Improving Livelihoods of Small Farmers and Rural Women through Value-Added Processing and Export of Cashmere, Wool and Mohair

IFAD Grant 1107 – ICARDA

Workplan

1 August 2009-31 December 2010

ICARDA, NARS of Kyrgyzstan, Tajikistan and Iran and CACSA

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1 General approach to project implementation

1.1 Project goal and target beneficiaries

The overall goal of the programme is to improve the livelihoods and income of small livestock producers and rural women through improved production, processing and export of value-added fiber in producing areas of Tajikistan, Kyrgyzstan and Iran. The target groups are small producers of cashmere, mohair and wool and women processor groups. The pilot sites at the four project sites in Iran, Kyrgyzstan and Tajikistan have been selected to represent typical fiber producing and processing areas.

The project targets a small number of communities at strategically selected research sites in each country. The number of direct beneficiaries varies with the nature of the activity. In the case of establishing breeding programs only a small number of farmers can be included as it demands very intensive work and data collection on the farms. Fiber processing will target two to four women groups in the fist years and then expand gradually.

1.2 Project management

The project is being implemented by ICARDA in partnership with NARS, NGOs and universities and with the support of qualified consultants. The project manager at ICARDA (Dr. Barbara Rischkowsky) is responsible for the overall project management and financial administration. Dr. Liba Brent (Terrra Institute) as principal investigator plays a key role in the project implementation. She will be working intensively with the women processors to improve their skills to produce yarns and handicrafts for international markets, identify and communicate their demand for raw fiber to the producers and thus establish the linkages between fiber producer, women processors and product markets in the pilot regions and in particular with markets in Europe and the US. Dr. Joaquín Mueller from INTA will guide the development of breeding structures with active participation of the producers and based on the demands of the women processor groups.

ICARDA's regional office in Tashkent and country office in Iran will support the programme in administrative issues.

In each country, teams have been created to provide the needed expertise. Key partner research institutes (NARS) and organizations have been selected based on earlier successful collaborative ICARDA projects, and projects and experiences of Liba Brent and IFAD. The institutional network will be further developed during the project duration. National coordinators from the NARS have been selected for each programme site. They will support the implementation of all project activities, link the project to the Ministries of Agriculture and Academy of Sciences and report to the Project manager and the Principal Investigator. As requested in the grant design document progress and financial reports will be prepared every six months (31 January and 31 July) starting on 31 January 2010. Additional technical reports will be prepared according to completion of project components or individual activities or when a sufficiently comprehensive mid-term assessment can be provided.

1.3 Participating institutions and focal points/persons

ICARDA:
Barbara Rischkowsky, project manager and small ruminant specialist

ICARDA regional office:
Nariman Nishanov, administration for Central Asia and professional officer on socioeconomic and market research

USA:
Liba Brent, principal investigator and socio-economist, Terra Institute, University of Wisconsin, Madison
SERRV International (Fair Trade Marketing NGO)

Tajikistan:
Dr. Fazzlidin Ikramov, Livestock specialist, Tajik Research Institute of Livestock
Dr. Ma'tazim Askarovich Kosimov, Site coordinator Northern Tajikistan and Mohair goat breeder, Tajik Research Institute of Livestock, Sogd Branch
Dr. Gulomkodir Safaraliev, Site coordinator Badakhshan, socioeconomist and small ruminant breeder, Tajik Research Institute of Livestock

Kyrgyzstan:
Dr. Asanbek Ajibekov, small ruminant breeder, Kyrgyz Institute of Livestock and Rangelands, Bishkek
Dr. Chuchumbaeva, CACSA, Central Asian Craft Support Association (NGO)

Iran:
Dr. Hamid Reza Ansari-Renani, fiber specialist, Animal Science Research Institute, Karaj, Iran

Argentina:
Dr. Joaquín Mueller, community based breeding specialist, INTA (Instituto Nacional de Tecnología Agropecuaria), Bariloche

2 Production systems and target beneficiaries of the new project sites

2.1 Iran

The project will be implemented near Baft city (latitude 29°17'N and longitude 56°36'E) in the southeast of Kerman province, 2270 meters above sea level. The annual precipitation for this region varies from 180 mm to 320 mm. The climate is hot and relatively dry, with temperatures ranging from -10 °C in winter to +35 °C in summer. City of Baft is about 12030 square kilometers located in east southern of Iran and in west southern of Kerman province; situated between Bardsir city in the north to Jirouft and Bam cities in the east, to Hormozgan province in the south and to Sirjan city in the west. Climate is made up of two distinct weather patterns; in the north and center it is mountainous and in the south the weather is of semi desert land type. Baft is the center of the Raeini Cashmere goat production, with 850,000 heads of cashmere goats produced in the region. The Iranian farmers do not sort cashmere in terms of fineness and color and are not organized to take advantage of collaborative marketing strategies and economies of scale. Iranian farmers sell produced cashmere to local dealers at a much lower price than the price exported or sold at some markets in countries in the region. They sell unsorted cashmere for low prices and lack direct market linkages. Similar to Southern Tajikistan, women in the region work with cashmere and wool but do not have access to export markets. The project's goal will be to work with producers and women processors to improve breeding, fiber quality, marketing infrastructure and market access. It plans to introduce harvesting, sorting and grading methods that were successfully applied by major cashmere producers such as Mongolia. It will also work to develop collaborative ties between Cashmere producers in Southern Tajikistan and Iran and encourage synergistic effects of the two projects.

Raeini Cashmere goats with an average live weight of 35 kg for males and 30 kg for females produce 250-500 g of cashmere with 19-21 micrometer fiber diameter and a staple length of 31 to 40 mm. Cashmere fibre color is mainly white but it is also found in a range of different colors. The goats are kept in small farms and by nomads.
Goats are most frequently mated in late June/July and kidding takes place end November till January; shearing will be done in late April/early May (Table 1).

Table 4. Main features of goat management in Iran

	Winter			Spring			Summer			Autumn		
	Jan	**Feb**	**Mar**	**Apr**	**May**	**June**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Mating [1]						**	**					
Pregnancy							***	***	***	***	***	***
Kidding	***										**	***
Lactating	***	***	***	***	***							***
Shearing				***	***				**			
Grazing	*	**	***	***	***	***	***	***	***	***	*	*
Stubble feeding	***	***									***	***

Concentrate feeding	*	*					**				**	**

*- Less frequent; **- Frequent; *** Most frequent; 1- Buck is mixed in the flock all year round

Nomad and semi-nomad farms are the target groups in this project. Nomads migrate to the south in autumn and winter (Persian Gulf area) and return back to Kerman province in spring and summer (Table 2). All family members are involved in raising goats; men do the shepherding, shearing and feeding the goats and the women are involved in milking and dehairing. Traditionally raw cashmere (cashmere + hair) is sheared using double blade knives, fiber is stored in plastic bags and kept at the farms. Cashmere is sold as bulk fleece at the site to local dealers at a price much lower than the international markets (in 2009 7 USD/kg fleece).

Table 2. Migration of Nomads with animals in different seasons and months of year.

Activity	Season/Month											
	Winter spring summer Autumn											
	J	F	M	A	M	J	J	A	S	O	N	D
Grazing in Baft city Kerman province –					x	x	x	x	x	x		
Migrating to Persian gulf provinces	x	x	x	x							x	x

Nucleus goats will be selected in each farm and superior bucks will be introduced to improve fibre quality and body weight. Women will be organized into groups to dehair the fibre and use the fine cashmere to make yarns and fabrics as this will add value and improve the market and therefore the livelihood of the women and the small holder farmers.

Raeini Cashmere goat breeding station in Baft

Iran has established some governmental breeding farms in different parts mainly to improve the genetic quality of cashmere goats. The main cashmere goat breeding center is located in Kerman province-Baft city. Its main objective is to produce superior males and distribute them among local goat farms. Baft Raeini breeding station has been established about 30 years ago and keeps 600 goats of which 300 heads are reproducing goats. Improved male goats from the station are distributed to local farms and to avoid inbreeding some superior male goats from local farms are introduced into the breeding station. Artificial insemination is used in the station and about 1000 goats of local farms are inseminated artificially using fresh semen from the breeding station. Major part of applied research can take place in this station with a close direct community level contact. Raeini goat breeding station would be a good center for developing a harvesting, sorting, breeding and marketing strategy in close communication with local farms. Training facilities at Baft breeding station can be used for workshops to train local cashmere producing farmers and women.

2.2 Kyrgyzstan (Naryn)

The Naryn oblast is located about 350 km from Bishkek and 200 km from the Chinese border 2800 m asl. The city of Naryn is known as the coldest town in Kyrgyzstan. Winter lasts for 145-165 days and temperatures been known to fall to -40°C. The average annual temperature is -6°C and the average annual rainfall is 250-300 mm. The population of the town of Naryn is about 45,000, and there are about 260,000 inhabitants in the Naryn oblast. The majority of families in Naryn rely on production of livestock (sheep, goats, horses and cattle) for livelihood. Crop production is limited due to the short growing season. The Naryn oblast is

one of the poorest and most isolated regions in Kyrgyzstan, with high unemployment and poverty. The yearly per capita income is about $2,000.
Kyrgyzstan and Naryn are known for developed felting tradition. Felting has been one of the earliest techniques of making textiles and it has played an important role in the life of nomadic cultures of Central Asia. The yurts of Kyrgyz pastoralists were made out of felt and protected the families from winter cold and summer heat. Felting was traditionally done by women whose job it was to process animal fibers and make felt rugs and clothing for practical use and aesthetic enjoyment. For hundreds of years, Central Asian women made felt vests, hats, shoes and decorative rugs to carpet the yurts and cover their walls. The art of felting was passed from mothers to daughters and women who were the most skillful felt-makers were respected for their craftsmanship.

Felting was widely used during the pre-Soviet era when the Kyrgyz pastoralists migrated with their livestock and relied on animal products for livelihood. After the Soviets annexed Kyrgyzstan and set up centrally planned agriculture women began to work on state farms and rely on mass produced consumer goods as opposed to handicrafts made within the household. This led to the decline of felt-making and other traditional arts and crafts. After the fall of the Soviet Union felting found a new role as a source of women's income. The high unemployment and the low productivity of subsistence farming that followed the market transition in Kyrgyzstan forced some rural families into poverty and many into a difficult financial situation. In their search for additional sources of income, some Kyrgyz women began to rediscover felt-making, realizing that felt products are desired on the local and the tourist market. The combination of a well-preserved felt-making tradition, pressures to find means of support and the new market opportunities inspired the development of small, women-led businesses that produce a variety of felt handicrafts for the local market and for export. Felt-making groups formed in the countryside and also in the capital city of Bishkek. The groups produce a wide variety of handicrafts and the diversity of their production is increasing each year. The products are sold on the local market mostly to tourists and some are also exported.

The assortment of products made by the different groups reflects the diversity in cultural capital and market signals the artisans rely on. For example, the remote Naryn region is known for its felt rugs or shyrdaks and is relatively isolated from outside markets. The artisans gravitate towards the use of traditional colors and patterns and towards the production of practical items for the home. Their felt products reflect the cultural capital of their region that has been passed on from generation to generation. Some of groups which it trying to work for export are changing the colors and the design of their rugs to suit the needs of the western market.

Many Kyrgyz felting groups, especially those in remote areas, face the challenge of finding markets for their handicrafts and obtaining market information that would help them to develop new products. The Central Asian market for felt products is relatively small and already saturated. The tourist market is also small and most tourists visit only during the summer months. In order to successfully market their products, the Kyrgyz felt-makers need to establish linkages to these developed and highly competitive western markets. They need to learn about the nature of the marketing process and understand the tastes and preferences of western consumers.

Gaining access to the American or European markets poses a considerable challenge for women in remote mountain villages who rarely leave their homes. Although some city-based felt-making groups have internet access and are successfully exproting their production

online, the majority of rural groups in remote villages need assistance in developing linkages to markets and in designing new products that would satisfy western consumers. The objective of the ICARDA team is to work with such groups in the Naryn region and increase their capacity to produce and market felt handicrafts that can successfully sell on American and European markets and increase their incomes. The ICARDA research project team (Asanbek Ajibekov, Svetlana Balalaeva, Liba Brent and Zura Rasalieva) visited four felting groups in Lahol, Min-Bulak, At Bashi and Acha-Kaindy village during the initial visit to the Naryn region in November 2009.

Project Sites and Felting Groups:

1. Lahol village, Naryn Rayon, Naryn Oblast

The Lahol village is one of the most isolated villages of the Naryn Oblasts. The village is located 40 km from the route Bishkek-Naryn in the Kara Khudzhur valley, 2800 meters above sea level. Approximately 250 families live in the village. The main source of income/livelihood is livestock production – sheep, horses and cattle. The sheep produced in Lachol are primarily fat tails and also some Tian Shian and other crosses. (In the Lachol village crossbred semi-fine wool sold for .88 cents in 2009.) Women traditionally make felt rugs *shyrdaks* and other felt products, mainly for their houses, and sometimes for sale. The women make felts using local semi-fine and coarse wool, processing it by hand. The women use Turkish dyes, which are brought from Naryn and Bishkek. They never received any trainings in felting and know only the traditional felting technique *ala-kiiz*.

The products made by the women are typical, traditional felt carpets – thick, coarse and heavy, with traditional Kyrgyz ornaments in bright colors and high contrast. The export market for felts of this design and quality is very limited. The geographical/social isolation of the Lahol group will make it more challenging for them to succeed in producing felt for export. The felting project will be important for the Lahol women not only in terms of increasing their capacity to produce quality, marketable felts, but also as a way to gain access to new social networks and collaborate with felters from other villages.

2. Min-Bulak village, Naryn Rayon, Naryn Oblast

The Min-Bulak village is located 30 km from Naryn city. As in Lahol, most village families rely on livestock production for livelihood and there are very few other sources of employment. In this village a group called “Uz Nuraim” of 10 women was selected for participation in the project. The Min-Bulak village is closer to the regional center Naryn and the residents have more opportunities to travel and find access to markets, information and other resources. The group has skills in producing shyrdaks, ala-kiiz, felt souvenirs, and products made from chii (local straw). The artisans have experience in participating in seminars, for example organized by UNDP. They also took part in craft fairs in Naryn city and Bishkek.

The group has a good creative potential. For example, they produce a small folding yurt as a souvenir, which is interesting and easy to transport. Most of their shyrdaks have traditional colors – green, blue and red - but they also use natural colors, which are favored by western buyers. Given the group’s experience in felting and in exhibiting and marketing products locally, the women could be trained to produce export products within 1-2 years.

3. At-Bashi village, At-Bashi Rayon, Naryn Oblast

The village is a regional centre with relatively developed infrastructure, but no internet access. It is located 45 km from Naryn city. The village is well known for its artisans, producing felt

shyrdaks; there are several craft NGO-s and cooperatives in the village. In this village the project selected for participation the Public Foundation "Ak-Bairak" with 15 women from socially vulnerable groups.

The Public Foundation "Ak-Bairak" was established in March 1999 with the aim to provide assistance to the families of disabled children through involvement of their parents in felt handicrafts production. The PF "Ak-Bairak" has two rooms in a kindergarten: one room is for disabled children, and another room is used as a workshop where the mothers work on felt handicraft production. Many of the mothers bring up their children alone, without husbands. The composition of parents changes as their children grow up and leave the center. At present time 7 women work at the workshop, and 8 women work at home. The group includes a professional seamstress with university education, Kasmira Asanbaeva, who has designing skills and is enthusiastic about innovative design and felting techniques. Her training and skills will be helpful in designing new products.

The group is supported by different projects, in particular by the "AUB-Charity" Foundation which previously funded training in wool processing and felt production for the group. The main products of the group are: shyrdaks, chair-mats, cushions, tuch-kiiz, and souvenirs. The products are sold during a tourist season in Tash-Rabat and Issyk-Kul area. However, none of the products are of export quality. Similar to the other two groups, this group also needs training in design, in new product development, in dying felt and in changing color schemes to suit western demand. We estimate that the group will require 1-2 years of training to reach export standards for products such as felt seat mats and shyrdaks.

4. Acha-Kaindy village, At-Bashi Rayon, Naryn Oblast

A famous Kyrgyz artisan-felter Janyl Alibekova lives in this village. She produces exquisite shyrdaks using quality raw materials and high-level technique. Her shyrdaks are very popular - representatives of Embassies, international specialists working in Kyrgyzstan and tourists travel here to buy her shyrdaks. Janyl showed us her new products and shyrdaks which she currently makes on order from the Aga-Khan Foundation Office in Naryn. Janyl works on her own, with some assistance from her family members.

A group of artisans "Cheber Koldor" (Skilful Hands) in this village was selected for participation in the project. The group includes 15 women felters, mostly pensioners and unemployed women. The group members have some experience in marketing shyrdaks to tourists who visit Naryn in the summer but their products are also not of export quality. The team plans to arrange for the group to collaborate with and learn from Ms. Alibekova. The group will also receive training in design, improved felting techniques and in using natural wool colors and dying felt.

Needs for raw material and for felting machines:

Based on interviews with all felters, the two types of wool best suitable for producing quality felt are Merino wool and Tian Shian wool. According to our estimates, each group will require about 400 kg of raw wool (at 50% yield this means about 13-20 kg of clean wool per artisan). One shyrdak takes about 3.5-5 kg of wool to produce. Altogether the 4 groups will use at the minimum 1.6 tons of wool. 800 kg of the total supply could be Tian Shian wool and 800 kg could be Merino wool. In this case, it will take one Merino sheep producer and several Tian Shian sheep producers to supply the groups. (The specific needs of each of the groups and of other felting groups will be discussed in detail during felting group survey conducted by CACSA in winter 2009-2010).

All felting groups would be able to improve quality and increase productivity if they could mechanize felt production. Thus, there is a high need for felting machines.

Merino Wool Producers:

Based on the research carried out during the first field visits, there are only a few Merino producers in Naryn and many of them are downsizing their flocks due to low prices for Merino wool. The Tian Shian sheep produce semi-fine wool and their crosses are much more widely produced across the Naryn region. However, the best wool is produced by the purebred Tian Shian sheep which might be scarcer. There are no Merino producers with fewer than 300 sheep in Naryn as it is not economical to produce wool sheep in small numbers. The smallest Merino producer has 300 sheep and produces nearly one ton of wool.

2.3 Tajikistan – Badakhshan

The overall population in the eight villages of the Askar Zamirov Dzhamoat is 2572 persons and 334 households. The villages are located around 40-65 km from Khorog in the mountains, along the road to Ishkashim, at approximately 2,500 - 3,000 meters above sea level. The annual precipitation in the area is only about 100 mm, primarily in the form of snow in winter. The village households practice subsistence livestock and crop production. They produce grains (wheat and barley), potatoes, beans, fruits (apples, pears, apricots) and vegetables (tomatoes, cucumbers, carrots, cabbage, onions, and peppers) primarily for family consumption. The amount of arable land in the dzhamoat is 133 hectares - only 0.05 hectares per person or 0.4 per household. Each family raises several goats and sheep (10-12 on average), 1-3 cows and poultry (primarily chicken). The maximum number of sheep and goats raised by a single household is 30, the smallest number is 5. The dzhamoat has 722 ha rangelands that are commonly owned.

Agricultural and livestock production in the area is constrained by the small amount of arable land and pastureland and by the relatively short growing season. Some villages located on the higher mountain plateaus have poor access to water sources. The pressure on the scarce land resources suitable for livestock and crop production is very high and most families cannot produce enough food to ensure balanced nutrition. Only a small share of agricultural production is sold on local markets; most products are produced only for family consumption.

The economic challenges faced by the residents of the dzhamoat (and of Badakhshan in general) are exacerbated by the geographical isolation of the region and the lack of roads suitable for civil and commercial transport. The region is linked with Dushanbe by two mostly unpaved roads that are passable only by terrain vehicles. Only one road is usable in the winter period.

Livelihoods:

The key source of income for the village households are remittances. Just about every household has one or two members who work in Russia for several years and send money home. They send approximately $100-150 per month especially during the spring, summer and fall season. In winter there is less work in construction and agriculture and less or no money to send. The $100-150 in remittances has to support a family of 7 or more persons and is often the only source of family income. The migrant workers are primarily men of working age (only about 1/6 are women). Younger men also leave their villages for the army and to study or work in Dushanbe or abroad. This means that the permanent village occupants who

do the majority of work in agriculture and livestock production are primarily women, older men and children.

History of Cashmere Production:

During the Soviet period, the 8 pilot villages were part of the "Badakhshan" kolkhoz which was formed in the 1930s. The kolkhoz was focused on livestock and crop production and started working on the development of cashmere goats in 1985. The objective was to develop a white Pamir cashmere goat by using Angora goats imported from northern Tajikistan, and the Gorno Altai cashmere goats imported from the Altai region of Russia. The Angora goats were used primarily to get the white color as the Altai cashmere goats are colored. The scientists who worked on this project brought over several hundred heads of each breed. All the animals had breeding certificates. (Unfortunately the certificates are no longer available – they were used up when there was no writing paper available in the governmental offices after the war.) Our team plans to conduct further research to identify the immediate origin of the imported Altai goats.

The goats were distributed to the state farms in each of the villages. The cashmere the goats produced was combed by women and sold to Orenburg (in Russia) where it was used to make the world-famous "Orenburg shawls" that sell for $200 and more. By 1991-1992 there were 4,500 of the new cashmere goats in the kolkhoz. Women who participated in combing the goats told us that the goats produced on average 500 grams of cashmere and some of the males produced as much as 1kg. Based on our discussions with shepherds who worked with these goats, the Altai goats adapted very well to the local conditions but the Angoras did not – they required additional feeding to do well. The Altai goats were large and good meat as well as cashmere producers – this corresponds to the descriptions of the Gorno Altai cashmere goat published by other sources. The shepherds claimed that the imported goats were even better "mountain climbers" than their local goats. Overall, the shepherds gave the Altai breed very high marks. They claimed that the kolkhoz became profitable mainly due to the cashmere production.

After the breakdown of the Soviet Union and the start of the civil war in Tajikistan the market linkages with Russia were broken and the kolkhoz lost its market for cashmere. In 1997 the kolkhoz was dissolved (to the disappointment of most of the shepherds) and the goats were divided between households. The households sold some of the cashmere goats to Afghanistan and from there the goats were supposedly sold to Pakistan. The remaining goats were bred to local meat goats.

Current Goat Production:

According to governmental statistics, there are 3,786 goats and 2,524 sheep in the dzhamoat. Based on this data, the 334 households have on average 11 goats and 7 sheep each. (We plan to check on this statistics, it is possible that the actual numbers are smaller – the dzhamoats have an incentive to show larger numbers of animals to simulate growth.)

The visual assessment of the village flocks and sample collection show that the goat population in the villages is very diverse – there are various crosses of the cashmere and Angora goats as well as different types of native meat goats. Most of the goats produce many different types and volumes of cashmere. Clearly, the crosses of the Altai goats produce the largest volume of cashmere – 300 – 500 grams. Their cashmere is thick, long but not exceptionally fine (about 16-17 micron). Some villages have as many as 30% of the Altai crosses (these villages originally had a greater number of the Altai goats) but other villages have only 20% or less. The local meat goats represent about 60-70% of the flock and we

estimate that they produce about 50 – 200g of fine cashmere. The volume and style of cashmere among the native goats seems highly variable – we will provide a detailed assessment after we examine the samples.

In addition there are about 10-20% of Angora/Cashmere crosses (again, some villages have more of those than others). The "Cashgoras" produce a blend of guard hair, kemp, mohair and cashmere fibers. Some Cashgoras might be fine enough for our spinning purposes if combed and cleaned. Given the distribution of these different types of animals, we can make a rough estimate that the households could comb on average 170-200 grams of cashmere per goat. Women experienced in combing goats confirmed this estimate. If we use the lower estimate of 170g of cashmere per goat, theoretically the 3,786 goats could produce about 640kg of raw cashmere. Even if the women collect only 100-50kg of cashmere in the spring, it will be enough to start our spinning activity.

In addition to the Askar Zamirov Dzhamoat, the cashmere goats were also produced in the Kozede Dzhamoat (on the road to Iskhasim) – the kolkhoz "Badachshan" had farms in these two Dzhamoats. There are also 8 villages in the Kozede Dzhamoat that have flocks with a large percentage of cashmere crosses (30% or more). We collected samples from one of the flocks in this area. Project resources permitting, we plan to start working in this area as well. Provided that the distribution of cashmere goats is similar to the Askar Zamirov Dzhamoat, additional 640kg of cashmere could be collected in this region.

As noted earlier, the cashmere produced by the large variety of cashmere, angora and native meat goat crosses is very diverse. Such diversity would present a challenge for commercial processors who require a specific fiber standard. However, we do not expect that this diversity will negatively affect handspun yarn production – we can blend the different types of cashmere and make a very nice yarn, after conducting spinning and knitting tests of individual fleeces.

Animal Husbandry:
Based on the governmental statistics, each household has about 11 goats, 7 sheep and 1-3 cows. The households graze their goats and sheep together on common pastures. All households that have animals in the communal flock take turns grazing. The grazing period is from March - April to mid December. At the end of December the animals are stalled until March - April and fed until the end of April. The fully stalled period usually lasts for four months. The animals are fed mostly hay. Those families that can afford it feed them concentrated feed as well. From July to the end of September the animals are grazed on summer mountain pastures. The villagers hire a shepherd who stays with the flock in the mountains and pay him 2-3 somoni per month per animal.

As mentioned earlier, the households do not practice any breeding selection (this was confirmed by all respondents). Most males are castrated before they go to the mountain pastures, primarily because many shepherds refuse to take the non-castrated animals. The males that are left to breed are not selected on any basis and most of them do not exhibit any superior qualities. In many cases the non-castrated males we saw breeding were only 8 months old. There are no Altai bucks or crosses left for breeding. One farmer who worked with the Altai goats in the past told us that he had to slaughter the last "purebred" Altai male a year ago because he was too old.

The lack of investment in breeding symbolized the "tragedy of the commons" - given that all village animals graze together during the breeding season, it makes no sense for a single

family to invest in producing superior breeding males unless other families do the same or at least agree to castrate all inferior males. Therefore, development of a breeding system at the community level is essential for improving the overall productivity of the village flocks.

Current Cashmere Market:
In spite of the fact that the households produce goats without selection, the cashmere these goats produce has some value – each year traders from Kyrgyzstan come to the villages to buy all the goat fleeces (which are shorn in April) for 5-8 somoni/kg – about 1.5-2USD. The traders stay in the area for one month and buy all fleeces for a single price, without sorting, and take them to Osh, Kyrgyzstan. We suspect that they take the fleeces to the cashmere-dehairing plant that was recently set up in Osh, dehair it and resell it.

None of the goats are currently combed as there is no market for combed cashmere. Some families still have cashmere combs that were used during the area of the kolkhoz. Being resourceful, the women have been using the combs to dig up potatoes and the combs are no longer suitable for cashmere harvesting. Most importantly, however, the skills in cashmere harvesting have not been lost – especially the older women have a long practice in combing goats and can train other.

The Economics of Value-Added Cashmere Processing:
Unlike other projects that focus primarily on improving cashmere for commercial processing, our project seeks to improve local cashmere specifically for small-scale, manual processing into handspun yarn and knitwear. This will allow the producers - poor rural women who lack other sources of income – to obtain much higher earnings than by selling the finest raw cashmere available. Handspun cashmere yarn sells for $40/per 200yards (about 75 grams) in yarn stores in the US and is coveted by knitters who use it to make luxury shawls, sweaters and other clothing. These types of products can be made and sold by the Pamiri women who are excellent spinners and knitters.

Based on the study of McGregor, Kerven and Toigonbaev (2009) the clean yield of 1kg of combed Kyrgyz cashmere was 66%. Assuming that the Tajik cashmere would have a similar yield, we expect that 1kg of combed cashmere could be processed into 660 grams of clean cashmere and into 600 grams of yarn. The yarn could be used to make (at the minimum) 4 scarves, 150 grams each, that could sell for $120 - $300 in the US or Europe, depending on the product quality and the market. If the scarves sold for the lowest estimated retail price of $120, the wholesale price would be $60. Depending on the cost of shipping, taxes, tariffs and other marketing expenses, the women could earn at least $30-40 per scarf - the project will guarantee fair trade wages for the women and will assist them to obtain a Fair Trade certificate for their products.

Based on our experiences with mohair processing in northern Tajikistan, an experienced knitter can make a 2 meters long scarf in 4-5 days while performing her regular housework. It takes about 7 days to make 1 kg (or 3,750 meters) of yarn under the same conditions, using a wooden spinning wheel. Based on these estimates, a woman could earn at the very minimum $120 by processing 1kg of combed cashmere into 600 grams of yarn and 4 shawls in one month. Such earnings would nearly equal to the amount of monthly remittances the families receives from Russia. Based on the quality of the products and access to luxury markets, the earnings could be much higher. For example, if the scarves sold for $200, the wholesale price would be $100 and the woman could earn at least $60 - 70 per scarf – doubling her monthly income to $240 or $280.

Based on our estimates of cashmere production in the pilot area (i.e. 170g of cashmere x 3,786 goats) about 640kg of combed cashmere could be produced in the pilot region. At 66% yield, this cashmere could be processed into 422kg of clean cashmere which could be processed into approximately 380kg of yarn. 380kg of yarn could be processed into 2,508 scarves that could be sold by the women for $30 - $60 each. In this case the women's direct earnings would be anywhere from $75,240 to $150,480.

Provided that a family had 11 purebred cashmere goats that produced 500 grams of cashmere each, the family could produce 5.5kg of combed cashmere, 3.63kg of clean cashmere, 3.27kg of yarn and 21 shawls for $647 (using the minimum estimates of $30 per scarf). This would provide an important contribution to the household income. If the scarf sold for a retail price of $240 – which is not inconceivable based on the prices of the Orenburg shawls, their earnings would double.

Cashmere is being woven into luxury Pashmina shawls in India and knitted into expensive scarves in Orenburg, Russia. This project wants to build on the capacity of the Pamiri women to spin and knit not only shawls but also sweaters, hats, socks and other clothing. We plan to produce not only standard shawls or scarves but a diverse palette of cashmere knitted products based on contemporary design and market demand. Therefore, the cashmere most useful for our purposes will be cashmere suitable for hand spinning and knitting.

Cashmere must be defined by the market place. The project plans to test different types of cashmere produced by different goats by spinning it into yarn and knitting swatches from the yarn. This will tell us which type of cashmere is most suitable for this type of processing and which types of goats should be used for breeding. We suspect that the cashmere produced by the Altai crosses might be well suited for spinning and knitting given that it is long, reasonably fine and high-yielding. The Altai goats produce large amounts of cashmere and in addition are good meat producers, tested in local conditions. However, cashmere style (or crimp) is also very important for spinning as it affects how the fibers hold together. Some of the native goats sampled seem to have cashmere with a fine style. Questions regarding the quality of different cashmere types will be best answered by the processing tests in the spring. The results of the spinning and knitting tests should give us a good indication as to which types of cashmere goats should be imported to the pilot region for breeding.

3 Summary of major activities planned for 2009/2010

After visiting the three new project sites and discussions with key participants at the pilot sites (women, farmers, and local officials) in October and November 2009[1] each project team decided about the required project focus, priority activities and their time frame for the first project year (November 2009-December 2010).
The project focus differs between project sites according to the prevalent small ruminant production systems and current availability of quality fiber, the presence of women processor groups and their current skills.

In Kerman province in Iran the marketing system for the cashmere from the Raeini goats is well established through middlemen and a fiber factory but paying relatively low prices to the

[1] Liba Brent visited Kyrgyzstan with the NARS collaborators and CACSA and Badakhshan with the NARS, Barbara Rischkowsky and Joaquín Mueller visited Kerman province in Iran.

producers. Cashmere is harvested by shearing the full fleece. A baseline study of the current production levels of the nomad Raeini goat flocks and of the cashmere quality will be conducted and interested Raeini producers selected to start breeding for higher quality and introducing better cashmere harvesting methods to achieve higher prices and produce the cashmere quality required for processing to yarns and knitwear. At present little processing of cashmere is done but there are nomad women that used to spin yarn and some are skilled in carpet production. As Liba Brent was not able to visit the site in fall because of the problems to get a visa for her, the formation of women groups and the assessment of their training needs will be done in spring.

In Naryn in Kyrgyzstan the main focus will be on developing the skills of existing felter groups with support from CACSA, assessing their demands with regard to quality and quantity of sheep wool, linking them to the most suitable sheep producers and opening new market channels for the higher quality handicrafts expected to be produced after one or two years of training. The animal scientists will focus on the sheep farmers with the highest potential to supply the required raw fiber and support them in selecting most suitable animals and improving their flock productivity.

In Northern Tajikistan a new pilot site in Asht has been established in spring 2009. The major constraint for further developing international marketing of the Mohair yarns and handicrafts already produced by the women groups is the supply of fine homogenous Mohair. Therefore the project team will put a lot of emphasis on building community nucleus flocks with the best females and males to achieve progress on increasing fiber quality as rapidly as possible in the first year. At the same time the women processors will be further trained in producing high quality yarns and knitwear based on feedback from the US market. To increase the market opportunities and to overcome the current bottleneck in fine fiber supply new product lines for using coarser Mohair fibers will be developed.

In Badakhshan in Tajikistan, women are goat keepers and processors at the same time. Nearly no purebred cashmere goats are available; consequently the supply of raw material is unsatisfactory in quantity and quality. The supply of better quality cashmere has to be rebuilt to allow the women the production of high quality yarns and knitwear for the international market. This includes controlled selection and breeding of cashmere goats and reintroducing cashmere harvesting by combing the goats. At the same time women processor groups will be formed and training will be started with the best available cashmere.

4 Detailed workplans for the countries/research sites

The workplan for each country is presented below in table format to provide an easy overview of the planned activities and the associated costs. The activities are grouped by the five components of the programme that include:

- **Component 1**: Characterize production systems and improve fiber production of small ruminants in all target sites.
- **Component 2**: Work on formation and capacity building of women's groups to develop fiber processing and export of value-added fiber and products in all pilot sites. Encourage the development of women-led small businesses.

- **Component 3**: Develop sustainable market chains that link fiber producers and processors with buyers.
- **Component 4**: Research on changes of income of fiber producers and women processors and their effects on livelihoods and gender roles.
- **Component 5**: Linkages (business, scientific and cultural) between the pilot communities and the global communities of producers, processors and consumers of fiber and fiber products.

In the first project year activities in component 5 will be limited to producing first technical publications for women processors, further developing the Mohair Magic label and setting up a professional webpage that will be used as a communication platform.

4.1 Detailed workplan for Iran from 1 November 2009 – 31 December 2010

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
	Selection of Pilot Sites.	- Pilot site selection was based on the importance of Cashmere production and interest of producers in the project		September-October 2009	Pilot sites and partners for project implementation selected.	Hamid Ansari
Comp. 1	**Act 1.1.** Characterize production systems and improve fiber production in all target sites.	- Production system surveys and baseline study	Survey questionnaire of approximately 30 producers	November-December 2009	Production systems, husbandry and marketing of representative farmers described	Hamid Ansari Joaquin Mueller Barbara Rischkowsky
Comp. 1	**Act 1.2.** Establish database on fiber quality at the pilot site	- Fiber sampling, fleece weight and body weight of a subsample of white Cashmere animals from the flocks that participated in the baseline study (30 flocks) - Analysis of cashmere samples at Almaty laboratory	Collection of fiber samples from a representative animals of the base population	March 2010 April-May 2010	Variation of cashmere quality in the base population established	Hamid Ansari Joaquin Mueller Barbara Rischkowsky
Comp. 1	**Act 1.3.** Improve breeding and animal husbandry practices focusing on fiber quality	- Select 8 breeders - Introduce selection scheme and breeding structure - Formation of nucleus within the flocks - Selection of bucks from Baft breeding station	- Select the best adult animals within the flocks - Tagging and sampling of nucleus animals - Identifying and distribution of quality bucks - Tagging and weighing	November-December2009 April-May 2010	Nucleus flocks established, best bucks identified in the flocks and additional bucks distributed where required	Hamid Ansari Joaquín Mueller Barbara Rischkowsky

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
		- Monitoring and selection of progeny	progeny			
Comp. 1&2	**Act 1.4.** Introducing better cashmere harvesting methods. Training in Cashmere Combing.	- Purchase and distribute cashmere combs. - Select trainers in cashmere combing. - Organize training in pilot sites on combing goats.	Preliminary interviews. Selection of most experienced combers for training. Training in combing and fiber collection.	March- April 2010	Participating households trained in cashmere combing, assessment preparation and collection.	Liba Brent Hamid Ansari
Comp. 2	**Act 2.1.** Initial discussions with women beneficiaries. Instructions regarding sample production.	- Selection of women's groups in vicinity of Cashmere producers or interested women in the - Prioritize specific activities to improve fiber quality according to market needs and local constraints. - Discussions of cashmere quality and types of cashmere for spinning - Groups instructed to produce first product samples.	- Discussions with women's group.	March-April 2010	Groups informed about project objectives. Production of first samples organized.	Liba Brent Nomad organization Baft Extension Service
Comp. 2	**Act 2.2.** Training in spinning yarn according to market standard. Identification of cashmere best suitable for spinning.	- Produce yarn and knit swatches from different types of cashmere and assess cashmere performance during processing. - Training in spinning organized in all pilot villages.	- Trainings in spinning and assessment of cashmere performance during processing into yarn and product samples. Record results for tagged goats.	March-April 2010	Yarn samples from different types of cashmere at pilot sites. Identification of best types of cashmere/goats for spinning. Identification of best spinners.	Liba Brent Nomad organization Baft Extension Service

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
	Purchase of spinning wheel models for local production.	- New models of spinning wheels delivered.				
Comp. 2	**Act. 2.3**. Collection and analysis of first product samples.	- Samples from pilot groups collected. - Best samples sent to the US for market testing. - Specific training needs of each group identified.	- Collection and quality/market analysis of product samples.	March-April 2010	First batch of product samples from women's groups collected and analyzed.	Liba Brent Nomad organization Baft Extension Service
Comp. 3	**Act 3.1.** Assessment of Yarn Sample on US Market.	- Test yarn samples with professional knitters in the USA	- Testing yarn by knitting swatches	June-September 2010		Liba Brent
Comp.4	**Act. 4.1** Soc-econ survey of producers and women.	- Survey of participants	- Survey questionnaire.	April 2010	Interviews. Survey data.	Liba Brent Hamid Ansari
Comp. 5	**Act. 5.1**. Data analysis and preparation of report on all components. Technical publications for farmers and women.	- Collection and analysis of data on all activities.	- Data organization and analysis. Assessment of results on nucleus creation.	November 2010	Project Report	Hamid Ansari Liba Brent Joaquin Mueller Barbara Rischkowsky

4.2 Detailed workplan for Kyrgyzstan from 1 November 2009 – 31 December 2010

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Output	Delivered by
	Selection of Pilot Sites.	- Pilot site selection was based on identification of women groups with good potential for felting		November 2009	Pilot sites and groups of beneficiaries selected.	Asanbek Ajibekov Svetlana Balalaeva Liba Brent
Comp. 1	Act. 1.1. Research on sources of Merino and Tian Shian wool in Naryn. Interviews with wool producers.	- Discussions with farmers about Merino wool production and conditions of supplying felting groups with quality wool for export products.	- Discussions with farmers. - Visual assessment of Merino sheep.	November 2009	Contacts with Merino wool producers established. Suppliers of quality Merino wool for felters identified.	Svetlana Balalaeva Liba Brent
Comp. 1	Act. 1.2.. Production Systems Survey of Merino and Tian Shian Sheep producers in Naryn.	- Survey of farmers	- Survey questionnaire	April 2010	Information on wool producers who produce wool for felting (Merino & Tian Shian sheep) Potential suppliers for felting groups.	Asanbek Ajibekov Barbara Rischkowsky
Comp. 1	Act. 1.3. Selection of wool producers–suppliers for felting groups. Work with producers on improving wool quality.	- Select farmers who will be supplying women's groups with raw wool. - Work with farmers on improving wool quality and other aspects of animal husbandry. - Assess the feasibility of breeders' association	- Selection of farmers based on their capacity to supply felting groups with raw material. - Selection of animals based on demand from felters	April-September 2010	Wool suppliers selected and trained in selecting breeding animals, fiber harvesting and fiber quality.	Asanbek Ajibekov Joaquín Mueller

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 2	Act 2.1. Initial discussions with beneficiaries. Instructions regarding sample production.	- Selection of 4 women's groups in 4 villages in the Naryn region. - Discussions of project objectives, felting experiences, challenges of producing felt products for export. - Discussions of wool quality and types of wool for felting. - Groups instructed to produce first product samples.	- Discussions with women's group.	November 2009	Groups informed about project objectives. Production of first samples organized.	Asanbek Ajibekov Svetlana Balalaeva Liba Brent
Comp. 2	Act. 2.2. Research on Felting Machines.	- Visit of felting-machine constructor in Kyzyl Tu (Issyk Kul). Assessment of felt quality. - Ordering of 2 felting machines for pilot group.	- Discussions with felting machine constructor. - Examination of felting machine and felt.	November 2009	2 felting machines for pilot groups ordered for spring 2010. (Cost of each machine: $1,000 with installation).	Svetlana Balalaeva Liba Brent
Comp. 2	Act. 2.3. Collection and analysis of first product samples.	- Samples from pilot groups collected. - Best samples sent to the US for market testing. - Specific training needs of each group identified.	- Collection and quality/market analysis of product samples.	January 2010	First batch of product samples from women's groups collected and analyzed.	Svetlana Balalaeva. Liba Brent
Comp. 2	Act. 2.4. General survey of Kyrgyz felt producers about their needs in wool quality, types, volume and prices.	- Survey of felting groups.	- Survey questionnaire.	March 2010	Information about overall demand for wool from felting groups.	Svetlana Balalaeva
Comp. 2	Act. 2.5. Supply groups with raw wool and felting and carding machines.	- Purchase of raw Merino and Tian Shian wool for groups. - Purchase and set up of felting (2000 USD) and carding machines (7000 USD).	- Purchase and distribution of raw material and technology to felting groups.	April-May 2010	Groups supplied with raw material and equipment.	Asanbek Ajibekov Svetlana Balalaeva

Grant Comp.	Activity	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 2	Act. 2.6. Training in new production technologies, design, business development and general capacity-building for felting groups.	- Trainings on production technologies, design and business development based on specific needs of individual groups.	- Trainings for felting groups.	April-September 2010	4 groups (50 women) trained.	Svetlana Balalaeva CACSA Liba Brent
Comp. 3	Act. 3.1. Test-Marketing of Products in USA and Europe. Design of Product Catalogue. Products on CACSA Website.	- Research on markets for products in the US and Europe. - Test-market products in the US.	- Market research, test-marketing.	August-December 2010	First products of pilot groups test-marketed.	Liba Brent CACSA
Comp. 4	Act. 4.1. Soc-econ survey of producers and women.	- Survey of participants	- Survey questionnaire.	March 2010	Survey data.	Jayik Isakov

4.3 Detailed Work plan for Northern Tajikistan from 1 November 2009-31 December 2010

Grant Comp.	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 1	Act. 1.1. Survey of producers describing the mohair production systems; Selection of farmers that can produce fiber for spinners	- Collect general information on Angora goat production at pilot site; - Interview 20 Angora goat producers, visually assess their flocks, assess their fleeces in terms of suitability for spinning and describe their flock structure and husbandry practices;	- Interviews with farmers, officials, NGO; - Visits farmers, interview them (use a survey questionnaire), examine their animals and fiber;	September-December 2009	Description of production systems and individual farms	Matazim Kosimov Farhod Kosimov Liba Brent
Comp. 1	Act. 1.2. Soc-econ survey of producers.	- Survey of 20 Angora goat producers in Asht to collect socio-economic data on Angora goat farmers, including data on fiber marketing.	- Survey questionnaire	October – December 2009	Description of producers' household economy and fiber sales.	Shamsidin Makhmudov Matazim Kosimov Farhod Kosimov
Comp. 1	Act. 1.3. Creation of breeding nucleuses for developing a new community breeding system	- Create 2 community breeding nucleuses: • white nucleus with approx. 35 animals from 3 farmers • black nucleus with approx. 50 animals from 4 farmers - Support 2 individual black nucleuses from two farmers (approx. 20 animals each). - Select quality breeding bucks, collect and tag best females from participating farmers, graze the females and the bucks separately during the mating season (1 month)	- Collaborate with farmers, NGO, governmental and community representatives to set up the nucleuses (select pastures, select shepherds, collect animals) - Tag, describe and weigh the animals, visually assess animals and fiber quality; - Monitor the nucleuses	October-November 2009	New community breeding system	Matazim Kosimov Farhod Kosimov Joaquín Mueller Liba Brent

Grant Comp.	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 1	Act. 1.4. Data collection on breeding nucleuses and control groups.	- Collect data on nucleus animals and on control group animals (non-nucleus animals from farmers who contributed to the nucleus) including: • visual assessment, • fiber sample, fleece weight from nucleus and selected control animals; total volume of fiber produced. • data on kid growth and survival (birth date, if available, weight at weaning and 6 months)	- Weigh animals, collect fiber samples, weigh fleeces	March-May 2010	Data on nucleuses and control groups.	Matazim Kosimov Farhod Kosimov Joaquín Mueller Liba Brent
Comp. 1	Act. 1.5. Training farmers in animal selection methods and husbandry practices, and basic accounting.	- Organize training and discussions on selection, fiber quality, breeding, feeding, animal health, mohair sorting, classing, marketing and basic accounting during visits to farms.	- Discussions and practical training.	October-December 2009 March-May 2010	20 farmers trained in improved breeding and husbandry	Matazim Kosimov Farhod Kosimov Barbara Rischkowsky Joaquín Mueller
Comp. 1	Act. 1.6. Preventive veterinary services for flocks of nucleus and control farmers.	- Treatment against internal and external parasites.	- Veterinary treatment	September-October 2009 April-May 2010	Animals of nucleus and control farmers treated	Matazim Kosimov Farhod Kosimov

Grant Comp.	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 1	Act. 1.7. Collaboration with key nucleus farmers of former project (Turgumboi, Suleimon, Suiumboi)	- Selection of bucks and females for nucleus flock; - Develop recommendations on selection, feeding and husbandry; - Establish connections with new nucleus farmers.	- Discussions, trainings, meetings	September-December 2009 March-May 2010	Support of nucleus farmers from former project maintained	Matazim Kosimov Farhod Kosimov Joaquín Mueller
Comp. 1	Act. 1.8. Develop a super nucleus under the control of the Livestock Research Institute (Matazim Kosimov)	- Selection and purchase of breeding animals for the nucleus; - Selection and registration of pastures; - Selection of shepherds, etc.	- Visit to farms, purchase of animals, registration of pastures	September 2009-September 2010	Super nucleus formed	Matazim Kosimov Farhod Kosimov Joaquín Mueller
Comp. 2	Act. 2.1. Research on the fiber processing system at the pilot site	- Collect information on women processors (approx. number of processors in the villages, income from yarn and knitting, % of overall family income, etc.)	- Interviews with women, group leaders, NGO, gov. officials;	September-November 2009 March-May 2010	Description of fiber processing system	Liba Brent
Comp. 2	Act. 2.2. Training of spinners in making luxury yarns	- Train spinners in fiber assessment, in separating kemp fibers and in spinning fine yarns.	- Training at the sites; - Selection of lead spinners.	September-November 2009 March-May 2010	40 spinners trained during first year	Liba Brent Matazim Kosimov Farhod Kosimov
Comp. 2	Act. 2.3. Training of knitters in making export products	- Select and train knitters in making products for export (shawls, sweaters…according to western designs)	- Training at the sites; - Selection of lead knitters	September-November 2009 March-May 2010	20 knitters trained during first year	Liba Brent

Grant Comp.	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 2	Act. 2.4. Training of carpet-weavers and blanket weavers for developing new types of cottage industry processing for adult mohair	- Select and train carpet weavers and blanket weavers	- Training at the sites; - Selection of lead artisans.	September-November 2009 March-May 2010	3 carpet weavers and 3 blanket weavers (depending on equipment availability)	Liba Brent Matazim Kosimov Farhod Kosimov
Comp. 3	Act. 3.1. Research on fiber marketing and on marketing yarn and products at pilot sites.	- Collect information on mohair markets in Asht and on marketing yarn and products in Asht. - Describe the existing marketing chains including linkages to the Russian market.	- Interviews with mohair traders, farmers, women and NGO. - Data collection during field trips - Possibly travel to Russia to examine the cottage industry	September-November 2009 March-May 2010	Description of current yarn and product marketing system at the sites	Liba Brent Matazim Kosimov Farhod Kosimov
Comp. 3	Act. 3.2. Test-marketing of products to initiate the development of an export market chain.	- Label the yarn, deliver yarn and product samples to the store, monitor marketing process; - Collect market feedback on yarn and products.	- Test-marketing products at the yarn store.	September 2009-March 2010	Report on test-marketing	Liba Brent
Comp. 3	Act. 3.3. Initial steps for developing a marketing system for yarn & products consisting of a (1) a local system for yarn collection, preparation and shipping, and. (2) a distribution system in the US and Europe	- Study of marketing models for handspun yarn and hand-made, fair trade fiber products. - Collaborate with women, NGO, local officials on setting up such as system at the pilot site. - Collaborate on setting up a marketing infrastructure in the US and Europe.	- Study and develop marketing models for yarn and products.	October 2009-August 2010	Report on marketing system development	Liba Brent

Grant Comp.	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
Comp. 3	Act. 3.4. Monitor progress on building a new processing and marketing chain and the development of linkages between production, processing and marketing.	- Synthesize all information on fiber production, processing and marketing. - Produce a "map" of the marketing chain with information on all components, volumes and prices.	- Data and information synthesis and analysis.	July 2010	Report on market chain	Liba Brent Matazim Kosimov Farhod Kosimov
Comp. 4	Act. 4.1. Data collection on socio-economic conditions in the pilot region	- Collect general soc-econ data about the population of villages in the pilot region (Marchamat, Oshoba, Opon, Shvar), such as income distribution, economic activities, women-led households, earning opportunities for men and women	- Interviews with gov. officials, NGO, residents, group leaders - Data collected during field trips	September-November 2009 March-May 2010	Analysis of socio-economic and gender conditions.	Liba Brent
Comp. 4	Act. 4.2. Monitor value added and income generated.	- Synthesize all information on fiber production, processing and marketing.	- Data and information synthesis and analysis.	July 2010	Report on market chain	Liba Brent Matazim Kosimov Farhod Kosimov
Comp. 5	Act. 5.1. Publications for farmers, processors and buyers.			End of first year	Information booklets, brochures	Liba Brent Matazim Kosimov Farhod Kosimov

4.4 Detailed workplan for Badakhshan/Tajikistan from 1 November 2009 – 31 December 2010

Grant Comp.	Activity Title/Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
	Selection of Pilot Sites.	- Selection of 8 villages in the Askhar Zamirov Dzhamoat		September 2009	Pilot sites selected.	
Comp. 1	Act. 1.1. Description of Goat Production by Households at the Pilot Sites.	- Collect information on goat production at pilot sites. - Interview goat producers (women) in each village, visually assess their flocks, estimate % of cashmere goat crosses in each flock, describe husbandry practices, collect fiber samples from cashmere crosses and local meat goats.	- Interviews with farmers, officials, NGO; - Visits producers, interview them, examine their animals and fiber, collect 10-15 fiber samples from each community flock (8 flocks sampled).	September-November 2009	General description of goat production systems. General description of cashmere crosses and meat goats. Baseline information collected	Fazliddin Ikromov Khonun Davlatquadamov Barbara Rischkowsky Liba Brent
Comp. 1	Act. 1.2. Selection, Tagging and Recording of Best Cashmere-type Goats. Survey of Households using a Questionnaire.	- Visit 10 or more households in each pilot village during stalled period and select and tag best cashmere-producing animals; - Interview heads of households using a survey questionnaire.	- Survey questionnaire - Tagging of animals	December 2009-February 2010	Preliminary Selection of Best Animals for Nucleuses. Detailed Information on Livelihoods of Households and Production Systems.	Khonun Davlatquadamov Fazliddin Ikromov Joaquin Mueller Barbara Rischkowsky
Comp. 1	Act. 1.3. Training in Cashmere combing. Collection of Cashmere from selected Cashmere goats and from native	- Purchase and distribute cashmere combs. - Select trainers in cashmere combing. - Organize training in pilot villages on combing goats. - Package cashmere from individual goats separately. - Include tag numbers in packages.	- Preliminary interviews. - Selection of most experienced combers from each village for training. Training in combing and fiber collection.	March-April 2010	20 women in each village trained in cashmere combing, assessment preparation and collection.	Fazliddin Ikromov Khonun Davlatqua-damov Liba Brent

	meat goats.					
Comp. 1	Act. 1.4. Data collection on collected Cashmere.	- Describe types of cashmere produced by individual goats in each household. - Take samples from tagged goats and register cashmere weights (combed and clean). - Tag additional best-performing goats. - Test selected samples at the Almaty fiber lab.	- Visual assessment and testing of cashmere produced by different goats. - Sampling and weighing of raw and clean cashmere from tagged goats. - Tagging additional animals based on performance.	March-April 2010	Description of categories of cashmere produced by cashmere crosses and native goats at pilot sites.	Khonun Davlatqua-damov Liba Brent
Comp. 1	Act. 1.5. Research on best available cashmere bucks (in Afghanistan, Pakistan, Russia…) Purchase and Import of Quality Breeding Animals.	- A source of cashmere bucks best suited for the production of cashmere for spinners will be identified. - Breeding animals will be purchased and imported.	- Research on cashmere goats in Afghanistan, Pakistan, Russia - Visit of production sites and import of breeding bucks.	November 2009-August 2010	Breeding bucks imported to the sites.	Fazliddin Ikromov Khonun Davlatqua-damov Joaquin Muller Liba Brent

Comp. 1	Act. 1.6. Creation of Breeding Nucleuses.	- Create 4 community breeding nucleuses in villages	- Collaborate with producers and governmental and community representatives to set up the nucleuses (select pastures, pens and shepherds; select best performing females for nucleuses.)	August-September 2010	New Community Breeding System Established.	Fazliddin Ikromov Khonun Davlatquadamov Joaquin Muller Liba Brent
Comp. 1	Act. 1.7. Data collection on nucleuses and monitoring.	- Collect best (tagged) females from producers, graze the females and the bucks separately during the mating season (1.5 months); - Collect data on all nucleus animals; - Collect data on control group animals (non-nucleus animals from farmers who contributed to the nucleus).	- Tag, describe and weigh the animals; - Visually assess animals and fiber quality; - Collect fiber samples - Monitor the nucleuses	September-November 2010	Data on Nucleuses and Control Groups.	Fazliddin Ikromov Khonun Davlatquadamov Joaquin Muller Liba Brent
Comp. 2	Act. 2.1. Training in spinning yarn according to market standard. Identification of cashmere best suitable for spinning. Purchase of spinning wheel models for local	- Produce yarn and knit swatches from different types of cashmere and assess cashmere performance during processing. - Training in spinning organized in all pilot villages. - New models of spinning wheels delivered.	- Trainings in spinning and assessment of cashmere performance during processing into yarn and product samples. - Record results for tagged goats.	April-May 2010	Yarn samples from different types of cashmere at pilot sites. Identification of best types of cashmere/goats for spinning. Identification of best spinners.	Liba Brent Khonun Davlatquadamov

	production.					
Comp. 3	Act. 3.1. Assessment of Yarn Sample on US Market.	- Test yarn samples with professional knitters in the USA.	- Testing yarn by knitting swatches	June-July 2010	Liba Brent	
Comp. 4	Act. 4.1. Research on Livelihoods of Households at Pilot Sites including Cashmere Goat Production.	- Data collection on population, income distribution, sources of livelihood, earning opportunities for men and women, production of cashmere goats and cashmere marketing…	- Interviews with gov. officials, international organizations, households, women's group leaders.	September - November 2009	General data on livelihoods at pilot sites including cashmere goat production.	Fazliddin Ikromov Khonun Davlatquadamov Liba Brent
Comp. 5	Act. 5.1. Data analysis and preparation of report on all components. Technical publications for farmers and women.	- Collection and analysis of data on all activities.	- Data organization and analysis. Assessment of results on nucleus creation.	November 2010	First Technical Project Report	Fazliddin Ikromov Khonun Davlatquadamov Joaquin Muller Liba Brent