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 January - 31 December 2011

ICARDA, NARS of Kyrgyzstan, Tajikistan and Iran and CACSA

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1 Summary of major activities planned for 2011

The focus and related project activities differ between the project sites according to the production systems, availability of quality fiber, the development status of the women processor groups and capacity of the partners.

In Naryn province in Kyrgyzstan the main focus in 2011 will be on further developing the skills of the four women felter groups with support from CACSA (accordingly the budget allocation to CACSA has been increased), and assuring their access to required good quality fiber, equipment and knowledge (component 2). To ensure successful international marketing their skills in design of higher quality handicrafts will be enhanced which will be one of the focal areas in training. Test marketing in the US will be expanded (component 3). The survey conducted by CACSA assessing the fiber demands of felting groups showed that Merino wool is the most adequate fiber for high quality felt products. The Merino wool will be supplied through directly linking the women to the identified best Merino farmers. However, for certain products semi-fine wool can be used which is important as small households including some of the women felters mainly keep semi-fine wool sheep like Tian Shian. Thus, the livestock scientists will focus on the Merino 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. At the same time they will work with selected smallholder sheep farmers on supplying high quality semi-fine wool and on improving income from sheep production in general (component 1). A study of the employment and social status of women living in high mountain villages is planned to provide baseline data for assessing the impact of the felting activities (component 4).

In Northern Tajikistan a major activity will be the full implementation of the breeding program including AI with Texas Angora bucks in the white nucleus. As the semen collection in Texas took much longer than anticipated and some last minute problems with the health certificates required for importing semen arose, the AI program could not be started in the mating season 2010 as planned. However, the semen is ready to be shipped and the use of frozen semen will allow to repeat the AI program for several years. Another major effort will be on fully organizing the market chain for mohair products including high quality yarns and knitwear and expanding the volume to be sent to US and Europe. To increase the market opportunities and to overcome the current bottleneck in fine fiber supply the new product lines for using coarser Mohair fibers will be further developed, e.g. weaving carpets. Specific training is being arranged with the support of CACSA. A master study will analyze the economics of Angora goat production (component 4).

In Badakhshan in Tajikistan, a major bottleneck is the availability of homogenous cashmere fiber as the goat population is of very mixed origin. Thus, a major task is to improve the genetics of the local goat population. The offspring from the Altay bucks imported from Russia will be identified and their performance recorded in spring. As the Altay bucks arrived relatively late, the number of offspring is expected to be relatively small in 2011. It is planned to take full advantage of the Altay bucks in the mating season 2011 (component 1). Therefore, the cashmere/cashgora collection campaign in spring 2011 will be used to identify the best females for priority mating to the Altay bucks in September/October 2011 besides collecting best quality raw material (component 1 and 2). Further important activities are training of the newly formed village women processor groups and providing them with the required raw material (fiber and dyes) and equipment (combs and spinning wheels). To obtain quality material for processing, the best cashgora collected will be sent for dehairing to Afghanistan. The training will focus on high quality yarn and knitwear production for the international market (component 2) so that test marketing can be started as quickly as possible (component 3).

In Kerman province in Iran the emphasis of the project activities in 2011 will be on cashmere producers (component 1), in particular on improving cashmere quality through breeding and harvesting techniques in the nomad flocks. Fiber fineness and cashmere harvesting techniques have

not been fully considered in the governmental breeding station and not at all in the nomad flocks. To start a breeding program for fine fiber, eight nomad flocks from the baseline study have been selected. The best bucks with regard to fiber quality, yield and growth were selected from the flocks and mated with the best females in within flock-nuclei. The breeding plan and mating scheme will be refined based on the experience in the last year. Also improved cashmere harvesting methods will be introduced. At present cashmere is harvested by shearing the full fleece as quality fiber is not being paid for. The main marketing channel is through middlemen that are paying relatively low prices to the producers. In order to make fine fiber production economically attractive, new market channels for large quantities of quality cashmere have to be explored and established in addition to the quality fiber to be utilized for processing to yarns and knitwear (project component 3). There is an organized nomad women group in Baft working on handicrafts from wool but the skills of the women are limited which was apparent from some test yarns and knitwear. Thus, a solution has to be found for organizing backstopping of fiber processing. Currently the ICARDA office is making a new attempt to allow Liba Brent to visit the project site. If this fails, an alternative plan for capacity building and formation of women groups will be developed.

An important point related to component 3 on sustainable market chains is how to further support the linkages to international markets with additional expertise, in particular on professional design. Because of the political unrest the first consultancy supported by IFAD did not include Kyrgyzstan as originally planned, the workplan now foresees to provide training on professional design through local expertise. The need for an additional consultancy on marketing will be discussed with IFAD.

The main activities related to component 5 will include producing sample product catalogues for the felting groups in Kyrgyzstan and further developing the Mohair Magic label. The earlier version of the marketing website (adventureyarns) will be set up professionally to be used as information and communication platform for interested customers and the public including project members.

2 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, expected outputs 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.

2.1 Detailed workplan for Kyrgyzstan from 1 January-31 December 2011

Grant Comp	Type of activity/ Objective	Description of Activity	Methods	Time frame	Outputs	Delivered by
C1	Identification of the contact farmers that will become suppliers of the fine and cross-bred wool	- Examination of sheep flock - Identification of sheep breed structure - Determination of the breeding direction to improve wool quality - Procurement of rams	- marking of animals; - visual inspection of sheep; - procurement of rams; - survey of farmers	Dec. 2010 Jan.-March	Established contacts with wool producers, information on sheep breeds, potential for wool supply	Asanbek Ajibekov
C1	Classification of sheep	- Assessment of sheep according to production indicators	- assessment of sheep using zootechnical methods	April-June	Determination of ways for improvement of wool quality	Asanbek Ajibekov
C1	Study of wool quality	- Wool sorting - Wool sampling - Wool quality analysis using samples	- assessment of wool	May-June	Information on wool quality	Asanbek Ajibekov
C1	Mating of ewes with procured rams	- Organization of mating	- free mating	Oct.-Nov.	Work on improvement of wool quality	Asanbek Ajibekov
C1	Training of farmers on breeding	- Practical recommendations and trainings on sheep breeding	- training	April-June	Mastering of practical breeding skills on wool quality improvement	Asanbek Ajibekov
C2	Provision of groups with raw wool, materials and equipment	- Procurement of fine and cross-bred raw wool for the groups - Support for the contact farmers by preventive agents against mange - Procurement of desks for wool product making	- procurement and distribution of wool and equipment among groups; - procurement and distribution of preventive agents to the contact farmers; - ordering production of	throughout the year	Provision of groups with raw wool materials and equipment Provision of farmers with the preventive agents	Asanbek Ajibekov/ Svetlana Balalaeva

Grant Comp	Type of activity/ Objective	Description of Activity	Methods	Time frame	Outputs	Delivered by
		- Support of women's groups with materials	desks; - procurement and distribution of materials for the groups			
C2	Increasing of competitiveness of pilot groups' products	- Involving of the leading designers to elaborate product samples for the pilot groups; - Trainings on product quality and requirements for carrying out the customers' orders; - Competition for the best products - Production of samples among artisans; - Probations in ateliers of the leading designers.	- discussion with designers and marketing specialists of the modern trends for felt products; - selection of designers for working on samples; - training of artisans on control of product quality and meeting the export requirements; - elaboration of conditions and procedures of the competition; - evaluation of the submitted samples; - consultations, practical work in ateliers of designers in Bishkek	Jan.-Feb. March-April April-May May	Competitive product samples are created and introduced into production Participants of the pilot groups have learned how to work on orders meeting market requirements to design and quality	Liba Brent/ Svetlana Balalaeva
C2	Trainings on design	- Trainings on production technologies, design considering concrete needs of each group.	- trainings for 4 groups of felters in Naryn province	April-Sept.	4 trained groups (55 women).	Svetlana Balalaeva /Liba Brent
C3	Marketing support	- Sending of the best samples to the US market - Organization of participation in the Oymo International Festival	- analysis and selection of samples for sending to the US; - selection of participants; - exchange of experience, participation in master classes, discussions in	April-May July-Aug.	Portfolio of orders tested Practical marketing	Liba Brent/ Svetlana Balalaeva

Grant Comp	Type of activity/ Objective	Description of Activity	Methods	Time frame	Outputs	Delivered by
			terms of the Festival; - accounting of pilot groups' product sales at fare of handicrafts in terms of the Festival			
C4	Socioeconomic research of women	- Employment analysis of women living in high mountain villages - Analysis of the social status of women	- collection and analysis of data	Jan.-Feb.	Survey data	Dzhaik Isakov
C4	Profitability analysis of activity of women in pilot groups	- Monitoring the value added for products through analysis of production costs and local market prices - Comparative analysis of income generation by women involved in the project and their neighbors	- economic methods	March-Sept.	Information on income of felters	Dzhaik Isakov
C3&5	Publications	- Elaboration of sample product catalogues	- Selection of photo-material - Layout and printing of the catalogue			

2.2 Detailed Work plan for Northern Tajikistan from 1 January - 31 December 2011

Grant Comp	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
C1	Monitoring of conditions of white & black nuclei goats.	- Monitoring of animal husbandry, feeding, and heath of goats in nucleus groups	- Visual assessment of animals, specifically weight and health of females and recommendations of improvements where necessary.	Jan.-March Dec. 2011	Improvement in the condition of females	Matazim Kosimov/ Farhod Kosimov/ Ismoil Chaitov
C1	Visual assessment and selection of nuclei females (white & black nuclei).	- Visual assessment and selection of females for artificial insemination	- Visual assessment of fiber quality, fleece weight.	March-April	Data on fiber quality and quantity.	Matazim Kosimov/ Farhod Kosimov/ Ismoil Chaitov
C1	Survey of kids	- Collection of data on kids in black and white nucleus and control groups	- Record birth date and parent info; weigh and tattoo kids (1-6 months).	March-May Sept.	Data on nuclei kids.	Matazim Kosimov/ F. Kosimov
C1	Veterinary assistance	- Veterinary support of nucleus groups, e.g. deworming	- Medicine for goats	March-May Sept.-Oct.	Improved animal health	Matazim Kosimov/ Farhod Kosimov
C1	Storing Frozen Semen	- Storing semen in liquid nitrogen		March-Dec.		Farhod Kosimov
C1	Artificial insemination with US semen	- Selection of farmer, selection of females - Development of scheme of crossbreeding - Preparation of equipment and training of staff - Synchronization of females and artificial insemination	- Synchronization and standard method for AI	Sept.- Nov.	300 females inseminated	Matazim Kosimov/ Farhod Kosimov/ Joaquin Mueller/ Sultan Suleimanov

Grant Comp	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
C1	Assessment, selection and culling of goats in nucleus flocks	- Visual assessment of nucleus flocks and control groups, selective weighing of animals, culling, castration	- Visual assessment of females and kids, selection of breeding animals, castration, culling	March-April Sept.-Oct.	Increase in productivity and improvements in genetics of nucleus animals	Matazim Kosimov/ Farhod Kosimov
C1	Training for farmers	- Training on selection of breeding goats and goats to be culled	- Training how to evaluate and select breeding goats based on overall productivity and fiber quality	March-April Sept.-Oct.	10 farmers trained	Matazim Kosimov/ Farhod Kosimov
C1	Distribution of feed and minerals	- Distribution of feed (500 g per doe and day) and minerals (total 500 kg) to 250 does in nuclei groups (Feed: 250 x 500g x 90 days x 1.5 somoni; minerals: 500 kg x 1 somoni)	- Purchase and distribute feed and minerals to pregnant nuclei females.	Nov.-Dec.	Improvement in the condition of females.	Matazim Kosimov/ Farhod Kosimov/ Ismoil Chaitov
C2&3	Purchase of kid mohair.	- Selection, sorting and purchase of 400 kg for spinning (US$3,000 for material; US$1,000 for transport; US$ 400 for temporary labor)	- Cooperate with farmers mohair buyer on selection and purchase of quality kid mohair.	March-May	400 kg kid mohair	Matazim Kosimov/ Farhod Kosimov/ Liba Brent Tuiguloi Saidova
C2	Mohair Dehairing.	- Organize a group of women to dehair mohair (50 somoni x kg of clean fiber)	- Hire a group of women to dehair mohair.	March-May	100 kg of clean mohair	Matazim Kosimov/ Farhod Kosimov/ Liba Brent
C2	Training in weaving and carpet-making	- Production of knitted and woven mohair products and carpets	- Trainers invited from Kyrgyzstan	April	10 women trained, samples of products produced	Matazim Kosimov/ F. Kosimov/ Liba Brent

Grant Comp	Activity title/ Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
C2&3	Purchase of yarn	- Purchase of 100kg of yarn (100 somoni/kg)	- Yarn purchase	April-Sept.	100 kg of yarn	Matazim Kosimov/ Farhod Kosimov/ Liba Brent
C2	Dying of yarn	- Dying of yarn	- Dying yarn with natural and chemical dyes	April-Sept.	100 kg of yarn dyed	Matazim Kosimov/ Farhod Kosimov/ Liba Brent
C2&3	Shipping yarn	- Shipping yarn	- Shipping yarn via DHL	Sept.-Oct.	100 kg of yarn shipped to the USA	Matazim Kosimov/ Farhod Kosimov/ Liba Brent
C4	Economic effectiveness of Angora goat production in Tajikistan	- Master study in collaboration with University of Panonia, Hungary, FVM-FAO Scholarship program		Jan.-Dec.	Master Thesis	Alisher Kosimov

2.3 Detailed Workplan for Badakhshan/Tajikistan from 1 January - 31 December 2011

Grant Comp	Activity Title/Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
C1	Purchase and distribution of feed, monitoring of bucks and does	- Purchase concentrates for bucks & farmers' flock (8 flocks x 15 goats = 120 heads for 90 days = about 10 tons for 1.5 somoni/kg; US $3,330); farmers will provide/buy hay - Emergency supply of hay (3 tons x 1 somoni = 3,000 somoni =US$ 670) - Feed budget for Dec. 2011 (US$1,000 feed; US$ 100 salt)	- Distribute feed during the first week of each month - Conduct monitoring of condition of animals	Jan.-March	Feed delivered to farmers Bucks in good condition	Fazliddin Ikromov/ Khurshed Davlatov/ Khonun Davlatquadamov
C1	Survey and evaluation of kids	- Tag, weigh and evaluate nuclei kid and females and control animals	- Evaluate and tag kids and females - Collect data on weight and fiber quality of females	March-April	Recorded performance of kids, females and bucks	Khurshed Davlatov/ Khonun Davlatquadamov/ Joaquin Mueller
C1	Veterinary services	- Castration of males (200 heads x 5 somoni) - Vaccination - Deworming	- Organize castration and veterinary services for village flocks	April-May Sep.-Oct.		K. Davlatov/ Khonun Davlatquadamov
C1	Nucleus formation and selected mating	- Selection of females and formation of 8 nucleuses (40 females per one male; about 3200 heads in 8 nucleuses) - Nucleus grazing for 1.5 months (hire shepherd for $100)	- Tag, describe and weigh the animals - Visually assess animals and fiber quality - Collect fiber samples. - Monitor the nucleuses	Sep.-Oct.	Data on Nucleuses and Control Groups	Fazliddin Ikromov/ Khonun Davlatquadamov/ Khurshed Davlatov/ Liba Brent

Grant Comp	Activity Title/Objective	Description of Activity	Methods	Time Frame	Output	Delivered by
C1	Farmers' training	- Goat and range management	- Organize trainings for goat producers	Oct.-Nov.		
C2	Production, Purchase and Distribution of Combs for combing goats	- Order and distribute 350 combs to women in 9 villages (1 comb = 22 somoni = US$ 5)	- Distribute combs in villages. - Comb goats separately Monitor combing	Jan.-Feb.	Combs delivered to women	Khonun Davlatquadamov
C2	Purchase, sort and evaluate combed fiber	- Purchase fiber from women - Package fiber from individual goats separately and include tag numbers in packages. - Expected amount of fiber combed (150 kg x 50 somoni/kg = US$ 1,700)	- Sort fiber into categories. - Record data on fiber collected	Feb.-April	Cashgora fiber purchased and evaluated	Khonun Davlatquadamov/ Liba Brent
C2	Purchase of spinning wheels	- 5 wheels each for 9 villages (US$70 per wheel)	- Import and distribute spinning wheels from Afghanistan.	March-April		Liba Brent/ Khonun Davlatquadamov
C2	Fiber dehairing	- Dehairing (150 kg x US$ 3 = US$ 450 plus US$ 50 for transport)	- Arrange fiber dehairing in Afghanistan	May-July		Liba Brent/ Khonun Davlatquadamov
C2	Trainings for fiber processors	- Knitting - Dying with natural dyes (US$300 for dyes)	- Organize trainings for fiber processors	Oct.-Nov.		Liba Brent
C3	Yarn purchase	- Purchase of 100 kg of cashgora yarn and samples	- Purchase yarn and products for test-marketing	Sep.-Oct.		Liba Brent

2.4 Detailed Workplan for Iran from 1 January - 31 December 2011

Grant Comp	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
C1	Establish database on fiber quality at the pilot site	- Statistical analysis of data received from Almaty Lab. for 790 cashmere samples taken in 2010 - Repeat baseline sampling on same animals in 8 flocks as in 2010 but add 4 samples of each sex for the "young" age class (total 256 samples).	- Statistical Analysis - In order to test year effect in baseline study. Also useful for repeatability analyses.	Jan. 2011 May 2011 (after return from winter pastures).	Variation of cashmere quality in the base population established Baseline information for establishing breeding progress Publications	Hamidreza Ansari-Renani Joaquin Mueller
C1	Comparison of fiber quality of females selected for the nucleus and in the base population of the flocks	- In 8 breeding flocks make sure you have at least samples from 12 randomly selected adult nucleus and 12 randomly selected adult base females, including those already tagged for baseline sampling. Total = 12x8x2 = 192 samples.	- Fiber sample collection , transport and analysis	May 2011 (after return from winter pastures).	Evaluation of efficiency of visual selection of females (comparison of nucleus with base females).	Hamidreza Ansari-Renani
C1	Evaluate the fiber quality of current breeding bucks and candidate bucks in the 8 breeding flocks	- Collect fleece sample from the 2 adult nucleus bucks and up to 8 other adult bucks available in each flock. (total = 10x8 samples.) - Collect fleece samples from 10 young (about 1 year old in December) bucks (total = 10x8 samples).	- Fiber sampling and analyses using standard methods - Detect new candidates for replacing adult bucks.	Dec 2010-Jan. 2011 on winter pastures	Evaluate objectively adult bucks available in flock. Detect new candidates for replacing adult bucks.	Hamidreza Ansari-Renani

Grant Comp	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
C1	Identification and performance recording and of nucleus offspring in the 8 breeding flocks	- Ear tagging male and female progeny of nucleus animals; recording birth dates. - Recording of weight of nucleus male and female progeny at 4 months age	- Standard record keeping (farmers need tags, appliers, scales (spring balances) and a list of dams in the nucleus).	January 2011 on winter pastures May 2011 (after returning from winter pastures)	Pedigree of progeny in nucleus for progeny testing and further selection. Systematic performance recording and selection of replacements	Nucleus farmers Hamidreza Ansari-Renani Nucleus farmers
C1&2	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. - Distribution of combs and training in combing and fiber collection.	Jan 2011 March 2011	Participating households trained in cashmere combing, assessment preparation and collection.	Hamidreza Ansari-Renani
C1&2	Determine best combs for cashmere harvesting	- Select two groups of female goats and use two different combs and measure cashmere yield, diameter and length -	- Identify the usefulness of combs	March-April 2011		Hamidreza Ansari-Renani
C1	Implement mating scheme (best bucks with best females)	- Prepare selective mating in nucleus flocks	- Arrange separation of flock (separate herding or fencing)	May 2011		Hamidreza Ansari-Renani Joaquin Mueller

Grant Comp	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
C2	Initial discussions with women beneficiaries. Instructions regarding sample production.	- Selection of interested women/ women associations, e.g. in vicinity of cashmere producers - 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. - Organize dehairing	March-April 2011	Groups informed about project objectives. Production of first samples organized.	Liba Brent Nomad organization Baft Extension Service
C2	Training in spinning yarn according to market standard. Identification of cashmere best suitable for spinning. Purchase of spinning wheel models for local production.	- 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.	March-April 2011	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
C2	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 2011	First batch of product samples from women's groups collected and analyzed.	Liba Brent Nomad organization Baft Extension Service
C3	Assessment of Yarn Sample on US Market.	- Test yarn samples with professional knitters in the USA	- Testing yarn by knitting swatches	June-September 2011		Liba Brent

Grant Comp	Activity	Description of Activity	Methods	Time Frame	Outputs	Delivered by
C3	Marketing study	- Description of current cashmere marketing channels	- Survey questionnaire - Informal interviews	April/May 2011	Interviews. Survey data.	Nariman Nishanov, Barbara Rischkowsky Hamidreza Ansari-Renani
	Data analysis and preparation of report on all components.	- Collection and analysis of data on all activities.	Data organization and analysis, e.g. assessment of results on nucleus creation.	January 2011 July 2011	6-month progress reports	Hamidreza Ansari-Renani