

EXTERNAL EVALUATION PANEL REPORT 2006

Developing Institutions and Capacity for Sheep and Fiber Marketing in Central Asia (WOOL) Project

20th – 25th May 2006

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ACKNOWLEDGEMENTS

This External Evaluation Panel report was possible only because of the hard work and generosity of many other people, particularly our hosts and assistants in Central Asia. The team would like to thank the staff of the Management Entity of the Global Livestock Collaborative Research Support Program based at University of California, Davis, for providing a wealth of background information and the organizational and logistical support that started the review off on the right track. In particular, the team thanks Susan Johnson, Associate Director of the GL-CRSP, who had the difficult task of coordinating the review and arrangements for the team, and who traveled with us, keeping us on track and on time.

The team also recognizes with thanks the WOOL project Principal Investigator, Prof. Robert Stobart of the University of Wyoming, and the researchers of the WOOL project components, Liba Brent of the University of Wisconsin and Carol Kerven of the Macaulay Institute. All of the WOOL project participants were eager to share the results of their work with us and patient with our many questions.

Special thanks are due to the many people of Kazakhstan and Kyrgyzstan with whom we met. In Kazakhstan, we were fortunate to be able to meet with Murat Otyunshiyev, Director and Asel Imasheva, Head of Fiber Laboratory of the ST Group who came in on a Sunday to meet with the EEP. Also giving up their Sunday, Bishtai Seidaliev, Director of the Mynbaevo Institute of Sheep and Goat Breeding and the other members of the Institute, including Serik Aryngaziev, Deputy Director, Berik Aryngaziev, Head of Wool Lab, and Mukhan Nuraliev, Head of Goat Department, and Timirkhan Bennebaev, Scientist. In Kyrgyzstan, we had the opportunity to meet Baitemirov Baialin Janishevich, the Deputy Minister of Agriculture and Water Resources, as well as many members of the Krygyz Sheep Breeding Association, including Akylbek Rakaev, General Manager, and members of the Board of Directors. All, including those too numerous to name here, were extremely generous with their time and their knowledge, and provided us not only with an understanding of the project activities, but also with a memorable introduction to the food and culture of the region.

We would have been lost without the assistance of Aidos Smailov and Nurgul Zhumasheva in Kazakhstan and Akylbek Rakaev in Kyrgyzstan, interpreters extraordinaire, who translated our questions and responses with unfailing grace and good humor, whether on the floor of a herders' *yrta* or the board room of an international research institute.

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THE WOOL PROJECT

The “Developing Institutions and Capacity for Sheep and Fiber Marketing in Central Asia” (WOOL) project has been carrying out a range of activities on wool and cashmere production, processing, and marketing in both Kazakhstan and Kyrgyzstan. The project began in 2003 following the end of three small grants in the same region that were funded by the Global Livestock Collaborative Research Support Program (GL-CRSP) during 2002-3. According to the GL-CRSP procedures, the project is eligible for review in its second or third year of operation, and depending on the results of the review, is either given the opportunity to submit a proposal for an additional two years of funding, often with modifications, or it is closed at the end of its original three-year grant period.

In this report, the External Evaluation Panel (EEP) recommends that the WOOL project be closed on its originally scheduled date of September 30, 2006, and that a new competition be held for additional research on a limited and focused set of topics that can be completed within the next two years in the same region. This recommendation is offered despite positive accomplishments by the individual researchers and by the Host Country researchers, particularly in an environment which is so new to market-led development practices. According to the GL-CRSP evaluation procedures, the EEP makes a recommendation, but the ultimate decision is the responsibility of the Management Entity.

In making this decision, the EEP took into account not only the successes of the research activities, but also, as directed in the Scope of Work (Annex 2), issues relating to policy relevance and project management, among others. It is the position of the EEP that the management issues and team dynamics burdened the research program with difficulties that could not be overcome in the short period remaining. These issues were interfering with the progress and cross-fertilization across the research components. It is hoped that greater impact will be achieved by holding a new competition for a differently focused program and reconstituted teams. As the EEP envisioned the process, the researchers currently involved in the WOOL program would be eligible to compete under the new grant with equal but not preferential treatment in the evaluation.

Specifically, the various components of the project have succeeded in, among other tasks:

- establishing excellent working relationships with organizations in both the private and public sectors in Kazakhstan and Kyrgyzstan;
- creating a baseline of data on wool and cashmere fiber quality in Kazakhstan and Kyrgyzstan;
- providing numerous farmer and professional training opportunities, including study tours and training workshops in-country and overseas;
- distributing market information publications;
- initiating producers’ groups, including for handicraft production;
- completing household surveys and analysis of the results;
- holding shearing schools;
- modeling fiber production and livestock sales.

The team makes its recommendation to close this project and to have an open competition for additional research in the region because:

- management issues and team interactions became more difficult as time progressed and now affect the ability of the project researchers to expand together into needed new areas of work;
- the current project's tasks have been essentially completed and have established the necessary baseline information;
- the project has not been able to add expertise and focus on macro-economic and policy analysis of the two fiber industries;
- the student training component expected in projects supported by the CRSP has been weak;
- there has been insufficient attention in the current project to the market analysis needed to achieve a more beneficial market outcome for herders/producers; and,
- extension-related activities have been over-emphasized in relation to research for a CRSP project.

After completing a first draft of the EEP report, the researchers had an opportunity to respond with their comments and identification of errors.¹ The material provided was helpful and, in some cases, clearer and more persuasive than the explanations provided in the project literature. In addition, some supplementary materials were supplied by the ME. In this final report, the EEP has reviewed all of the comments and the supplementary material that was provided and the team leader had additional conversations to clarify some points. However, it is unlikely that the revisions made here will fully satisfy the researchers or the Management Entity, because, as in any evaluation situation, the project and the evaluators have different goals and different perspectives, and each reader may see a different emphasis than what was intended, as words are often imprecise and interpretations differ.

BACKGROUND

Three small grants were funded by the GL-CRSP to initiate research on the production, processing, and marketing of fiber and other livestock products in Kazakhstan and Kyrgyzstan in 2002-2003. The three grants were:

- *Linking Sheep Producers and Markets* under the direction of Malcolm Childress at the University of Wisconsin. Robert Stobart of the University of Wyoming was a researcher on this activity. Research under the grant was expected to compare the production economics and marketing environment for different breeds of sheep raised to produce fine wool, meat, or both meat and wool. An analysis was planned on the marketing opportunities for each of these three production strategies. Extension materials for local producer groups were going to be prepared about the research results.
- *Feasibility of Market Development and Support Services for Livestock Products in Kazakhstan and Kyrgyzstan* under the direction of Kathleen Galvin at Colorado State University. Carol Kerven, an independent researcher associated with the Macaulay Institute in Scotland, was a researcher on this activity. Research under the grant was intended to investigate the developing markets for fine wool and cashmere in both Kazakhstan and Kyrgyzstan. The goals for the grant included identifying ways to

¹ The EEP team received comments from Stobart, Kerven, and Brent.

- improve marketing from the perspective of producers, traders, domestic processors, and researchers.
- *Research on Wool Production and Marketing in Kazakhstan and Kyrgyzstan* under the direction of David Thomas with Liba Brent as another researcher on the study, both of the University of Wisconsin. Research under the grant was to support a study of the marketing chain for wool in Kazakhstan and Kyrgyzstan and to propose methods, technologies, and policies to improve production and marketing of wool.

At the conclusion of the pilot period, the GL-CRSP ME gave the researchers involved in these projects the opportunity to work together to prepare a proposal for a larger grant. The Program Director felt there were synergies among the small grants that could be captured by a larger activity for potentially greater impact. The GL-CRSP regular projects are funded at the \$750K level for three years. The GL-CRSP does not provide long-term small grants. The options were either to work together or to decline to continue.² Under the leadership of Malcolm Childress at the University of Wisconsin, a proposal revising and combining these topics into a single project dated November 2002 was submitted to the GL-CRSP for funding, but it was initially rejected. Suggestions for revisions included, among other points, adding a market specialist, increasing attention to the policy environment and the gender implications of market operations, including training, and developing a vision for scaling-up local achievements to achieve regional impact. The proposal was revised further and resubmitted in March 2003.

The revised project proposal,³ “Developing Institutions and Capacity for Sheep and Fiber Marketing in Central Asia,” was accepted in 2003. Even before signing the subgrant, however, the project experienced management difficulties and funding complications. Childress left the University of Wisconsin to take a position at the World Bank and as a result was unable to continue as Lead Principal Investigator for the project.⁴ A new lead Principal Investigator (PI), Robert Stobart of the University of Wyoming, was chosen by the project team. Stobart had worked as a researcher under Childress’ small grant in Kyrgyzstan. Stobart inherited a nearly final work plan for Year One but with a team that lacked expertise in key areas of its implementation, particularly the marketing and economic competitiveness topics that were to have been under Childress’ purview.

Over the next two years, the project lost additional researchers and some expected supplementary funding, and reduced the number of countries in which it planned to work (e.g., Tajikistan). Kathleen Galvin, Colorado State University (CSU), and others at CSU withdrew after the second year of the project. Dave Thomas, who was initially slated to take

² Several researchers indicated that they felt pressure to develop a joint proposal, despite a lack of experience in working together and some question as to how the collaboration would be enacted.

³ Research on meat marketing identified in the first proposal was deemphasized in the revised proposal, although it was apparently to be addressed as part of the analysis of multiple pathways of competitiveness: “Within each of our sites, we will analyze the characteristics of a range of production units and develop a stratification system based on breed characteristics of sheep and goat produced in the region, ecological conditions, producers’ resource endowments, production technologies, proximity to main markets and marketing channels....For example we will evaluate the options of specializing into fiber, dual purpose or meat production system for sheep and goat producers in various zones, estimate the relative profitability of these systems for different strata of producers, and propose investments in production and marketing to increase profitability” (in the revised proposal, Childress et al 2003: 4).

⁴ In the Annual Reports of 2003-4 and 2004-5, it states, that Childress will “provide consultation and back-up on project management and specific activities.”

a larger role, reduced his involvement to a more advisory position. Shifts also occurred among the Host Country (HC) personnel. In 2005-6, responding to these changes, some research areas were deemphasized or stopped, such as Galvin's planned work on fibers of other animals such as camel and yak.

Now in its third year, the project is carrying on as three separate components primarily engaged in descriptive research on the fiber processing chain, following relatively narrow lines of inquiry, organized by type of fiber and country location: wool and cashmere in Kazakhstan and in Kyrgyzstan. Each of these three components is discussed below as a relatively independent activity, as that is how they have *de facto* been managed, despite overlap among the institutions and personnel. The wool fiber investigations are mostly carried out by Stobart in Kyrgyzstan and Brent in Kazakhstan. Work on cashmere production, processing, and marketing is carried out mostly by Kerven and primarily in Kazakhstan, though some testing has also been conducted in Kyrgyzstan.

Each of the activity leaders (Stobart, Brent, and Kerven) has developed excellent working relationships with their HC colleagues. Institutional support, in the form of access to scientists and laboratory facilities, has been enthusiastically and generously supplied by the host country counterparts.

Overall, although the activities that have been completed are consistent with those laid out in the work plans and many activities have been completed in a satisfactory manner, the project as a whole has not maintained the broader vision of the revised, accepted proposal, and several key components of the revised proposal have been abandoned or repeatedly postponed. This has occurred despite efforts by the External Program Administrative Council (EPAC) and the Management Entity (ME) to encourage their integration, particularly the inclusion of graduate degree training, an analysis of "multiple pathways of competitiveness" in the two countries, and a component on policy analysis; one of these efforts included the offer of an additional \$50,000 to support an economic agriculturalist in 2005-2006, even though the inclusion of such a skill was already an important part of the revised proposal. Furthermore, the project increasingly suffered from internal tensions over research and funding priorities, leading to difficulties in establishing and maintaining an effective management structure. The combination of these problems has led the EEP to recommend that the WOOL project be allowed to end on September 30, 2006, without an opportunity for submitting a proposal for a two-year extension.

ROLE OF EXTERNAL EVALUATION PANEL (EEP)

To achieve a dynamic, effective, and responsive project, the Global Livestock CRSP (GL-CRSP) incorporates a results-driven framework, the keystone of which is a continuous cycle of evaluation. Project progress is monitored on an ongoing basis, and budget allocation decisions are based on performance. While the nature of the evaluation process varies from project to project, the performance of each GL-CRSP project is assessed as part of routine management; continuation of the project is contingent on each research team's ability to deliver results. Projects are reviewed in the second or third year of activity.

External evaluations are carried out by independent reviewers who can offer a critical and impartial view about the quality and progress of the research projects. They provide evidence for objective decision-making about project components and can help to address difficult institutional issues or biases. To carry out these evaluations, an External Evaluation Panel (EEP) is convened.

Members of the evaluation teams are senior scientists recognized by their peers and selected for their in-depth knowledge of a research discipline relevant to the CRSP and experience in research and/or research administration. At the Global Livestock CRSP, expertise is drawn from the External Program Administrative Council (EPAC) and the Pool for External Evaluation of Research, a pool of accomplished research scientists and faculty members with expertise in disciplines complimentary to the EPAC. Candidates for the EEP are nominated by the Management Entity (ME), in consultation with the EPAC and are subject to approval by USAID.

According to a Scope of Work (SOW) developed by the ME in consultation with the EPAC and USAID, each external evaluation will, as needed:

- Assess whether the research project is well-balanced, whether the different activities are progressing adequately, and whether they are relevant and helping to achieve the larger project goals;
- Identify inadequate performances;
- Gauge effective balance between research and training for development of institutional research capability;
- Assess the balance of domestic versus overseas research in terms of effectiveness of solving constraints in developing countries;
- Evaluate the performance and the productivity of each institution on each project;
- Assess the appropriateness of projected resource allocations; and,
- Evaluate the dissemination of research results, and the effectiveness of utilization (a measure of the appropriateness of the research).

Review Schedule and Limitations

The ME – in consultation with its own advisory groups and collaborating institutions, including the WOOL Project PI, as well as USAID and the evaluation team – developed an appropriate work schedule for the external review of the WOOL project. The review includes site visits and meetings with project participants and collaborators. The WOOL review did not include visits to the US collaborators, although the Lead US Principal Investigator, Stobart, as well as US-based researcher Brent and British-based researcher Kerven, did participate in the review in Kazakhstan and Kyrgyzstan.

It is however a limitation of the review that the team was not able to speak directly with some of the other US-based investigators, particularly the team from Colorado State University (CSU) that had withdrawn from the project after the second year. Although the documentation provided described the CSU work, they were not present during the in-country review and their work was not presented by the other researchers.

Review Team

The External Evaluation Panel review team for the WOOL project included three members of the EPAC and an external fiber and livestock specialist with extensive experience in Central and East Asia. The members of the panel were Dr. Gilles Bergeron, Senior Food Security Advisor, FANTA project, Academy for Educational Development, Washington, DC, USA; Dr. Dennis Poppi, Associate Professor, Schools of Animal Studies and Veterinary Science, University of Queensland, Brisbane, Australia; Deborah Rubin, Director, Cultural Practice LLC, Bethesda, Maryland, USA; and Ralph Van Gelder, Agribusiness, Livestock and Marketing Consultant, Caboolture, Queensland, Australia. Bergeron, Poppi, and Rubin are all members of the GL-CRSP External Program Administrative Council. Dr. Rubin served as the team leader for the review.

Outcome of the Review

The EEP recommendations will serve as the basis for bringing about changes in the specific activities of the project, including deciding on its continuance or discontinuance. If the CRSP governing bodies or its ME disagrees with a recommendation, the ME will submit the rationale and justification for such disagreement to USAID. Copies of these documents (both the review and the response) will be made available to the Board for International Food and Agricultural Development (BIFAD) and its relevant committees, the Administrative Management Review Team, and USAID, in their roles in reviewing the CRSP.

DISCUSSION OF THE PROJECT PROBLEM MODEL

The statement of the revised WOOL project problem model is “the challenge of increasing producer value through improved information, quality, and volume of sales.” It is followed by a statement of the project objective “to investigate how producers can gain more value from their livestock through improved marketing of these products.” The hypothesis underlying the problem model statement is that, by increasing information and preparation of fiber prior to sale, producers of cashmere and wool would be able to achieve better prices for their product. The production, processing, and marketing of fibers are important development issues for both Kazakh and Kyrgyz sheep and goat farmers, since large sectors of the rural population are dependent on the sale of livestock products for the bulk of their farm-based income. In its current formulation, however, the problem model orients the researchers towards a narrow interpretation of the broader mandate suggested by the project’s three interrelated objectives:

- To increase the marketability of farmers’ products...through proper preparation and description.
- To understand how the global market impacts their local markets.
- To create institutions that can facilitate marketing of their products.

The focus of the WOOL team on the first and third objectives oriented their efforts more towards extension and training and less towards research. In addition, the focus has essentially been on animal fiber, reflecting the disciplinary interests of the researchers, rather than on the broader conceptualization in the revised proposal that also encompassed different livestock products and their comparative market potential (see previous fn 3). The

core research issue of the relative competitiveness of different livestock products in the Central Asian region and internationally that was presented in the revised project proposal has not been investigated. Thus although clear, the overall problem model is not sufficiently robust to guide a substantive research effort, even though it has helped to direct some baseline work through descriptive analysis towards understanding fiber quality characteristics and distribution. Taking a more global view would have encouraged the researchers to establish baseline economic and quantitative values for their respective industries (both cashmere and wool) at the start of the projects.⁵

The discussion of the problem model and the research activities in the project reports and documentation do not tell a clear and convincing story. The problem model, for example, does not distinguish between the issues surrounding the wool industry on one hand and the cashmere industry on the other. Reports alternately mentioned wool and cashmere in a disjointed manner, such that the reader had little clear idea of the distinction between the two commodities in regard to the activities of the project.

Perhaps most problematical, in the eyes of the reviewers, is that the researchers have not addressed either in the problem model or in the execution of the project, the macro-economic context or the policy issues at industry or government levels.⁶ In addition, they have not thought outside the immediate project budget, as to methods of expanding activities of the project, apart from the cashmere component, where additional funds were leveraged from outside sources. The problem model has not been revised or adjusted in response to the findings of the work carried out.

POLICY ISSUES

This project has clear policy ramifications. This was recognized in the revised proposal and subsequent work plans which included an activity (#1) on “understanding competitiveness for producers and policy-makers.” Government policies are also included in the “improved” situation presented in the conceptual diagram in the workplan for 2004-5. On the positive side the review team found that (i) the project already addresses (even if only implicitly) several key policy issues; (ii) the policy/institutional context is favorable for an expansion of the livestock sector in targeted countries; and (iii) some apparently good policy/institutional partners have already been identified by the project.

That being said, the project will have to overcome important challenges if it is to make lasting, policy relevant contributions: (i) the project itself has a weak policy focus; hence (ii) key policy issues are not explicitly identified and articulated; (iii) as important, policy makers are not considered a target audience for education and training, leaving gaps between economic players and policy makers; (iv) no good map exists of the institutional landscape, possibly leading to poor coordination between donors; and (v) many stakeholders

⁵ The researchers in their responses to the report have expressed their concern that this assessment of the problem model does not reflect the agreement by the GL-CRSP that the revised proposal needed to narrow its focus.

⁶ The researchers assert that there were neither resources nor data to carry out a macro-economic analysis during the term of the project. In its statement, however, the review team is responding to the lack of attention to this topic.

misrepresent the project's role and goals as an extension service, rather than as a research undertaking. Key recommendations emanating from this review to improve existing or future projects include: (a) carrying out an institutional mapping exercise to understand what is being done and by whom; (b) identifying key policy issues to be explicitly addressed by this project; and (c) elaborating specific means to communicate to policy makers their domains of decision with respect to the animal fiber industry and available options at their disposal to support this sector.

Accomplishments in the Policy Arena

The following section discusses successes and positive aspects that may be built upon.

Areas of Policy Importance. Several policy issues are implicit in the work of the WOOL project. Positive efforts have been made in the following policy areas that may be built upon, either in the wrapping up of the current activities, or in thinking about future work in the region:

- *Poverty alleviation*
Although the project does not specifically target poorer farmers, it has the potential to increase the incomes of all livestock herders, small and large. The cashmere researcher in fact argued that the interest shown by small holders in goat rearing could make them chief benefactors if a surge in demand was to take place (although the evidence presented in this regard was not sufficiently documented to be convincing to this reviewer).
- *Export promotion and expansion of international trade*
Several key activities are meant to improve the quality and quantity of production, which, it is assumed, will lure traders from within and from abroad and thus expand aggregate national revenues. This acquires a special importance in a country like Kyrgyzstan with few exports of economic importance. Unfortunately, the economic and marketing analysis needed to support this contention was not done.
- *Internal economic linkages*
Boosting the quality and production of animal fibers, coupled with supporting value added transformation at the local level (e.g., felting handicrafts, as already promoted by one of the researchers; and many other as yet unexplored avenues such as the processing of raw fiber, production of finished goods, trade, etc.) reveal a strong potential for vertical/lateral linkages to the secondary/tertiary sectors in the economy, and thus for employment creation.
- Increasing national expertise in a sector where the country already has a strong comparative advantage could be a policy objective. This would require that an explicit policy goal be articulated to increase technical quality in key areas and make the country a center of excellence for particular aspects of the animal fiber sector. The aims would be to increase revenues, trade, and employment.

Identification of Institutional Partners. The project has identified and worked with several important institutional partners in the region who will be able to uptake and replicate knowledge gained/generated by this project. These include:

- Excellent collaboration with Kazakhstan’s Mynbaevo Institute of Sheep and Goat Breeding of the Ministry of Agriculture in Kazakhstan;
- Few but crucial representatives of the private sector already identified (ST Group in Kazakhstan, others through KSBA in Kyrgyzstan);
- Civil society is already engaged (e.g., via KSBA in Kyrgyzstan);
- Links with universities and students are already well established and currently used in training and extension (Kazakhstan and Kyrgyzstan);
- Markets for various products exist, although those markets are not much differentiated now (but this may be due to low differentiation in product itself);
- The KSBA in Kyrgyzstan has helped to design the wool and sheep strategy for the Ministry of Agriculture. The strategy is part of the broader national strategy for agriculture, which, if accepted by the Office of the President, would become part of the poverty reduction strategy for the country that will be used by donors to guide the development of their programs.

Conditions Favoring Expansion in the Policy/Institutional Context.

- The government approach in both countries is to not disturb business. It does not want to intervene, just ensure business can operate in a favorable, unfettered environment (as reported by both the ST Group in Kazakhstan and the KSBA in Kyrgyzstan, as well as by individual herders in both countries).
- The Government of Kazakhstan has already stated its desire to improve the quality of the breeds.
- Some state sponsored credit has been made available to downstream industries (e.g., ST Group in Kazakhstan and the KSBA in Kyrgyzstan) showing official interest.
- According to KSBA, the main obstacle to fuller government support is lack of knowledge on their part, not obstructionism on the basis of, say, a national strategy or other such principles. Hence, a well-designed information dissemination strategy targeting key policy decision makers could rapidly increase support (e.g., put favorable incentives in place, remove hindrances identified to the expansion of this sector, etc).

Points of Concern

The key shortcoming is that despite the promise, the project may fail to leave a lasting contribution in the policy arena, for the following reasons:

Weak Policy Focus

- Although policy implications of project are clear (see above) the project has not explicitly stated any policy objectives.⁷ Key aspects that could be discussed, with specific goals and indicators attached, include: poverty alleviation; export promotion; upstream/downstream linkages in commodity chains; policy initiatives to provide microfinance to assist herders aggregate product in a manner attractive to international processors; good land husbandry practices and environmental protection (e.g. watershed management); vocational training policies; etc.

⁷ Few explicit mentions are made with regards to policy, and when done at all it is at a very general, unspecific level. For instance, the Thomas/Brent proposal states that the Project will provide “Recommendations of governmental policies to improve wool production and marketing” (Point 3, Section IV, p.10-11). No more is said, so the reader has to extrapolate what those recommendations might be.

- Dissemination of results to policy makers is weak or nonexistent⁸. No means are envisioned to influence policy making, and no results are to be reported in terms of impact on policy making or on policy decisions⁹. An effort was made to publish in Russian some of the preliminary results but this is very thin, and certainly not sufficient to motivate policy action. Also, not only information is needed, but also the training of policy makers is critical.
- Government support in both countries is limited to “not standing in the way” (which is good), but no particular strategy is in place to support the sector (no credit projects, no incentives, weak and thin extension services, etc.). As currently implemented, the WOOL project will not change this reality, nor create much rationale for putting in place such support systems.

Key Policy Issues Absent from the Discussion

- Key policy issues are absent from the discussion, and some critical issues are not even mentioned. For instance, there is an apparent lack of concern for environmental issues from all sides. As a result several opportunities are lost to make recommendations that may reduce environmental harm. For instance, in Kyrgyzstan, a tax is now paid by head of animal owned. A better-targeted taxation tool could encourage proper land husbandry practices by pairing the tax to the carrying capacity of the land used. At a lower level of intervention, the negative environmental consequences of indiscriminately increasing goat herds need to be explained to producers as well as to policy makers. The team is not suggesting that all of these issues should have been actively researched at the field level, but that there should be some acknowledgement of them in the discussion of the implications of the on-going research results.

The Institutional Landscape

- Although the project has established good relationships with groups that appear to be key players, the larger institutional landscape has not been adequately described. It does not seem that an “institutional map” exists of the different actors supporting livestock production in Central Asia. People interviewed only referred to the big players (the World Bank, SDC, GTZ, and the Aga Khan Foundation) but no mention is made of other agencies possibly involved (NGOs, large farmer associations other than KSBA, etc.).
- Because of this first point, it is hard to see how coordination may occur between service providers. This hampers a sound division of labor among them, cornering each in a “jack of all trade” role. For instance, many of the stakeholders we interviewed misrepresent WOOL’s role and goals as an extension service, rather than as a research undertaking. Better understanding of the institutional landscape would help a future GL-CRSP project define its niche better and concentrate more efficiently on its research objectives.

⁸ The WOOL team responded that its relationship with government agencies such as Mynbaevo Institute of Sheep and Goat Breeding demonstrates their close relations with policy makers. The review’s comment, however, is concerned with the lawmaking policy elites, not with the sheep and goat breeding scientists.

⁹ The WOOL team responded that the review did not take into account the profound state of disruption of the policy environment in both countries, and that government resources were insufficient to address any of the issues suggested by the review. This may be true. If so, however, adjustments should have been made to the problem model.

Scale of Operation Too Small

- The scale of operation is too small to matter for policy makers. The number of persons/institutions touched by the project is relatively small. Likewise, the samples drawn represent very small proportions of the target population. This offers weak evidence when presenting solutions to policy makers. It may be better to reduce the number of policy relevant research goals, but make sure that all goals included produce fully supported recommendations.

Recommendations

Policy aspects that may be considered in a future request for GL-CRSP proposals in Central Asia might include the following:

1. Carry out an institutional mapping exercise

It was largely agreed by the review team members that the marketing and economic analyses promised in the initial proposal should be the *sine qua non* of any continuation of the WOOL project. This “marketing activity” will require a good understanding of the various parties involved, from the production of animal products to the transformation and value adding activities; then to the market operators at the local, national, and international levels. A preliminary to this exercise is that there exists a good understanding of who the various actors are in each sphere, of the various institutional arrangements under which they relate and operate and of the gaps that may exist along the relevant commodity chains. This institutional mapping would be of great benefit, not only to the GL-CRSP, but also to all parties involved in the field: our interviews with key operators were only too telling in their lack of awareness of the upstream/downstream linkages that may exist in both countries.

2. Identify key policy priorities and issues to be addressed by this project

No effort has apparently been made so far to tap policy makers’ intentions with regards to the meat and fiber sectors in either Kazakhstan or Kyrgyzstan. This may be due to the absence of a national strategy in this respect (itself possibly proceeding from a lack of understanding by policy makers of the options and possibilities in those economic sectors and/or to the generally chaotic situation in public affairs). In any event, the elaboration of a revised project in Central Asia should ascertain whether this is the case, link up with existing policies and identify its own strategic space, taking into account national, regional and local priorities, and the lessons learned from the institutional mapping exercise suggested in the first recommendation above.

3. Elaborate specific means to communicate to policy makers their domains of decision and available options at their disposal to support this sector.

According to our interviews, the policy climate would be favorable to an expansion of the meat and fiber sectors, if only policy makers were aware of the options, issues, and potentials of this economic area. Both the KSBA and the ST Group directors for instance, mentioned the receptivity of policy decision makers to the new ideas provided by the current WOOL project. A special effort should therefore be made by any subsequent GL-CRSP project to prepare materials specifically tailored to a policy making audience, bringing them the facts and advocating for (if the economic and marketing analysis demonstrates this is warranted) policy investment in those areas.

REVIEW OF THE CASHMERE AND GOAT COMPONENTS

The majority of the work on the cashmere component has been carried out in south central Kazakhstan, in the Zhane Kurgan district of Kyzl Orda Province, 1,200 km distant from Almaty. Although the team was not able to visit these activity sites because of the distance, they visited with herders in the Ay Darly in Jambul district of Almaty province, some 300 km northwest of Almaty city. Ay Darly is in the semi-desert (150 mm annual precipitation) and range-fed livestock are the only means of livelihood. There are several small villages of less than a thousand people each, as well as outlying livestock farms on the rangeland. Residents keep semi-coarse wool and coarse wool (fat-rumped Kazakh meat type) breeds of sheep, and two types of goats, angora and cashmere-producing Kazakh goats. Ay Darly is on the edge of the Taukum sand desert, where some pastoralists with whom the project has also worked move for winter with their animals.

In Kyrgyzstan, contacts were apparently made with the GTZ office in Osh, which, in October 2003, imported a number of cashmere males and females from the Bayan Oglia Aimag in western Aimag, Mongolia. Information has been exchanged between the two projects.

The objective of the activities under the cashmere and goat components of the project is to investigate how producers can gain more value from improved marketing of livestock products, including meat and cashmere. According to the proposal, there are six umbrella “research” activities that were to be carried out:

1. Understanding competitiveness for producers and policy makers;
2. Organizational development for marketing and quality assessment;
3. Fiber quality management and handling at farm level;
4. Outreach for marketing innovation among producers in Kazakhstan (and Kyrgyzstan);
5. Advanced training in fine fiber; and
6. Joint workshops for researchers, policy makers, and investors.

Specifically, the work plan for the cashmere and goat component has included activities to increase incomes for herders by:

- increasing the quality of the cashmere produced on the goats;
- identifying the goats which produce quality cashmere;
- associating goat production with agro-ecological regions in Kazakhstan; and
- trying to increase the value and marketability of cashmere, through better shearing/combing and sorting procedures.

Accomplishments

There have been a number of positive developments resulting from the activities on cashmere production, processing, and marketing. These are notable accomplishments given the geographical distribution of animals and budget of the cashmere component. They have been achieved by the component activity leader on a relatively tight operations budget through active leveraging of in-kind resources from host country institutions, international agencies, and personnel.

- The researchers and their clients have established excellent social relationships and those encompass all sectors of the market chain, including local business (ST Group), government institutions (Mynbaevo Institute of Sheep and Goat Breeding), farmer groups (KSBA), women's groups, and individuals. The cashmere component leader has enormous enthusiasm for the project's work that encourages and motivates the host country colleagues.
- The component confirmed that native Kazakh goats could produce world class cashmere in commercial quantities. There has been a realization at industry level that cashmere could contribute to export income for Kazakhstan and Kyrgyzstan.
- The component activities have done much to create awareness in the herding population of the potential value of cashmere in desert areas and of cashmere's value as a secondary income to meat production in the more favorable areas.
- The project activities have supported the commencement of a market-based approach to knowledge development on cashmere.
- The component activities have helped to accumulate an objective database of cashmere fiber sample information that provides information on the range of fiber diameters of Kazakh goats in distinctive agro-ecological regions.
- The component supported the introduction of the OFDA equipment for objective measurement of cashmere samples.
- The component provided low to moderate training activities at the industry level for fiber handlers and women in cottage industries. It has helped to create awareness in herders of the need to sort cashmere at combing time in order to produce lines of cashmere attractive to buyers.
- The component has initiated a process to link country production and processing to international buyers and processors. A dialogue has opened between Kazakhstan and Italian cashmere mills, although this has not at this stage led to commercial returns.
- The component produced information bulletins in Kazakh and Russian for Kazakh herders in the main cashmere producing regions.
- The component produced instructional videos for Kazakh herders in the main cashmere producing regions.
- The component identified native cashmere goat herds in various agro-ecological regions of Kazakhstan.
- The component has also established links to the Kyrgyz cashmere industry through the GTZ programme in Osh Oblast, Kyrgyzstan.
- The component supported a study tour to Mongolia.
- The component has leveraged funds from other donors and institutions.

Points of Concern

Despite its significant accomplishments, the component as a whole does not meet the expectations for a CRSP research activity. This is not because of a lack of quality or care in the activities completed, but rather because of a difference in orientation between CRSP research goals and the more applied, extension approach pursued in this component.

- This review has found that the component activity leader and researchers have generally taken a narrow perspective when applying themselves to their work. The research that has been undertaken supports the problem-solving objective through providing an assessment of the phenotypic range in fiber diameters for goats in the regions sampled. Although this provides a base for developing selection programs for goats, it is not

genetic research of major value. Analysis of the fiber samples allows herders to cull from the herd those animals which produce fiber that is too thick in diameter to be classed as cashmere. Thicker fibers are termed “cashgora” and are generally worth one-tenth the value of cashmere. Culling these animals from the herd provides the herder with a more commercially acceptable fiber production unit. The fiber diameter information can be used to select which females should be mated to which males by other groups (such as the local scientific institutes or by the producers) who are engaged in genetic research and animal breeding.

- There has been little development of descriptive, qualitative, or quantitative models applicable to the cashmere fiber industry in order to place subsequent research into commercial reality, either at industry, or farm management levels, although such effort would be consistent with the Problem Model statement.
- There has been no critical assessment of the competitiveness of cashmere in comparison to other livestock products nor any modeling of the economic importance of cashmere in either country.
- There is no evidence of increases in herders’ incomes through the marketing of cashmere, nor is there likelihood of this in the near future. In addition, there has been a lack of farm management information clarifying the relative values of cashmere and wool to meat and skins, within the herder’s product mix. Finally, there is no apparent organizational structure or finance to encourage herders to aggregate their cashmere into lines attractive to buyers nor has there been significant attention given to establishing receival and/or aggregation points for cashmere.
- The research conducted to date has not been planned to further future scientific analysis.
- There has been limited attention to research on industry policy or national government policy regarding livestock products production, processing, or marketing and limited meaningful contact with official government departments or agencies to initiate advice to policy makers. No policy issues have been addressed during the nearly three years of activity.
- The encouragement of goat production for cashmere has been undertaken without consideration of the potential environmental hazards of increasing goat herd numbers.
- There have been no peer-reviewed publications from the project to date.
- There has been a lack of attention to the commercial possibilities in the USA by sale of appropriate livestock, e.g., Rambouillet rams (or semen or embryos) for sheep and similar items for goats and fiber handling and preparation equipment, such as fiber sorting tables, designs for animal handling yards, etc.
- Although not supported with GL-CRSP funds nor a part of the WOOL project, it was noted that the Mynbaevo Institute animal breeder is intent on crossing Angora goats and cashmere goats with the aim of replacing cashmere guard hair with Angora fibers. This is likely to be a long-term failure and has the potential of causing an increase in fiber diameter in herds involved and hence of lowering the commercial value of the whole fleece.
- The number of samples tested for cashmere fiber diameter has been minimal.

Recommendations

1. The cashmere activity should not be continued in its current direction. It should be stopped and, as also suggested below for wool, a new proposal requested with significant redesign and/or realignment with a marketing and policy focus.

2. Research into breeding program should not be funded by GL-CRSP as there is little short-term return by such intervention. The development of a marketing system, however, leading to aggregation of cashmere into sorted lines attractive to larger buyers, particularly early stage processors, would be of immense value to the herders, although it is not clear that the current researcher has this interest or understanding of how to achieve this result.

REVIEW OF THE WOOL AND SHEEP COMPONENT

The wool and sheep component was well founded with respect to the problem model. The activities are being carried out in both Kazakhstan and Kyrgyzstan, led respectively by Brent and by Stobart, but there are overlapping activities across countries and between the two wool components.

In both countries, however, the idea -- to add value at the farm level and to empower farmers with market information to better position them with respect to obtaining a fair and reasonable price for their product -- is excellent. A basic requirement for this is to know what the market requires and also to produce products that meet the market requirement(s). The production of a product required by the market needs farmers to identify the wool quality they are currently producing, to make changes to produce a product within the preferred wool quality ranges (if that is not being done at present), and to grade and sort the variety of product currently being produced at the farm level into wool quality ranges that can be marketed for a better price.

A major impediment at present is that the quality of wool being produced is not known and secondly that the skills to grade and sort into defined lines to enable buyers to buy with confidence (and hence perhaps pay more) are not available. The project set out to address these issues with both wool and cashmere.¹⁰

The project achieved its objectives with wool with mixed success. At the farm level, they were very successful in engaging farmers and advisors and in their training. This was a major activity of the team and has generally been successful. The KSBA activities (in Kyrgyzstan) stand out as an excellent example of the organization of farmers by which to achieve these objectives. The engagement of the ST group (in Kazakhstan) is also an excellent example of engaging a major buyer and processor into the process. These are the ways forward to best engage farmers and processors and are more successful than a top-down Government-led approach. There is however a need to engage the Government organizations if only to get cooperation from all levels. The evaluation team was told repeatedly that the Government bureaucracy still had many features of the old Soviet system. The approach adopted by the WOOL team with respect to farmers, buyers, and processors was commendable, although and with greater engagement of the Government bureaucracy they would have also helped to

¹⁰ Cashmere (as noted in the previous section) had an additional issue in that it was a novel fiber for the region. It had only recently been determined that some goats had cashmere and essentially a new industry needed to be created. Thus, a significant education campaign at all levels (farmers, buyers and policy makers) was needed to produce, sort, and attract buyers for cashmere.

change this aspect of the marketing chain. These issues are expanded upon in the previous Policy section

There were excellent relationships established with the farmers, KSBA, and the ST group who are the main co-operators in the project. It was apparent that there was wide support and enthusiasm within these groups for the project. The communication lines worked well with these groups and there was evidence of various forms of communication and media that were used such as lectures by CRSP staff, videos, brochures, seminars, training workshops (e.g., hands-on experience in wool shearing), and overseas visits for key personnel (e.g., at a fiber testing laboratory Denver, Colorado (USA), at the International Grassland Conference, Dublin (Ireland), and at the International Wool Textile Organization (IWTO) meeting, Italy). There was a strong emphasis on training with these groups which was well advanced in numbers and key personnel for the trainers. There were fewer farmers involved in this training. This is to be expected at this stage of the project and one might expect these numbers to markedly increase in this latter phase of the project.

Progress in some areas, however (see below), was not great and did not meet the original objectives. Much work remains at a preliminary aspect of analysis and the team did not advance many ideas as to their in-depth analysis of some of these issues. There were many missed opportunities as to how to extend the interpretation of the data. There were many interesting researchable issues and many have arisen as a result of the current work. Yet, there appeared to be no work plans written or verbally communicated as to publications or ideas on these aspects. Some of these which are expanded on later are the analysis of the wool data from flocks, the outline of an action research activity with respect to artisans, and the testing of the organizational framework for classing and sorting wool to get better prices at the farm level.

The central theme of the project was centered on the market, yet there was little evidence of any meaningful activity in this area. There were general statements about connecting producers and processors to markets but little evidence of this except for the good and strong connection to the ST group in Kazakhstan. The external international markets were not engaged in any way. Central to the project model was to engage external international markets with the process which was being set up in order to provide more competition in the buying of wool. These external markets were not identified in any systematic study nor were any engaged except in an *ad hoc* manner.

As noted above, the same activities in the overall proposal also directed the wool component, each of which is addressed in turn below:

1. Understanding market competitiveness for producers, policy-makers and investors
2. Organizational development of centers for fiber quality measurement
3. Training on fiber quality handling at farm level
4. Outreach for marketing innovation among producers in Kazakhstan
5. Advanced training and advice on wool and specialty fine fibers.

Understanding Market Competitiveness for Producers, Policy Makers and Investors

This was a central theme of the project and the hypothesis upon which it was based. It is a laudable objective and one which underpins the marketing strategy of major international

producers of wool. It might be expected to be successful and seems commonsense. However, a more recent analysis of the Chinese wool industry outlines why there are limitations to this simple concept in an environment of many buyers and middlemen and a processing industry with variable requirements, not all of them based on quality.¹¹ This contrasts with the more established international market.

Given this scenario, an in-depth analysis of the international and regional market and the role of Kazakhstan and Kyrgyzstan within that was required. Such an analysis requires three aspects:

- The role of Kazakhstan and Kyrgyzstan in the world wool market, its potential contribution and market competitiveness
- The role of Kazakhstan and Kyrgyzstan in the regional wool market, its potential contribution and market competitiveness
- An analysis at the farm level for the role of wool, cashmere, and meat using common farm management principles, especially with respect to modeling on-farm activities and providing sound advice as to which activity farmers should commit their resources, the relative proportions of goats and sheep, and the risk analysis of these activities.

Some of these aspects were addressed by Childress in his small grant report, but the current larger project (i.e., WOOL) was supposed to build on that. It was the main theme and activity of the original proposal. In that proposal and subsequent EPAC reviews, there was a continual requirement to address this issue with the appointment of a suitable person and/or team. This was not done. It was unfortunate that Childress had to withdraw from the project and this no doubt has contributed to the lack of activity in this area. The EEP recognizes that the team tried to find a relevant economist in response to ME requests. This has proved to be difficult to set up. However, the EPAC is of the view that after the first year, this should have been a top priority for the project, which for various reasons did not occur.

The current “future” proposal and identification of an economist to work on this at this stage is good but a bit too late (see also section on program management). The comments about the possible work on this topic are not very coherent nor address contemporary analysis in this area, such as Brown et. al. 2005 (see fn 3). It is disappointing that the major activity underpinning the whole project was not addressed despite continual requests from the ME and EPAC.

The team has, however, done much groundwork upon which such an analysis could take place. In Kyrgyzstan, they have done extensive farmer household surveys; in Kazakhstan, there is also some household data but it is more limited. Unfortunately, the team does not have the expertise to analyze these in any depth and the data remain a rich field in which to investigate. It is noted that in Kyrgyzstan, one PhD thesis has looked at this aspect. However, other than general collation of data, neither the wool or cashmere household data have been analyzed in depth. The team appears to have done a good job in the collection of

¹¹ Colin G. Brown, Scott A. Waldron, and John W. Longworth, *Modernizing China's Industries, Lessons from Wool and Wool Textiles*, 2005, ISBN 1 84376 591 8, Edward Elgar Publishing, Inc, Massachusetts, USA.

this data and the involvement of students from various institutions in both countries in its collection.

This market economic analysis still needs to be done by an experienced market economist in this field. It is central to assessing the adequacy of the problem model which at this stage remains a good idea but which has never been tested from both an international and regional market analysis and a practical action research test of organizational development. The latter is the second activity which will be commented on in the next section.

Organizational Development of Centers for Fiber Quality Measurement

The concept of developing organizations with the capacity to carry out fiber quality measurement is a good idea. It is essentially a development plan to put in place at the farm and regional level a system of classing and sorting wool into lines that the market requires and by which farmers could achieve more value for their product. Such a system is in place in most advanced wool producing countries of the world. However the role of the Kazakhstan and Kyrgyzstan wool industry in the world market and the regional market is different both in terms of the volume of its trade (and hence the interest generated by international buyers), the type of wool produced given the variability in diameter and staple strength, and the market process chain. It was essential to set up this organizational structure to test the problem model within the Central Asian region and, assuming the concept had some credence, to put in place a scheme which would help farmers realize more value for their product.

Accomplishments in Organizational Development

- The idea of involving a major commercial wool-processing firm (ST Group-Kazakhstan) for the region is excellent.
- The idea of using a farmer co-operative (KSBA-Kyrgyzstan) is excellent.
- This approach of farmer and processor organizations being intimately involved in the development of such an organizational structure is based on the best practice of organizational theory and the team is to be congratulated on this. It should be noted that these initiatives operate in separate countries.
- OFDA machines of two different types for field work and lab work were purchased by ST Group and KSBA (not with CRSP funds) to put in place the necessary testing of diameter and staple length of wool but not its staple strength. The latter appears a deficiency given the break observed in the wool we examined and to which the team continually referred, presumably due to poor under-nutrition in winter. This aspect was also mentioned in the original grant proposal as an activity but which was cut from the final proposal. It may need to be resurrected.
- Extensive work has been done measuring diameter and length from individual sheep, particularly in Kazakhstan, and from bales in Kyrgyzstan. This is good baseline data and the group has accomplished their objectives.

Points of Concern

- Skill acquisition in skirting, classing, and sorting was necessary if the scheme was to be set up. Skirting appears to be well defined and training was supplied on it, but classing and sorting has not yet started at any meaningful level.

- Classing and sorting are skills which were present under the old Soviet system (although using a different grading system) and at least KSBA were confident they could do this. They did in fact seem to have a system in place on the farm visited in Kuttubai, Kyrgyzstan. Classing, sorting and bulking are central to the objectives of this activity of the project and it is expected that this would be much further advanced than was observed. It would be expected that by year two the process would be under trial and that by year three it could be more extensively evaluated as an action research process by which to evaluate the original problem model and hypothesis. This is a long way from being done at present.
- There was little appreciation of the difference between individual sheep data on wool diameter and length and bale data on these parameters.
- Individual sheep data were extensive and they successfully achieved their objective of benchmarking wool quality across Kazakhstan in particular. Although, the data are very useful, there is no evidence of how they were going to analyze this data, nor of a publication process. There was no link to animal breeding and they did not appear to have engaged the animal breeders in a meaningful way by which to take the data forward. They seemed to be concerned that the animal breeding objective was requested to be removed from the original proposal (which it was). However, the current data are not very meaningful unless they can be taken forward to alter the wool produced. This is an example of drawing in other groups and using them to build on the outcomes of the project to have a much wider impact and is an opportunity missed. The ST Group had bought Australian merinos as part of the process to improve wool quality but perhaps selection within existing lines or similar ecosystem regions of the former Soviet Union might be a more effective way to go. The project should not get into animal breeding but they should be influencing the animal breeding process being carried out by other groups by the data they have collected on individual animals.
- Bale data are very useful for the marketing of wool, a major objective of the project. It is different from individual sheep data and they cannot be correlated except in a loose fashion. The bale data provide a quality assurance value for buyers even though the process to be used is not a certified IWTO laboratory. In the circumstances it is an appropriate first step. Once again it provides some benchmark value so that the objective is reached. However, this process is essential to the marketing of wool by a process of classing, sorting and bulking into lines, a major objective of the organizational objective of the project. KSBA wants to do this but there was little evidence of a large scale formal approach by the group and one might have expected that this would be well in place with a group as enthusiastically committed as this group. ST Group also analyzed bale and processed sliver data and espoused a view that it wanted farmers to enter this process (as promoted by the project) yet it did not have an aggressive approach by which to entice farmers to do this particularly by way of price incentive (the project objective by which farmers would benefit). The ST Group data appeared to be more useful to the company than the farmer.

Training on Fiber Quality Handling at Farm Level

Training on fiber quality handling was well done at all sites. It was a major activity that was essential to the conduct of the project and the group has achieved its objective. It should be noted that this is an ongoing activity that is continually increasing the numbers of farmers being reached. The group made a concerted effort to address all members of the supply chain

i.e., farmers, buyers, and processors. A more detailed comment is given in the report on training.

A lot of information has gone to farmers, middlemen, buyers, and processors about what is meant by quality in the international wool market. Farmers appeared much more aware that there were aspects of wool quality that they needed to meet if they wanted to get better prices.

One feature is that both ST Group and KSBA have conducted training in addition to the GL-CRSP program and is an example of the wider impact the project has had.

Training in classing, sorting and bulking is not as advanced as it should be at this stage of the project. This has created problems in implementation of the organizational structure necessary if farmers are to capitalize on this approach. The team observed at the Kuttubai collective farm in Kyrgyzstan that group members put wool aside to do this but the absence of an experienced wool classer at the time of shearing creates organizational problems and missed opportunity for immediate feedback to farmers about their wool quality. It also increases double handling of the product. These are all issues to do with the successful implementation of the organizational structure that was proposed in the project. It was stated that people have skills in preparing wool for sale learned under the Soviet system but they need to be trained to discern international standards of wool quality. More effort should have gone into this activity.

There was no formal plan of how the organizational structure would proceed using on-farm wool classers and factory OFDA testing of wool bales for further sale and processing.

Staple breaking strength should be covered as part of the process. Significant wool break was observed on a number of farms and this was explained by the recent severe winter (under-nutrition) such that a break occurred in the middle of the staple thus increasing variability in HAUTEUR in the processed sliver, which increases processing problems due to wastage and noil. The original proposal had a section on this relating to the fact that animals no longer moved to better areas as occurred under the Soviet system. This aspect of quality needs to be better incorporated into the project and a system of farm management devised to overcome this. Without attention to this aspect the good work on wool quality to date may be undone if processors find they still have a problem despite having more even lines to buy. All sectors of the current project recognized this as a problem.

Outreach for Marketing Innovation among Producers in Kazakhstan

This was an interesting activity which was enthusiastically endorsed by participants. Essentially it set out to connect a small group of artisans with markets in the USA and other groups who could help in marketing (e.g., Central Asian Craft Support Association). It was an extremely important activity for the women who were involved.

However it was limited in its scope. This was also mentioned in the initial assessment of the project. The challenge therefore was how to take this limited project in terms of individuals and give a wider result for the region. This has not been done in any meaningful way. There are no plans for how to publish this work and it is seen as a training and development process. It is, however, an action research process. The outcome of this process should be

the publication of a manual outlining what needs to be done to start such an artisan group, what quality aspects are important in terms of the initial wool and the final art product, a checklist of do's and don'ts, and a comprehensive list of contact names and organizations. Such an outcome would ensure that the lessons learned during the current process are extended to other groups and that a wider group of individuals would benefit. The market economic analysis (activity #1) should also investigate the reality of such an industry other than small localized groups. None of these suggestions nor any others are part of the current plan.

It is noted that a wider analysis of twelve felt making artisan groups was undertaken. Aspects of their production and marketing were collated yet there were no plans on how the information was to be used other than the potential to be involved in such an activity.

Advanced Training and Advice on Wool and Specialty Fine Fibers

This was an activity which was well done. It essentially sought to train technicians and senior managers on the parameters of wool quality and also the technical skill to measure this. They sought to make them aware of IWTO requirements and what is required in the international market. Our discussions with senior managers and technicians indicated that this was successful and all expressed a high awareness of the issues. This is a substantial achievement of the project given that all previous training was under the Soviet system which bore little relationship to international market requirements.

OFDA machines (OFDA 2000 and OFDA 4000) have been purchased as part of this process and leverage was obtained by getting ST Group (in Kazakhstan) and government funds by KSBA (in Kyrgyzstan) to purchase these. Unfortunately these are different machines, with different operating requirements (temperature and humidity), and the results have differed. Some calibration is necessary between both instruments in order to compare data. This is not a fault of the project but rather the differing wishes of two groups. This, however, introduces complications in setting up the organization of this activity. The technicians in charge of these machines were well aware of their operational requirements and were adept at using them. Activities that formed part of this process included training at Yocom McColl laboratory, Denver and the attendance of people at the IWTO meeting in Italy.

Accomplishments by Site

Kazakhstan - the Monitoring of Wool Quality

- Good connections with the largest processor factory in the region, the ST Group.
- Good and extensive monitoring data, covering in a strong statistical basis the diversity of the fine wool growing areas of Kazakhstan. An excellent outcome for the activity.

Kazakhstan and Kyrgyzstan – Artisan Activity

- This is an excellent scheme with a committed enthusiastic team of women. We saw only one small group with whom the team was actively working.
- There were twelve felt making groups surveyed across both countries.
- Additional effort should go into the production of a manual based on the action research process that was used so that other groups may be set up based on the experiences of this group.

Kyrgyzstan – Work with KSBA

- This is a dynamic organization with great promise. Although it has only a small percentage of the total farmers within its association, it covers all areas of Kyrgyzstan. It is a grassroots organization and its mode of action fulfills exactly the objectives of the project in achieving a better price for farmers. This association between the project and KSBA needs to be encouraged further. The leader of this group has benefited by the advanced training activity (trips to USA Yocom McColl laboratory Denver and IWTO meeting in Italy) and the project has provided some support along with the earlier small grant for this individual to submit a PhD thesis to the local University.
- KSBA has recently initiated good links with the Kyrgyzstan Agrarian University in training students and providing work experience opportunities within the activities of the project.
- KSBA in association with the WOOL project has produced a wide range of publications and media releases on the topic of wool quality directed at farmers.
- The WOOL project has initiated training of trainers and used the resources of KSBA to extend this to their farmer base. It was stated that farmers were much more aware of wool quality and its requirements as a result.
- KSBA has an extensive database on household activities (income, gender, time) part of which has been analyzed by Mr. Akylbek Rakaev for a PhD at a local University. However, it was stated that there is much more data and many more issues which could be explored with the data.
- KSBA in addition to project activities has also collected individual sheep data similar to the work of Dr. Brent in Kazakhstan but likewise nothing substantial has been done with the data.

Points of Concern by Site

The wool components were not integrated across sites. The activities for wool in Kazakhstan and Kyrgyzstan were different but had little interaction until recently.

Kazakhstan – the Monitoring of Wool Quality

- There have been no formal connections with Government nor any active plans for connection with animal breeders who would benefit by using the data and continuing the process.
- There has been no plan for publication and limited ideas on the use to which the data could be put. Similarly, there is little connection with the household survey data and farm types. There is a good connection to regional distribution of wool types but little progress in GIS mapping of such.
- There is no connection to the bale data being collected in Kazakhstan nor any clear view as to how both activities interconnect. There were some isolated bale sampling activities. They are not involved in the development of an organizational structure plan (Activity 2 of the project) for this region but their expertise is used by the ST Group. The ST Group appears to have such a plan and at least in one region, a large co-operative breeding farm (Uzumbulak farm, Annual report 2005) this was utilized to achieve a higher price. However the ST Group approach has more to do with helping the ST Group than in helping farmers (especially small farmers) achieve a better price. This is understandable but does not achieve the objective of the project.

Kyrgyzstan – Work with KSBA

- There are no formal Government links with the project.
- The numbers for training at the farm and/or advisor level seem low but as explained by KSBA this train the trainer process is expanded upon substantially by the process by which they use these people within the KSBA system to reach out to many more farmers.
- The activities have not advanced very far. The major activity, that of setting up an organizational framework for skirting, classing, sorting and bulking, is only in place to a very limited extent. It is not apparent why this should take so long to set up given the aims of KSBA and the objectives of the project. It was stated that the skirting process was now well in place but this is a very simple exercise. The much more important activity, that of classing, sorting and bulking has yet to be set up in a comprehensive way. This was the major activity and outcome proposed in the original proposal and this objective has not been met.
- There is a lack of education of herders in the relationship between fiber testing of samples from the animal for on-farm herd selection purposes and fiber testing of baled fiber in relation to the value of the fiber to the buyer and processor.

PROJECT AND COMPONENT MANAGEMENT***Project Management***

Management of complex CRSP programs is a challenging undertaking. Even though the range of activities in the original proposal was reduced in the final work plans, the issues surrounding the implementation of research activities on two quite different fibers for two different types of animals in two different countries would be difficult. It appeared that over the past three years, these challenges became, in some cases, serious management problems that affected the flow of funds and the preparation of work plans and project reports.

However, the lack of a clear overall project management structure and communication system in the WOOL project has hindered the project in achieving greater overall accomplishments, and, at times, created misunderstandings, particularly among the researchers outside of the host countries. In short, the higher levels of project management did not function effectively, even though the management within each component of the project, particular with the HC partners, was fine.

The EEP believes that both the WOOL project and the GL-CRSP ME share a responsibility for developing and maintaining a good working relationship and good communication. The ME expects the PI to follow the requirement in the grant document and the instructions prepared by the ME for its budget, work plan, and annual report submissions. These are not negotiable. They can be very time-consuming and, at first, confusing. The ME has a responsibility to provide clear and timely direction, and the PI has the responsibility to seek guidance and to act on it in a timely manner.

The Lead PI faced a steep learning curve in overcoming his lack of experience with the often burdensome CRSP procedures and regulations, sometimes leading to delays in document submissions and revisions. The first year, for example, required several revisions that delayed approval of the work plan and the project's fieldwork. Other deadlines set by the ME for

responses in subsequent periods were also missed, such as the submission of sections of annual reports, materials for PI meetings, plans for the EEP review process, and the selection of an economist to join the project.

The ME provides guidance about CRSP procedures in the form of instructions for its various forms and clarifications, in meetings, by email, and by phone. Responding to a wider need to clarify its operations, the CRSP ME also prepared a new, consolidated manual of procedures and policies in January 2005 that was distributed to PIs, with encouragement for them to pass the information along to their research teams.

Other GL-CRSP projects are subject to the same requirements but most have been able to comply without experiencing the degree of difficulty related by the WOOL project.

The PI and other team members, however, both in the early days of the project and more recently, stated that they did not feel they received the guidance they needed to prepare the work plans and budgets in a form that would be acceptable to the ME. They expressed relatively high levels of frustration with the CRSP procedures, with one researcher stating “that it was not able to meet all the deadlines and fully satisfy all the requirements.”

Timeliness of responses on all sides repeatedly surfaced in discussions with the EEP as an issue between the project and the ME. The consequences of late or partial submissions by the project were sometimes exacerbated if the ME was unable to respond quickly due to its own work load and/or travel schedules. In retrospect, this pattern reflects a larger problem of communication between the WOOL project and the ME. It contributed to delays in finalizing and approval of annual work plans, slow progress on requests by the ME and EPAC for revisions in the project, and delays in both the identification and the approval of an agricultural economist for the project team.

Communication among WOOL researchers

- Communication among the current component leaders is minimal and some members of the WOOL project team expressed a belief that not all information is shared equally. The Lead PI communicates directly with each of the other component leaders, previously Galvin and Brent; more recently Kerven and Brent. These dyadic relationships vary greatly in quality and frequency. However, the Lead PI has not coordinated communication between the components, for example, by holding regular meetings or conference calls among component leaders. Apart from the schedule set out by the GL-CRSP for submission of budgets, work plans, and reports, there is no WOOL project calendar for communicating whether face to face, by phone, or virtually to discuss the progress of each component and to share experiences, contacts, or results.
- The PI communicates primarily by phone (with Brent) and email (with Kerven) as individual component leaders. There is no clear system for commenting and feedback; the PI does provide guidance on work plan development to some component leaders and not others.
- There were three opportunities for bringing WOOL researchers together as a group to discuss overall project goals and objectives. The first was to develop the content for the original proposal at a meeting in Colorado; the second was in Almaty in April 2004; the third time was at the Dublin conference in June 2005. Potentially key participants, however, were unable to attend the various meetings, affecting the dynamics of team-building and the ability of researchers to learn about each others' activities. For example, Kerven was not involved in the Colorado meeting; Childress did not attend any meetings

after that one; Galvin was not present at the Almaty meeting but was represented by Randy Boone. At the Almaty meeting, a discussion about plans for information-sharing and collaboration was held, but the ideas that were generated – e.g., to put materials on a website and to exchange information among collaborators – do not seem to have occurred.

- The involvement of Host Country (HC) researchers in the WOOL project has been limited to each of their respective components. There have been no significant opportunities for all the main project participants to address the goals and objectives of the project as a whole, even when they have been physically together (e.g., at the Dublin conference in June 2005). This means there have been many missed opportunities for greater interaction either across institutions or across national borders, despite the institutional and spatial overlap of the components (e.g., both Brent (wool) and Kerven (cashmere) use ST Group and KBSA for fiber testing; both are involved with scientists from the Mynbaevo Institute). Thus the inclusion of local, national, and regional needs and priorities appears to be *ad hoc* rather than systematic, and limited to the degree to which each HC institution has a vision for its own activities (and this varies by institution and by country). The lack of a formal process for sharing ideas across activities inhibits the systematic inclusion of local, national, and regional needs and priorities. Instead, activities are developed according to the interests of the individual researchers and/or their institutions.
- The lack of communication across components means there is also no system for evaluation of on-going work or periodic review of each component's progress against its work plan indicators.
- Only minimal effort had been taken prior to the EEP's visit to develop a vision for future directions for the entire project, despite the quickly approaching deadline of July 15, 2006 for the potential submission of an extension proposal. Apparently no discussion occurred among the group prior to the review as to the future. No formal plan was presented other than an outline of possible work by an economist in the wool area. Reflecting the lack of integration across the WOOL project's different components, the brief statement on WOOL's future prepared by the Lead PI had not been shared with all component leaders.
- There did not appear to be a publication plan, in the sense of a justified set of materials to be targeted towards key audiences through key journals or other outlets. There is a minimal set of publication deliverables for each activity, "research briefs," and outreach/extension materials.

Component Management

To its credit, the project has, within the individual components, successes that have been noted above. In particular, each of the individual components and their respective leaders appear to have established good communications with their HC partners.

Many aspects of administration are handled by each of the three component leaders independently, and these appear to have been done well. Each component leader works directly with his or her HC and US-based counterparts, developing initial drafts of work plans and budgets.

Recommendations

For the time remaining to complete the WOOL project, it would be helpful for the project management to:

- Establish a calendar for the completion of all written reports and data sets from project work.
- Develop guidance for a publication and dissemination plan for future descriptive and analytical work to be completed under the project.

As guidance to the ME, the team recommends that in situations where PIs are exhibiting signs of difficulty:

- the ME provide additional support for new PIs on issues related to administration and finance, such as in the form of an “orientation package.”¹²
- the ME issue requests and respond to queries in writing to maintain a record of correspondence on work plans, budgets, and other key decisions such as interim evaluations and recommendations offered by the EPAC, including sending summary emails of decisions or new deadlines agreed to by phone.
- the ME state its expectations for responsiveness and set both deadlines and consequences with the PI and the project and maintain a system of follow-up to be sure that the project is clear how these requests will be handled within the budget provided by the CRSP.

FINANCIAL MANAGEMENT

- The Lead PI has encountered difficulties in managing the GL-CRSP financial management guidelines. There are no serious mismanagement problems, but rather the submission of work plans and vouchers has been very slow, delaying the movement of funds from UC Davis to Wyoming and then out to the component leaders and to the HC participants.
- Financial issues are not transparent. Activity leaders prepare budgets but are not involved in the final decisions for allocations of funds, which is made by the PI ostensibly without explanation. There is the apprehension that different standards are being used for different components (e.g., cutting data analysis on one activity to pay for EEP vehicles) either when allocations are made at the start of the work year, or when changes may be made mid-course. The review team only had access to work plan budgets and not expenditure data, except at the overall project level.
- Overall control of the budget is managed by the PI in a manner that has created tensions among some of the component leaders to the extent that some team members have indicated that they cannot work together. Although budgets were allocated on an initial agreed upon basis, as time passed different team members viewed the distribution of funds differently, leading to a breakdown. Expectations of the ME and EPAC and the team members about what could be achieved on the budgets that were approved also appear to have varied. All parties, the ME and the project, should have formalized the milestones they were working towards, as without these both sides have had expectations that were not realized.
- There is a perception that budget allocations are not handled equitably and that

¹² The idea for an “orientation package” was suggested by Susan Johnson, GL-CRSP Associate Director.

reimbursement procedures are not consistent across components. Each component leader submits a budget that he/she has developed, usually after some consultation with HC partners. According to the component leaders, the PI then tells them what their final budgets will be. There is little opportunity for negotiation and little explanation about how the allocations are determined. The communication breakdown was sufficiently serious that efforts were made by at least one component leader to engage the ME in the process during the last budget cycle in the fall of 2005.

- The HC project costs are significantly lower than those in the US although the CRSPs strive for a 50:50 US:HC allocation. This may be the result of some costs (such as travel costs for a Kyrgyz researcher or some materials costs) being allocated to the US side instead of the HC side.
- Because of the way the budgets are constructed (see comments below on matching) and annual reports are written, it is impossible to determine the level of support by the lead US university to the project.

Cost-sharing

- There is a lack of understanding by the PI about matching requirements. In discussion, the lead PI was not aware that costs incurred in the host country by HC researchers were not subject to matching. The lead PI informed the EEP that he had been trying to match at the rate of 25% for all project expenses. If this were the case, the University of Wyoming would be overmatching. The funding record,¹³ however, shows a matching rate against expended funds of 15.7% in the first year and 25.9% in the second year, which averages out to a lower than needed 25%. The project should review its procedures for matching to ensure that appropriate HC costs are subtracted from the calculation of the needed amount to be matched.¹⁴
- It is very difficult to tell from a single document what the source of and the calculations are to determine the amount of the cost share that is listed in the budget justification narrative. The annual report for 2003/4 and 2004/4 indicate match of several days time from both Malcolm Childress and Dave Thomas, but there is no part of the work plan budget that shows an activity against which this contribution is matched. There are no trip reports that are prepared by either Childress or Thomas; nor do other trip reports refer to them. It is therefore difficult to document their involvement in the project. The annual report 2005 lists Childress at the same rate and activities as in 2004.
- Matching contributions for 2004-2005 is given as follows by institution:

Institution	Cost share
Colorado State	\$ 7,935.65
Univ of Wisconsin	\$21, 414.00
Univ of Wyoming	\$22, 852.00
Macaulay Institute, UK	\$ 8,215.00
Total	\$60,416.65

This total figure does not match that noted in the funding history (\$69,080.95).

¹³ Provided to the EEP by the ME in an Excel spreadsheet, "Funding History" in Section 6 of the EEP CD.

¹⁴ GL-CRSP guidance for cost-sharing is documented in its policy and procedures manual and in the subgrant.

KSBA Financial Management

- The KSBA in Kyrgyzstan is the only HC partner to receive institutional funding through a subgrant. Their records are excellent; each transmittal of funds is well-documented and the files are accessible and orderly. Receipts are collected and kept at the institution and notes are made about any expenses for which receipts are not available.
- There are some delays in the receipt of funds from the University of Wyoming each year. In the first year, funds were not received until April 2004 for a work plan that was supposed to begin in October 2003. In subsequent years, funding was received in January 2005 for a work plan beginning in October 2004, and then in October 2005 for that years work plan.
- In the case of KSBA, US and HC research leaders speak several times per year and meet when possible at international meetings to discuss their plans and the budgets for the coming year of work. They identify relevant work plan tasks and build up the budget accordingly.
- According to the Kyrgyzstan co-PI, information about the entire project budget is shared by the lead PI with the HC co-PI. This practice differs from that described to the team by the other researchers who say they are not given access to information on the entire project budget. Whatever is the “truth” of this situation, the perception that information is not freely shared has created tension and mistrust over budget issues.

Recommendations

For the time remaining to complete the WOOL project, it would be helpful for the project management to:

- Establish a calendar for the completion of all written reports and data sets from project work.
- Review the matching procedures and recalculate required cost-share amounts showing their relationship to the work plan budgets.
- Document the amount of leveraged funding and in-kind contributions provided by HC partners.

TRAINING

Training in the context of the GL-CRSP needs to be viewed at three levels: at the operator level (farmer, middlemen buyers and processors), at the professional level of scientists and technical staff, and at the student level (graduate and undergraduate training). Gender opportunities are especially important in this activity. Training was very successful at the operator level but less successful or lacking at other levels.

Operator Level Training

Training has been a large focus of the activities of the project. To achieve the project objectives, it was necessary to train people at all levels from farmers to middlemen buyers to processors. The type of training was similar for both cashmere and wool fibers in both the type of people to whom it was directed and the nature of the material being presented,

although handled separately because of the different characteristics of the two fibers. The review team had no criticism of the separate nature of these two projects.

The cashmere activity is directed towards setting up a new industry with people of little to no experience. In that context they were required to initially raise the awareness of cashmere and its value at all levels from farmers to Government and then to train people in its harvesting and preparation. It has done this successfully: comments were often made to the review team about cashmere, particularly that there was little prior knowledge of cashmere before the project activities. However, the team did acknowledge that they have been involved in this area for a number of years (on other projects) and some other donor projects have been involved in training. Nevertheless, this is still a considerable achievement. The USAID office in Kyrgyzstan was very much aware as a result of project activities that cashmere offered new opportunities for small farmers especially in the poorer areas.

The wool activities were directed towards a mature industry but one which had been disbanded after the collapse of the Soviet system and one which had no knowledge of international market requirements. Once again the achievement of the team in raising this awareness was considerable and at all locations the people interviewed had knowledge that they needed to change to international market requirements. They also had knowledge of what those requirements were with respect to fiber diameter and length but had little knowledge of staple strength.

The approach taken and the groups and individuals that were targeted were appropriate. The numbers of people involved seems on the low side but at least for some groups, eg KSBA, it was explained that there was much further activity based on their own projects and they relied on the train the trainer approach of the project. All participants mentioned that training had enabled them to prepare their fiber correctly and that they had gained better negotiating power with traders. In that context, the project approach was successful. This was not however evident in the setting up of an organizational structure to class, sort and bulk fibers (of either type) for better marketing and so it appears there is still a gap between knowing what to do and actually doing it. Incentives and confidence in the message are still issues that need to be tackled.

One very effective training activity was observed in the shearing school at Kuttubai (Kyrgyzstan). On completion of the activity, the novice shearers were presented with their own handpiece so that they could immediately start their craft and the speeches and formal presentation elevated these young men in the eyes of their community. This was a very powerful, innovative, and effective activity funded by the project. This demonstrates the wide range of methods employed by the team under the training activity and that they were successful at this level.

All parts of the project have prepared extensive material in the form of brochures, CDs, videos and photos. This was a successful outcome.

Professional Level Training

The provision of professional level training was also a successful outcome of the project. Various professional groups made trips to the USA, international conferences, and Mongolia for various training activities. Success is reflected in the professional and competent manner

in which these senior people from groups such as ST Group, KSBA and some research institutes could talk about cashmere and wool quality and measurement methods. Their enthusiasm for the project in both participating countries and for both fibers may be attributed to this training. Operator competence in the operation of the OFDA machines was apparent despite some problems of agreement between the OFDA 2000 and OFDA 4000. There was a constant message coming from these individuals that, for both fibers to be successful, quality to international standards was paramount. The project was thus extremely successful in getting the individuals who lead the industry to this point. The interaction with Government agencies was limited and not formalized. However the emphasis on training the professionals within the commercial sector was correct and may drag the Government agencies along. Training in marketing and economic analysis of the industry was lacking, probably as a result of the lack of such a person on the team.

Student Training

Student training at the graduate level was non-existent. Although not part of the original proposal, it had been requested by the ME and the EPAC each year, and is a fundamental expectation of CRSP projects. It is recognized that the priority was the above training to other sectors of the industry. There was a perception in the team that they had never proposed graduate training but correspondence with the ME and EPAC reports have always raised it as an issue. It should have been done even on a limited scale.

There were many missed opportunities for this training. Funding was listed as an issue but there are many ways in which students can be added to a project. There does not seem to have been any interest with the emphasis on other forms of training. One PhD student did his work on the household survey data from the previous small grant but attributed his knowledge and thesis to the current team members and the interaction that he had with them.

The team may have done themselves a disservice with respect to outlining the undergraduate training. They have not listed any achievements in this area but there were some noteworthy examples. The ST Group is located on the campus of one of the Kazakh Technical Colleges and students gained work experience in the ST laboratory on topics closely aligned with the project activities. The students from the Kyrgyzstan Agrarian University were closely associated with the KSBA laboratory and also involved in the project activities. The Head of the Livestock Development Department at this University was extremely supportive of the opportunities provided by the project for his students. Members of the team had given lectures to students groups on various occasions. Students had participated in the household surveys.

The general impression is that these activities should have been started much earlier in the project and that there have been many missed opportunities for graduate and undergraduate student training.

GENDER

Gender issues among pastoralists have been less well studied than among other producers, such as agriculturalists and fishers. The English literature on gender relations among the farm and herder households in Central Asia is also less extensive than on other parts of the world. To contribute to filling these gaps, there have been repeated requests to the PI and other researchers from the inception of the research to address gender issues more thoroughly. These requests have been communicated in various ways: through letters from the ME on revising the original proposal, in comments of the gender assessment carried out in 2003, and through the training and subsequent team meeting on gender held in Dublin in 2005.

Research Issues

Although women have been key participants in a number of the individual activities of the WOOL project and several of the activities aim to encourage women's economic advancement, key opportunities for documenting both baseline conditions and changing contexts of gender issues have unfortunately not been completed as a systematic part of the project's research activities, either at the farm/household level or on a wider scale in terms of relevant educational and economic policies that affect men and women's opportunities.

As has been noted in other sections of the report, the narrow focus of activities on fiber has screened out other useful and related research activities. Gender issues appear to have been understood by the researchers as relating only to women,¹⁵ or as being descriptive of normative patterns of behavior of men and women,¹⁶ rather than looking at relative constraints and opportunities for both men and women or investigation of the fundamental cultural practices and beliefs that shape gender relations as they relate to farm production, processing, and marketing.

One specific and positive effort has been developed under the Kyrgyzstan wool component. A questionnaire was administered to 150 women surveying various aspects of sheep farm management. Although carried out only on women, rather than with both women and men, it begins to document women's perceptions about the gendered division of labor and division of financial responsibility among herding families. The researcher is eager to continue and expand this study with field research on both women and men. Among the provisional findings, the researcher noted that women's roles in the household change significantly at different points in their life cycles and with their different status in the household. Women in general are significantly involved in livestock-raising, especially the milking and the sale of milk and other dairy products. Older mothers-in-law have greater decision-making power than younger daughters-in-law, and participate in decisions about both the purchase and sale of animals. Such findings – particularly if followed up by direct observation rather than only self-reporting – could provide extremely useful information for the design of extension materials and new interventions.

¹⁵ This understanding of gender as addressing only women is clear in the following paragraph from the first year work plan: "The project will encourage women's participation in the fiber marketing and training activities, as trainers as well as trainees, and emphasize their role in classing and sorting. Training for Central Asian participants on advanced fiber assessment techniques in Activity 5 will seek to include women."

¹⁶ Annual report for 2004.

A second effort focused on women has been Brent's activity to assist groups of Kazakh and Kyrgyz women who produce felt clothing and other items for export. Brent has been helping a group of five women to develop new market networks both in the US and between Kazakhstan and Kyrgyzstan to link groups of women felt producers and fine wool producers in both countries.

Training and Extension Issues

The training and extension programs have included both women and men, but men have dominated the attendance lists. Women's involvement has been more opportunistic rather than as result of any gender analysis to determine where women or men have been underrepresented and to make an effort to broaden recruitment to include the underrepresented group. Women have been overrepresented among the trainings on handicraft production and wool dyeing and spinning, as these are areas in which they have historically been involved. Similarly, women have received training in fiber measurement training, yet the team learned that in Kazakhstan it is more common for women to work in the fiber analysis laboratories, although in Kyrgyzstan, the head of KSBA's wool and fiber lab in Bishkek is a man, named Urmat Myrzakmatov, who was one of the participants on the Mongolia cashmere study tour, funded by the British Embassy in Kazakhstan.¹⁷ The point remains that the project has an opportunity to provide trainings that transform gender-based segregation in the labor market. Increasing gender equality would in this case be better achieved by exploring this pattern of job segregation.

Staffing

This project has involved a large number of women in its relatively short life span. Although the Lead PI is a man, the other activity component leaders have been women (Galvin, Brent, and Kerven). In addition, the head of the wool testing laboratory of the ST Group in Kazakhstan is also a woman.

¹⁷ Thanks to Carol Kerven for clarifying this point.

SUMMARY OF KEY FINDINGS

Accomplishments

- Each of the activity leaders (Stobart, Brent, and Kerven) has developed excellent working relationships with their host country colleagues.
- Institutional support, in the form of access to scientists and laboratory facilities, has been enthusiastically and generously supplied by the host country counterparts.
- Baseline data has been collected and analyzed on a range of topics from household production data to fiber measurements for both wool and cashmere.
- Training programs for operators and for professionals have been relatively numerous and have reached a large number of people. As reflected in comments to the review team, information was successfully communicated and remembered.
- A range of outreach materials have been prepared and disseminated, from videos to brochures.
- Links have been established between key segments of the market chain, particularly within each country between producers, traders, and processors.

Points of Concern

- Perhaps the most significant concern about the program is its problems in the management: in communication among project members, in creating a harmonious working environment for participants, and in managing the flow of information and resources across the project.
- A second important concern is the lack of linkage between the overall macro-economic and policy analysis and the selection of wool and cashmere as the research emphases.
- Although aspects of the research and extension findings have been distributed to herders, members of the private sector, and to researchers, there has been no clear overall publication or dissemination plan for research results.
- There has been little effort to analyze broader marketing issues in order to increase financial returns to the herders.
- The project has not incorporated any degree training into its efforts despite repeated requests for this and despite clear opportunities to work with students in the host countries who were affiliated with partner institutions.

In light of these findings, the team makes its recommendation to close this project and to have an open competition for additional research in the region because:

- The management issues affect the ability of the component leaders to expand together into needed new areas of work;
- the current project's tasks have been essentially completed and have established the necessary baseline information;
- the project has not responded in a timely manner to repeated requests to add expertise and focus on macro-economic and policy analysis of the two fiber industries;
- the student training component expected in projects supported by the CRSP has been weak; and,
- extension-related activities have been over-emphasized in relation to research for a CRSP project.

APPENDIX A:**Scope of Work
External Site Visit Review – WOOL****I. Adequacy of the Problem Model and the Quality of the Scientific Research**

- a) How does the Problem Model (PM) address a development issue of importance to the country(s) in which the project functions. Is the PM clear, fully developed, and scientifically sound?
- b) Is the scope of the research appropriate given the budget and timeframe? Does the budget accurately reflect the needs of the project?
- c) How do the objectives and activities fit the problem model?
- d) Are there aspects of the PM that are missing or are inappropriate? What are they?
- e) What is the quality of research being conducted? How does the research make a significant contribution to the relevant field(s) of science and how does it advance understanding of appropriate development processes?
- f) How does the research support a problem solving objective and does it link logically with the PM? Does it develop a technology that has development/science value? How can that technology be applied?
- g) How does the team's expertise match the research agenda? Is the level of contribution appropriate to the area of investigation? How does the team interact?
- h) Is the research agenda appropriately matched to the project's resources? Why or why not?
- i) How effectively has new knowledge been applied in the modification of the original PM and workplans?
- j) Evaluate the quality of publications and papers.

II. Progress

- a) Considering the funding history of the project, evaluate the accomplishments of the project and provide rationale for your evaluations.
- b) Have goals and objectives, as articulated in the workplans, been met? If not, please provide explanation.
- c) Should the project be continued or modified? Provide rationale for your evaluation.
- d) In what ways have the impacts and outputs been significant? Evaluate the mechanisms for dissemination of research results.
- e) What, if any, are the benefits to the US?
- f) Does the project have an effective plan for dissemination of research results? What is it?

III. Policy

- a) Do the project goals have policy implications? What are they and how have they impacted national development?
- b) Has policy been incorporated in the project design? At what level are appropriate policy makers engaged? (Ministries, provincial, regional, local, etc.)

IV. Training

- a) Rate the adequacy of the amount and quality of the training. Is there an appropriate mixture of long- and short-term training? Evaluate the impact of the training on participants.

- b) How does the human capacity building provide the basis for long-term capability to institutionalize the goals of the project?
- c) Evaluate the role of students on the project. Are students an integral part of the project? How are they selected and mentored?

V. Project Management

- a) Has the team developed mechanisms to ensure that local, national and regional needs and priorities will continue to be incorporated into the development of the research agenda? What are these mechanisms?
- b) Do regional collaborators and team members have a substantive role throughout the life of the project? What are these roles?
- c) Describe the project management structure and function. Is it appropriate for the type of research being conducted?
- d) Evaluate the intra-project communication. Describe strengths or weaknesses.
- e) Does the project management function effectively? Why or why not?
- f) Evaluate the quality of communication with all members including host country collaborators. Is communication adequate and frequent enough, or are there problems?
- g) How effective are operational decisions? What mechanisms have been incorporated for evaluation of ongoing work? Are they effective?

VI. Financial Management

- a) Have USAID and GL-CRSP financial management guidelines been implemented? What has been the track record of the project in submitting vouchers and using funds in a timely manner each year?
- b) Have cost matching requirements been met? What has been the effect of the cost matching requirements?
- c) Have funds been provided to the project in a timely manner each year? If not, please provide explanation.
- d) What is the level of support that the lead university and host country university provides to the project? Do the universities have any formal reviews, oversight and internal/external evaluations?
- e) Is the administrative cost of the project appropriate for the size of the project? Is the present structure cost-effective and efficient? What modifications should be made to improve the administrative performance of the project?

VII. Gender

- a) How were gender issues taken into account during project design and implementation?
- b) Has a gender component been incorporated into all activities as appropriate? If not, why not?
- c) How have US professional women been incorporated into the CRSP program?
- d) What are the contributions of each research project in supporting participation by US and host country women at the scientist, training and producer levels?
- e) Can project impact be disaggregated by sex?

VIII. Miscellaneous

- a) Has the project leveraged significant funding from other sources? Why or why not?
- b) Is the project regional? Is the rationale for regionalization clear? What are the

- linkages to regional activities? How appropriate are they? Should changes be made? Why? Are its linkages appropriate to its regional activities?
- c) What is the level and quality of inter-project collaboration?
 - d) Describe any significant linkages to other research/development projects (CRSP or non-CRSP)?
 - e) Identify unexplored areas of collaboration between projects that are feasible and have potential.

APPENDIX B:

**Agenda for External Evaluation Panel – WOOL Review
May 20 – 26, 2006**

Saturday, May 20th	
12:30 – 1:30 p.m.	External Evaluation Panel meeting with Susan Johnson, GL-CRSP Management Entity <i>Meet in Lobby of Almaty Hotel</i> <ul style="list-style-type: none"> • Review Process • Scope of Work • Team Assignments • Report Schedule • GL-CRSP/WOOL project background
1:30 – 2:30 p.m.	EEP Lunch with Bob Stobart, WOOL Project lead PI <i>Meet in Lobby of Almaty Hotel</i>
	<u>Individual Meetings with EEP</u> <i>6th floor, Almaty Hotel</i>
3:00 – 3:30 p.m.	Liba Brent, University of Wisconsin - Madison
3:30 – 4:00 p.m.	Aidos Smailov, Cashmere Component
4:00 – 4:30 p.m.	Carol Kerven, Cashmere Component
7:00 p.m.	Dinner
Sunday, May 21st	
7:30 – 8:45 a.m.	EEP meeting with Gilles <i>Almaty Hotel Restaurant, 1st floor, (Breakfast)</i>
9:00 a.m.	Meet in Lobby
9:15 – 10:30 a.m.	WOOL Project Presentations --Kazakhstan <i>Overview, Bob Stobart, Lead PI Cashmere Component, Carol Kerven Wool Component, Liba Brent</i>
10:30 – 12:30 p.m.	Tour of ST Group wool testing facility <i>Asel Imasheva, ST Group Lab Director</i>
1:00 – 2:00 p.m.	Lunch
2:00 – 3:30 p.m.	Travel to Mynbaevo Village

Sunday, May 21st (continued)	
	Meeting and Tour of Facilities
3:30 p.m.	Mynbaevo Institute of Sheep and Goat Breeding Kazakh Scientific Centre for Livestock Veterinary Research, Ministry of Agriculture <i>Dr. Bishtai Seidaliev, Director</i> <i>Prof. Serik Aryngaziev, Deputy Director</i> <i>Berik Aryngaziev, Head of Wool Lab</i> <i>Mukhan Nuraliev, Head of Goat Dept.</i>
5: 30 p.m.	Dinner at home of Serik Aryngaziev
Monday, May 22nd	
<i>The cafeteria on the 3rd floor of the hotel is open 24 hours and serves typical Kazak foods and beverages. We will also have snacks available for the drive. At the first interview, 9:00 am, tea and breakfast will be served.</i>	
7:00 a.m.	Depart for Ay Darly, Jambul district, Almaty province <i>Meet in Lobby</i>
9:00 a.m.	Arrival in Ay Darly <i>Accompanying the review team for the day:</i> <i>Bob Stobart, Lead P.I.</i> <i>Carol Kerven, Cashmere Component PI</i> <i>Serik Aryngaziev, Mynbaevo Institute</i> <i>Berik Aryngaziev, Mynbaevo Institute</i> <i>Aidos Smailov, Component Manager/Interpreter</i>
9:00 – 11:00 a.m.	Interview and tea with farmer in family's home (Yurta)
11:00 – 12:45 p.m.	Interview with second farmer
1:00 – 2:30 p.m.	Lunch in local café
2:30 – 4:00 p.m.	Interview with third farmer
4:00 p.m.	Depart for Almaty
7:00 p.m.	Dinner, on own

Tuesday, May 23rd	
7:30 a.m. – 8:45 a.m.	EEP meeting <i>Almaty Hotel Restaurant, 1st floor, (Breakfast)</i>
9:00 – 9:30 a.m.	Meeting KazRuno (wool buying company) <i>Almaty Hotel Restaurant, 1st floor</i> Tursun Gapashevich, Director
9:30 a.m.	Depart for Uzumbulak Village
1:15 p.m.	Arrival in Uzumbulak Village <i>Accompanying the review team for the day:</i> <i>Bob Stobart, Lead PI</i> <i>Liba Brent, Component PI</i> <i>Asel Imasheva, ST Group</i>
1:15 p.m. – 2:30 p.m.	Lunch at home of Orontai Shonov, Chief zootechnician <i>Joining the group, Mr. Timirkhan Bennebaev,</i> <i>Scientist, Mynbaevo Institute</i>
2:30 – 3:30 p.m.	Visit to Sheep-shearing station and sheep flocks
3:45 – 5:00 p.m.	Visit with local women spinners
5:00 – 6:00 p.m.	Dinner at the home of Chief zootechnician and meet with farm director
6:00 p.m. (arrive 10 pm)	Depart for Almaty
Wednesday, May 24th	
6:00 a.m.	Departure for Bishkek, Kyrgyzstan (Check-out of hotel)
8:00 a.m.	Breakfast at café enroute (EEP Meeting), arrive Bishkek around 10:00 a.m.
10:30 a.m.	Departure for Kyrgyz Sheep Breeders Association (KSBA) <i>Meet in hotel lobby</i>
11:00 – 12:30 p.m.	Presentation: Wool Component in Kyrgyzstan <i>Akylbek Rakaev, Manager KSBA</i> <i>Urmatbek Akmyrzaevich</i> <i>Kamchybek Tursunaleivich</i>

Wednesday, May 24th (continued)	
12:30 p.m.	Depart for Kemin Rayon, Kuttubai Village
2:00 p.m.	Lunch in Kuttubai Village
3:00 – 5:30 p.m.	Visit to sheep marketing cooperative “Kuttubai” <i>Jumgalbek Moldouisaev, Leader</i> <i>Shaiyk Mykyev, Member</i> Visit to Sheep shearing activity at Kuttubai
5:30 p.m.	Depart for Bishkek
8:00 p.m.	Dinner meeting of EEP
Thursday, May 25th	
7:00 a.m.	Breakfast meeting of EEP
8:30 – 12:30 p.m.	Meetings
8:30 - 9:15 am	Ministry of Agriculture and Water Resources <i>Baitemirov Baialin Janishevich, Deputy Minister</i>
9:30 – 10:00 a.m.	World Bank and Winrock International Farmer to Farmer program <i>Asyl Underland, World Bank</i> <i>Bolotbek Oruzbaev, Country Director</i>
10:15 – 11:00 a.m.	KSBA Board of Directors <i>Kashkarbaev Siezdbek</i> <i>Bokonbaev Ursulanbek</i> <i>Saralaev Asranbek</i> <i>Saliev Imanbek</i> <i>Babataev Kadyrbek</i>
11:15 – 11:45 a.m.	Kyrgyz Agriculture University <i>Professor Abdukerimov Asanbek, Department Head, Livestock Development</i>
12:00 – 12:45 p.m.	Lunch
1:00 – 2:00 p.m.	USAID Mission to Kyrgyz Republic <i>Dr. Clifford Brown, Country Representative</i>
2:00 p.m.	Depart for Almaty, Kazakhstan

Thursday, May 25th (continued)	
5:30 p.m.	Arrive in Almaty Check-in to hotel (near airport)
6:30 – 9:00 p.m.	EEP Dinner Meeting
9:00 – 9:30 p.m.	EEP Meeting with Lead PI (if possible, preliminary results)
12:15 a.m.	Depart for airport <i>Dennis Poppi</i> <i>Ralph van Gelder</i> <i>Gilles Bergeron</i> <i>Bob Stobart</i>
Friday, May 26th	
4:30 a.m.	Depart for airport <i>Deborah Rubin</i> <i>Susan Johnson</i>

APPENDIX C:**Meeting and Interview Contacts****Saturday, May 20, 2006, Almaty, Kazakhstan**

External Evaluation Panel Meetings (Poppi, Rubin, and Van Gelder) with

- Susan Johnson, Associate Director, Global Livestock CRSP
- Bob Stobart, Lead Principal Investigator, WOOL project, and Researcher, Wool component (Kyrgyzstan), University of Wyoming
- Liba Brent, Researcher, Wool component (Kazakhstan), University of Wisconsin
- Aidos Smailov, Research Assistant and Interpreter, Cashmere component
- Carol Kerven, Researcher, Cashmere component, Independent Consultant

Arrival of team member Bergeron

Sunday, May 21, 2006, Almaty, Kazakhstan

1. Presentations by WOOL Team members Stobart, Brent, and Kerven

Also present:

- Serik Aryngaziev, Professor, Deputy Director, Mynbaevo Institute of Sheep and Goat Breeding
 - Berik Aryngaziev, Head of Wool Lab, Mynbaevo Institute of Sheep and Goat Breeding
 - Mukhan Nuraliev, Head of Goat Department, Mynbaevo Institute of Sheep and Goat Breeding
 - Aidos Smailov, Research Assistant and Interpreter, Cashmere component
 - Nurgul Zhumasheva, Interpreter
2. Visit to ST Group wool testing facility
- Murat Otyunshiyev, ST Group
 - Asel Imasheva, ST Group Lab Director
3. Visit to Mynbaevo Institute of Sheep and Goat Breeding, Kazakh Scientific Centre for Livestock and Veterinary Research, Ministry of Agriculture, Kazakhstan
- Bishtai Seidaliev, Director, Mynbaevo Institute of Sheep and Goat Breeding
 - Serik Aryngaziev, Professor, Deputy Director, Mynbaevo Institute of Sheep and Goat Breeding
 - Berik Aryngaziev, Head of Wool Lab, Mynbaevo Institute of Sheep and Goat Breeding
 - Mukhan Nuraliev, Head of Goat Department, Mynbaevo Institute of Sheep and Goat Breeding
4. Serik Aryngaziev's home for dinner (located in Mynbaevo Village)

Monday, May 22, 2006, Ay Darly, Kazakhstan

Visit in Ay Darly to meet with three different livestock owners (one local Kazakh family and two ethnic Kazakh families from China) accompanied by Serik Aryngaziev, Professor, Deputy Director, Mynbaevo Institute of Sheep and Goat Breeding, and Jeksenbai Sisatov, Center for Livestock and Veterinary Research.

Tuesday May 23, 2006, Uzumbulak, Kazakhstan

1. Tursun Gapashevich, Director, KazRuno, a wool-buying company that is part of the ST Group.
2. Uzumbulak Sheep Shearing station
3. Orontai Shonov, Chief Zootechnician
4. Timirkhan Bennebaev, Scientist, Mynbaevo Institute of Sheep and Goat Breeding
5. Visit with three local women spinners who produce hand-spun yarn from local wool for the American market.
6. Orontai Shonov's house for dinner (Uzumbulak village)

Wednesday, May 24, 2006, to Bishkek, Kyrgyzstan

1. Kyrgyz Sheep Breeders Association (KSBA) offices
 - Akylbek Rakaev, General Manager of KSBA
 - Urmatbek Akmyrzaevich, Regional Manager, KSBA
 - Kamchybek Tursunaleivich, Regional Manager, KSBA
2. Kuttubai village
 - Members of the sheep marketing cooperative "Kuttubai" including:
 - Jungalbek Moldouisaev, leader
 - Shaiyk Mykyev, member
 - Others

Thursday, May 25, Bishkek, Kyrgyzstan

1. Kyrgyz Sheep Breeders Association (KSBA) offices
 - Bolotbek Oruzbaev, Country Director; Farmer to Farmer program Winrock International
 - Prof. Abdukerimov Asanbek, Kyrgyz Agriculture University, Head, Livestock Development Department
 - Dr. Abdugany Abdurasulov, Kyrgyz Agriculture University
 - Baitemirov Baialin Janishevich, Deputy Minister of Ministry Agriculture and Water Resources
 - Kyrgyz Sheep Breeders Association, Board of Directors
 - Kashkarbaev Siezdbek
 - Bokonbaev Ursulanbek
 - Saralaev Asranbek

Saliev Imanbek
Babataev Kadyrbek
Katira Junusheva
Altyn Baitokoeva

2. Johnson and Rubin also met with the Financial Manger, Burul Tashbaeva.
3. Clifford Brown, USAID Kyrgyz Republic Country Representative

Return to Almaty, Kazakhstan

4. Meeting with researchers Stobart, Brent, Smailov, and Kerven to share preliminary results of review

APPENDIX D:

Glossary

BIFAD	Board for International Food and Agricultural Development
CSU	Colorado State University
EEP	External Evaluation Panel
EPAC	External Program Administrative Council
GIS	Geographic Information System
GL-CRSP	Global Livestock Collaborative Research Support Program
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
HC	Host Country
IWTO	International Wool Textile Organization
KSBA	Kyrgyzstan Sheep Breeders Association
ME	Management Entity
NGO	Non-governmental Organization
OFDA	Optical Fiber Distribution Analysis/Optical Fiber Diameter Analyzer
PI	Principal Investigator
PM	Problem Model
SOW	Scope of Work
ST Group	Name of private sector business
USAID	United States Agency for International Development
WOOL	Label given to the Developing Institutions and Capacity for Sheep and Fiber Marketing in Central Asia project