
<td>$4.50</td>
<td>not sold</td>
<td>$6 (Feb 2006) ²</td>
</tr>
<tr>
<td><strong>South Kazakhstan province</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkistan district, Abai village producers received from local trader</td>
<td>$1.50 to $1.90 ³</td>
<td>not sold</td>
<td>$1.50 (Feb 2006)</td>
</tr>
<tr>
<td>Turkistan district, village trader in Babai Kurgan sold to Turkistan wholesalers</td>
<td></td>
<td>$9.80 white $13.60 brown</td>
<td>$4.50 (Feb 2006)</td>
</tr>
<tr>
<td>Turkistan district, Kentau town, main traders for region sold to Turkistan wholesalers</td>
<td></td>
<td>$13.6 to $21.2 ⁴</td>
<td></td>
</tr>
<tr>
<td>Turkistan district, Kentau town bought from local traders</td>
<td></td>
<td>$9.00 to $13.60</td>
<td></td>
</tr>
<tr>
<td>Chimkeynt city, cashmere processing factory bought from Turkistan wholesalers (from all south and west Kazakhstan)</td>
<td></td>
<td></td>
<td>$18</td>
</tr>
</tbody>
</table>
Notes:
1. Price starts lower at beginning of season, rises as traders compete to buy, and drops to initial price at end of the season, when goats have moulted most of the cashmere.
2. Producers receive the lower price when fleece contains burrs from cotton fields.
3. Price per goat skin drops to $0.75 in May after down has moulted
4. Higher price paid by Turkistan wholesalers if greater quantity sold to them

Goat fiber and down traders

The following information on prices, local buyers and their contact details have been given to ST Group company which is planning to purchase raw cashmere from the project area in April 2006.

1. Shieli district, town centre. Largest local buyer is:
  Rahat Kamzat
  Tel. 8-300-678-1790
  and Shieli tel. 43013
  He gets an order from Turkistan buyers, who give him an advance of $2,500 to start buying before 15 April. Unless he gets an advance, he does not buy. In 2005 he bought 6 tonnes of goat fiber from Shieli and other districts. Turkistan buyers like Shieli fiber as there are no burrs in it, compared to around Turkistan where cotton is grown and there are a lot of burrs. The Turkistan wholesalers mix the high quality Shieli cashmere with lower quality from Turkistan region, which is cheaper, prior to selling on to the next level. He does not sort fiber when buying, and Turkistan buyers do not pay according to quality or color. His buying season is from 20 April-20 May.

  There are now only three buyers in Shieli centre; several years ago there were around 8 buyers but most of them became bankrupt as they did not know the criteria of the goat fiber they were buying and therefore could not sell it onto the Turkistan wholesalers.

2. Shieli district centre
  Bolat Baishokov
  Tel. 8-300-1380309
  and Shieli tel 41085
  He has been trading in goat fiber for the past four years, giving cash advances to village buyers in Shieli and Zhane Kurgan district, who collect for him. He provides them an advance about 10 days before buying season starts on 20 April. However, if other seasonal buyers offer higher prices to the village collectors, these collectors will sell only half the agreed amount at the previously fixed price to the Shieli buyer, saying that they were unable to collect more.
He has been selling to the same Turkistan wholesaler for the past four years. In 2005 he also bought from Suzak district in neighbouring South Kazakhstan province, where the price was much lower in 2005, at 100 t/kg ($0.75) as the quality is not as good as Shieli district. Other traders in Turkistan district said that Suzak district also has angora goats, which will have interbred with Kazak cashmere goats, resulting in lower-quality cashgora fiber being produced.

3. Zhane Kurgan district centre
Korjan Nurmahmet
Address: Manat Koken 73
Tel. 22490
(no mobile tel)
He is the biggest trader in fiber and skins, within the district. In 2005 he collected 2 tonnes of goat fiber, which he sold to the Turkistan wholesalers. He does not receive cash advances from them but can only afford to buy one tonne at a time, then resell to Turkistan and start buying again.
He commented that in spring at shearing time, there is “an endless river” of goat fiber going to Turkistan city. Almost every young man in the district who had a vehicle or motor bike goes “hunting” to buy the fiber, and the market is open, with no monopoly.

4. Zhane Kurgan, Kruash village
Kassim Bey
Tel: ***
In 2005 he collected more than one tonne of goat fiber, from Kruash village. He has established a monopoly for collecting fiber from this village and said he does not allow other people to buy fiber in the village. He started buying in May after people shear their goats but some people did not shear until June, when most of the down had already moulted. As the 2004/5 winter was very cold, producers did not want to shear their goats too early, as the goats were in poor condition and could get cold and die.
He remarked that another disadvantage of combing is that goats in one flock start moultimg at different times, therefore combing cannot be done all at one time. Shearing is done very quickly, a whole flock can be shorn at the same time and with an electric shearer takes 10 minutes per animal.

5. Turkistan district (South Kazakhstan), Babai Kurgan village
Amirghali Sulimenov
Tel: 47696
In 2005 he collected and sold 6 tonnes of goat fiber including 400 kg of hand-separated down to a Turkistan wholesaler. He buys from 6 or 7 villages around Babai Kurgan village centre. He hires local women at 200t/day ($1.50) to hand-separate the down from the coarse fiber. If the fiber is fluffy, one woman can separate 2 kg of down per day, but if it is dirty or contains burrs, the rate is 1 kg/day. He said it’s very important to remove all the coarse hair from the down, as the Turkistan wholesalers pay more for purer down.
He pays 50% lower price for fiber which contains burrs, as it’s very difficult to separate.
He commented that most farmers in the area do not hand-separate down from the coarse fiber. He would like to encourage farmers to comb rather than shear their goats, as goats kept in the colder upland region are sheared late in June when most of the down has already moulted off.

He does not sell down sorted by color to the Turkistan wholesalers, even though they offer a difference in price by color, because he gets more profit by mixing the colors and selling all at one price to them. He gets a cash advance at the beginning of April from the Turkistan wholesalers, who trust him.

6. Turkistan district, Kentau town
Usein Saparmuratali and wife Aijamal Karimkulova
Mobile tel: 8-300-3020561
Kentau tel. 33880
In 2005 he and his wife, who work together, collected 15 tonnes of coarse fiber from districts of Shieli and Zhane Kurgan in Kyzl Orda province, as well as Jety Su, Suzak and Turkistan districts in South Kazakhstan province. They have been in this business for five years.

His wife organises up to 60 local women to hand separate the down from the coarse fiber. She pays the women 250t/($1.90) per kg separated down. If the down is clean and fluffy, one woman can separate up to 5 kg per day. At the end of the 2005 season in July, they had sold 8 tonnes of separated down from the 15 tonnes of fiber purchased (53% down ratio). Goats in Suzak district produce a lot of down, but there are angora goats in that district [these produce much more down than local cashmere goats]. They do not keep the colors of the down separated when they sell to the Turkistan wholesalers. White down is less in demand and sells for 1,300t/kg ($9.8). Most in demand is brown, which is described as very fluffy and nice, selling for 1,800t/kg ($13.6)

Government Officials met:

Kyzl Orda province

- Shieli district, Akimat (local government administration):
  Zhaporov Turmagbek, head of agriculture
  Toktibaev Abdimoulen, Deputy governor, Livestock

- Zhane Kurgan district, Akimat (local government administration):
  Orazbekov Yurgadin, deputy head of agricultural development for district
ANNEX 1: ST

OFDA 4000 analysis of 25 cashmere from Kyzl Orda and South

summary by Carol Kerven  Feb 23 2006

Kyzl Orda

<table>
<thead>
<tr>
<th>Village</th>
<th>Farm flock No.</th>
<th>Lab no.</th>
<th>Type of goat</th>
<th>Mean fibre diameter (micron)</th>
<th>Mean of three tests per sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gigant</td>
<td>1</td>
<td>G-01</td>
<td>4 yr F brown</td>
<td>17.43</td>
<td>3.74 - 4.91</td>
</tr>
<tr>
<td>Gigant</td>
<td>1</td>
<td>G-03</td>
<td>3 yr F white</td>
<td>17.54</td>
<td>4.25 - 4.48</td>
</tr>
<tr>
<td>Gigant</td>
<td>1</td>
<td>G-05</td>
<td>3 yr F black</td>
<td>15.85</td>
<td>3.59 - 3.64</td>
</tr>
<tr>
<td>Gigant</td>
<td>1</td>
<td>G-08</td>
<td>2 yr F white</td>
<td>16.05</td>
<td>3.38 - 4.65</td>
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<td>MEAN Flock 1</td>
<td>16.7</td>
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<tr>
<td>Gigant</td>
<td>2</td>
<td>G-04</td>
<td>2 yr F grey</td>
<td>15.17</td>
<td>2.85 - 3.42</td>
</tr>
<tr>
<td>Gigant</td>
<td>2</td>
<td>G-02</td>
<td>3 yr F grey</td>
<td>15.61</td>
<td>2.88 - 3.15</td>
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<tr>
<td>Gigant</td>
<td>2</td>
<td>G-07</td>
<td>4 yr F grey</td>
<td>14.44</td>
<td>2.46 - 3.02</td>
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<td>MEAN Flock 2</td>
<td>15.07</td>
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<td>MEAN Giant 7 samples</td>
<td>16.01</td>
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<tr>
<td>Enbekshe</td>
<td>4</td>
<td>G-09</td>
<td>2 yr male black</td>
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<td>Enbekshe</td>
<td>4</td>
<td>G-10</td>
<td>adult F grey</td>
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<td>2.99 - 3.85</td>
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<td>Enbekshe</td>
<td>4</td>
<td>G-12</td>
<td>4 yr F brown</td>
<td>17.24</td>
<td>3.51 - 4.33</td>
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<tr>
<td>Enbekshe</td>
<td>4</td>
<td>G-15</td>
<td>1 yr male grey</td>
<td>15.07</td>
<td>2.8 - 3.3</td>
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<td>Enbekshe</td>
<td>4</td>
<td>G-17</td>
<td>2.5 yr male white</td>
<td>14.97</td>
<td>3.05 - 3.32</td>
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<td>Enbekshe</td>
<td>4</td>
<td>G-21</td>
<td>4 yr F black</td>
<td>15.31</td>
<td>2.89 - 3.11</td>
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<td>Enbekshe</td>
<td>4</td>
<td>G-24</td>
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<td>Enbekshe</td>
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<td>G-25</td>
<td>2 yr F white</td>
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<td>3.97 - 4.65</td>
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<td>MEAN 8 samples Flock 4</td>
<td>range 14.00 - 17.24 mfd</td>
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</tbody>
</table>

Note:  this is a large flock of about 500 goats but some goats managed in the flock belong to other owners.

South Kazakhstan

Turkistan

<table>
<thead>
<tr>
<th>Village</th>
<th>Farm flock No.</th>
<th>Lab no.</th>
<th>Type of goat</th>
<th>Mean fibre diameter (micron)</th>
<th>St. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babaikurgan</td>
<td>3</td>
<td>G-08</td>
<td>3 yr F white</td>
<td>15.91</td>
<td>3.2 - 3.46</td>
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<tr>
<td>Babaikurgan</td>
<td>3</td>
<td>G-16</td>
<td>2 yr F grey</td>
<td>17.37</td>
<td>3.42 - 4.67</td>
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<td>Babaikurgan</td>
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<td>G-23</td>
<td>2 yr F grey</td>
<td>16.71</td>
<td>3.21 - 3.4</td>
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<tr>
<td>Babaikurgan</td>
<td>5</td>
<td>G-11</td>
<td>grey</td>
<td>16.71</td>
<td>3.79 - 4.29</td>
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<td>Babaikurgan</td>
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<td>G-14</td>
<td>grey</td>
<td>17.42</td>
<td>3.23 - 3.94</td>
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<td>Babaikurgan</td>
<td>9</td>
<td>G-20</td>
<td>brown</td>
<td>17.02</td>
<td>3.85 - 4.03</td>
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<td>MEAN 6 samples</td>
<td>range 15.91 - 17.37 mfd</td>
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</tbody>
</table>

* from slaughtered goat skin

Abai

<table>
<thead>
<tr>
<th>Village</th>
<th>Farm flock No.</th>
<th>Lab no.</th>
<th>Type of goat</th>
<th>Mean fibre diameter (micron)</th>
<th>St. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>G-13</td>
<td>2 yr F white</td>
<td>16.18</td>
<td>3.28 - 4.14</td>
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<tr>
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<td>6</td>
<td>G-19</td>
<td>2 yr F black</td>
<td>18.19</td>
<td>4.42 - 4.58</td>
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<tr>
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<td>16.96</td>
<td>3.75 - 4.15</td>
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<td>8</td>
<td>G-18</td>
<td>3 yr male black</td>
<td>16.2</td>
<td>3.40 - 3.50</td>
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<td>MEAN 4 samples</td>
<td>range 16.19 - 16.96 mfd</td>
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</tbody>
</table>

Comments regarding results:
1. According to traders interviewed in both provinces, the best quality of down comes from Shieli and Zhane Kurgan districts of Kyzl Orda province. The sample test results show about a micron increase in diameter in Turkistan district of South Kazakhstan compared to Shieli district.
2. There is considerable variation of cashmere quality within flocks. However, some larger flocks contain goats belonging to several different people, so there will be different genetic lines within one management flock.
3. Some of the adult males have fine cashmere, e.g. Lab no. G-17 from Enbekshe village, Shieli district with 14.97 micron diameter. These bucks could be used for breed improvement of cashmere in local flocks.