

5.5 KARAKUL SURVEY

5.5.1 Introduction

A survey was carried out to collect data and information on Karakul production. This sector has been traditionally of great significance in Northern Afghanistan. Because it is a value added sector, it offers opportunities for income generation as an alternative to the production of illicit drugs. Very little is known about production figures and producers of Karakul in Central and South Asia in general. During the 90's, Karakul went into a deep decline in former Soviet Central Asia. This decline has been driven largely by two factors: (1) the disruption of Soviet-internal and export market channels after the break-up of the Soviet Union, and (2) the general decline in international demand for Karakul pelts, a development that parallels the decline in demand for pelts in the western industrialized world in general. However, anecdotal evidence from Central Asia suggests that in recent years, demand, in particular from countries of the former Soviet Union has been increasing again. Unfortunately, there are no reliable data on the Karakul sector available at all.

As a first step in the development of a Karakul research and development program, basic production information and producer perceptions need to be collected. The Karakul Survey was conducted in the northern provinces of Kunduz, Balkh, Faryab, Samangan, Sari Pul and Jawzjan. A total of 131 Karakul producers were surveyed.

The results also include information about the coefficient of variation because we felt that this additional parameter was useful, given the relatively small sample size and the fact that this is first recent published evaluation of Afghan Karakul production.



photo by Thieme

5.5.2 Flock Size and Distribution of Colour Types

In some areas, notably Balkh, answers to the questions about colour distribution in flocks were not answered. In order to ascertain colour distribution, the data set was filtered for each colour type to include only those records that were true zeros or above. Therefore, the colour type distribution statistics could not be combined into one table.

Table 115 Size of karakul flocks in different provinces

Province	Average Flock Size	STD of Flock Size
Balkh	168	161.69
Faryab	45.32	48.07
Jawzjan	197.27	339.84
Kunduz	181.61	142.22
Samangan	14.22	12.09
Saripul	101.67	113.68
Overall	133.95	189.87

Table 116 Number and proportion of GREY colour pelts in Karakul flocks from different provinces

Province	Average Flock Size	Average No of Grey Colour	Percentages of Grey Colour
Faryab	45.35	23.76	52.40
Jawzjan	96.50	43.14	44.71
Kunduz	181.61	129.10	71.09
Samangan	14.22	6.11	42.97
Saripul	36.25	21.25	58.62

Table 117 Number and proportion of SUR (golden-brown) colour pelts in karakul flocks from different provinces

Province	Average Flock Size	Average No of Sur Colour	Percentages of Sur Colour
Faryab	43.86	0.57	1.30
Jawzjan	96.50	0.29	0.30
Kunduz	182.80	17.13	9.37
Samangan	14.35	0.00	0.00
Saripul	36.25	0.00	0.00

Table 118 Number and proportion of BLACK colour pelts in karakul flocks from different provinces

Province	Average Flock Size	Average No. of Black Colour	Percentages of Black colour
Faryab	45.35	21.41	47.21
Jawzjan	96.50	53.07	55.00
Kunduz	181.61	35.95	19.80
Samangan	14.22	8.11	57.03
Saripul	36.25	15.00	41.38

Since the Sur (Golden-Brown) colour achieves the highest price on the market, higher proportion of Sur type animals would probably increase income for Karakul farmers. The association of high-priced colour types with lethal factors requires careful consideration, however.

Wealth distribution was defined by delineating 5 ownership classes:

Table 119 Ownership classes for karakul flocks

Ownership Class	Flock Size
1	1-15
2	16-49
3	50-99
4	100-499
5	> 499

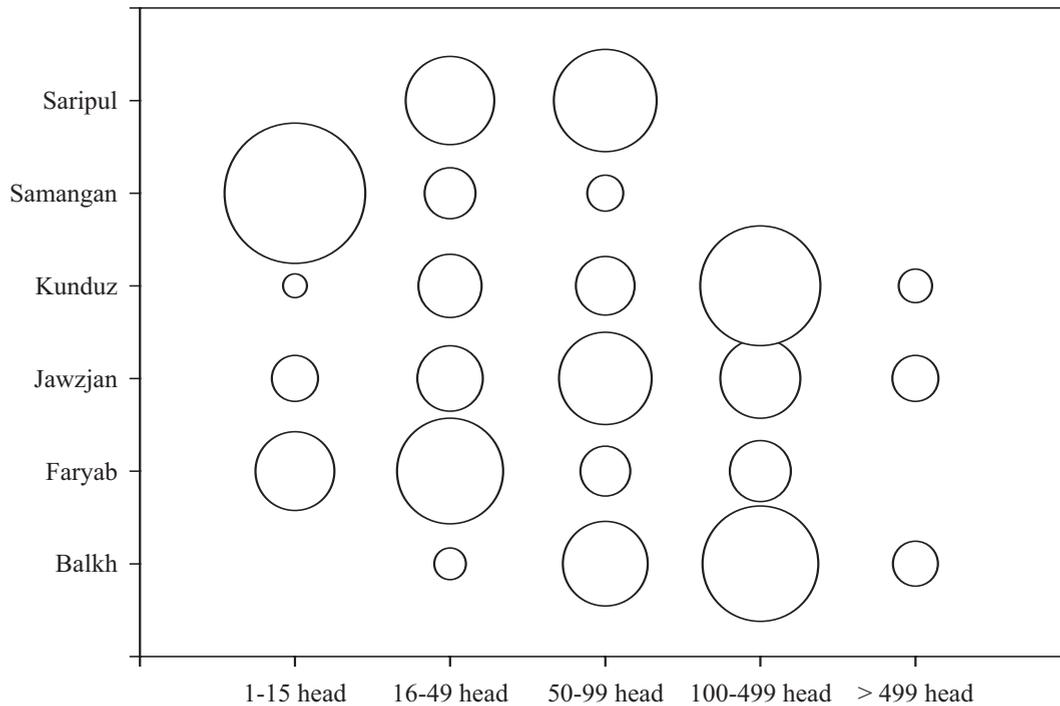
These ownership classes differ from the ones defined above for Level 2 summaries because only producers actually owning sheep were interviewed.

Table 120 Distribution of karakul flock sizes in different provinces

Province	Ownership class					Total Respondents
	1	2	3	4	5	
Balkh		4.35	30.43	56.52	8.70	23
Faryab	26.32	47.37	10.53	15.79		19
Jawzjan	9.09	18.18	36.36	27.27	9.09	22
Kunduz	2.44	17.07	14.63	60.98	4.88	41
Samangan	83.33	11.11	5.56			18
Saripul		33.33	44.44	22.22		9
Overall Average	17.42	19.70	21.21	37.12	4.55	132

These data are graphically summarised as follows:

**Figure 41 Karakul sheep wealth distribution
(percent respondents represented in proportion)**



There are several conclusions from these numbers. First, there is a very large variation in average flock size both between and with provinces (see coefficient of variation). Second, the SUR colour type is rare and sometimes absent. This is the colour that achieves the highest prices in the market. Clearly, there is considerable scope for production improvement. In Karakul sheep, the most expensive colours and curl types are associated with lethal factors. Therefore, the selection to increase Percentages and Numbers of these high-value pelt types is not a trivial undertaking and would benefit considerably from support by research and extension entities. Third, there are quite large flocks in Afghanistan, suggesting the potential to rebuild an industry that formerly was economically very important in the Northern provinces.

5.5.3 Pelt Production

According to Central Asian folklore, Karakul pelt production developed out of the practice to kill one lamb if a ewe had twins, especially in a bad forage year, because the milk production capacity of the Karakul ewe under range conditions suffices only for the successful rearing of one lamb. One should expect therefore a relationship between forage year and decision to pelt lambs rather than rearing them. This decision is based on rainfall. In Northern Afghanistan, most of the precipitation falls in the winter months. At lambing time in early spring, producers therefore have a good sense of expected forage production. Accordingly, the survey asked for typical pelt harvest averages in a bad and in a good forage year.

Table 121 Performance characteristics of karakul flocks in different provinces				
Province	Performance Characteristics	Average	STD	CV
Balkh	Lambing Rate	85.22	9.26	10.87
	Weaning Rate	65.22	8.78	13.47
	Pelting Rate (Good Forage Year)	34.00	28.71	84.43
	Pelting Rate (Bad Forage Year)	56.00	8.79	15.70
	Pelting Rate 2001	39.44	23.68	60.04
	Pelting Rate 2002	39.38	30.10	76.44
Faryab	Lambing Rate	96.84	17.49	18.06
	Weaning Rate	66.84	20.79	31.10
	Pelting Rate (Good Forage Year)	49.47	29.82	60.27
	Pelting Rate (Bad Forage Year)	42.63	28.07	65.84
	Pelting Rate 2001	31.54	26.27	83.28
	Pelting Rate 2002	63.33	100.03	157.94
Jawzjan	Lambing Rate	90.48	19.87	21.97
	Weaning Rate	65.24	15.92	24.41
	Pelting Rate (Good Forage Year)	5.00	10.25	204.94
	Pelting Rate (Bad Forage Year)	47.00	47.76	101.62
	Pelting Rate 2001	40.00	48.99	122.47
	Pelting Rate 2002	44.44	49.69	111.80
Kunduz	Lambing Rate	69.02	20.93	30.32
	Weaning Rate	53.50	27.44	51.28
	Pelting Rate (Good Forage Year)	75.12	20.62	27.44
	Pelting Rate (Bad Forage Year)	44.88	15.95	35.53
	Pelting Rate 2001	40.73	45.82	112.49
	Pelting Rate 2002	45.00	63.36	140.81
Samangan	Lambing Rate	77.78	10.83	13.92
	Weaning Rate	60.56	11.29	18.64
	Pelting Rate (Good Forage Year)	5.00	6.87	137.44
	Pelting Rate (Bad Forage Year)	55.00	15.37	27.94
	Pelting Rate 2001	35.56	20.61	57.96
	Pelting Rate 2002	25.56	18.32	71.71
Sari Pul	Lambing Rate	97.78	11.33	11.59
	Weaning Rate	75.56	16.41	21.71
	Pelting Rate (Good Forage Year)	73.33	41.37	56.41
	Pelting Rate (Bad Forage Year)	23.33	14.91	63.89
	Pelting Rate 2001	13.33	19.44	145.77
	Pelting Rate 2002	NA	NA	NA
Overall Averages	Lambing Rate	82.52	20.05	24.30
	Weaning Rate	61.92	20.68	33.40
	Pelting Rate (Good Forage Year)	47.59	37.16	78.08
	Pelting Rate (Bad Forage Year)	46.07	23.81	51.67
	Pelting Rate 2001	36.24	36.64	101.12
	Pelting Rate 2002	42.19	59.16	140.24

Interestingly, the results are not consistent and may be conditioned by differences between provinces in the general forage situation and feed availability. Usually, Karakul producers pelt most of their lambs in a bad forage year, and rear as many as possible (pelting only male) in a good year. This was the case in the provinces of Balkh, Faryab, Jawzjan, and Samangan, but not in Kunduz and Sari Pul. Lambing Percentages and Numbers was quite low in Kunduz and Samangan. This indicates considerable potential for improvement in nutrition and reproduction. This is even more evident for the weaning rate data. These performance data demonstrate the benefits that a development program could realize by improving nutrition and health services for Karakul production. On the other hand, these reproductive figures are too low for a speedy recovery of sheep flocks after the drought. Interventions in the Karakul sheep sector are necessary.



photo by Pittroff

5.5.4 Markets

5.5.4.1 Returns from pelts and wool

In order to gather information about recent developments, producers were asked if their returns for wool and pelts were better or worse than the previous year.

Table 122 Returns from the sale of pelts in 2002 compared to 2001

Province	Lower Returns	Higher Returns	NA	Number of Respondents	Percentages with lower returns
Balkh	23			23	100
Faryab	19			19	100
Jawzjan	21		1	22	95.45
Kunduz	28	12	1	41	68.29
Samangan	6	2	10	18	33.33
Sari Pul	9			9	100
All	106	14	12	132	80.30

On average, producers reported lower returns, with the notable exception of Samangan. This may suggest regional differences in marketing. Unfortunately, there are no marketing studies available for Karakul pelt production. Most likely, the market is dominated by a few traders that buy directly from producers at lambing time. This may explain why in one province apparently better prices were paid. A better understanding of the Karakul marketing channels in Afghanistan, and indeed Uzbekistan and Turkmenistan (all these countries are likely served by the same traders) is required to develop interventions that help producers directly. The total absence of any quality control and any assistance in training in pelt treatment and conservation must play a role in the economic returns for producers. This could be improved.

Table 123 Returns from the sale of wool in 2002 compared to 2001

Province	Lower Returns	Higher Returns	NA	Number of Respondents	Percentages with lower returns
Balkh	23			23	100
Faryab	19			19	100
Jawzjan	10	11	1	22	45.45
Kunduz	29	11	1	41	70.73
Samangan	7	1	10	18	38.89
Sari Pul	9			9	100
All	97	23	12	132	73.48

The situation for wool sales mirror the results obtained for the pelt market. Again Samangan was the exception. The fact that most of the carpet wool in Afghanistan is imported would suggest good market potential for home-grown wool. However, there is not a single mill in Afghanistan; consequently, wool produced in Afghanistan is hand-spun and can likely not compete with wool purchased at low prices from New Zealand and Europe. Again, an intervention program should look at the market and intermediary processing. Investing in a wool mill in Afghanistan could be a profitable enterprise, if initially some regulation of the wool market was enacted by the Government. Definitely, this could help Afghan sheep producers in rebuilding their flocks and businesses.

5.5.4.2 Market Opportunities

The farmers were asked about current and expected market opportunities. First it was of interested to see if pelts and wool sales differed from the previous year.

Table 124 Market opportunities for karakul pelts					
Sale of pelts in 2002 compared to 2001					
Province	Less	More	NA	Number of Respondents	Percentages of Respondents who sold less
Balkh	14	8	1	23	60.87
Faryab	17	2		19	89.47
Jawzjan	17	4	1	22	77.27
Kunduz	23	18		41	56.10
Samangan	12	1	5	18	66.67
Sari Pul	9			9	100
All	92	33	7	132	69.70

The reasons for lower sales could be manifold, including the desire to rebuild flocks. Therefore, these numbers do not reflect future intentions of producers.

Table 125 Market opportunities for karakul wool					
Sale of karakul wool in 2002 compared to 2001					
Province	Less	More	NA	Number of Respondents	Percentages of Respondents who sold less
Balkh	5	18		23	21.74
Faryab	12	7		19	63.16
Jawzjan	10	10	2	22	45.45
Kunduz	23	14	4	41	56.10
Samangan	13	2	3	18	72.22
Sari Pul	9			9	100
All	72	51	9	132	54.55

The wool market seemed to have been better than the pelt market, but still more farmers reported less wool sales than those reporting higher wool sales. Without more detailed information about regional and international markets, these data are difficult to interpret.

Table 126 Interest of customers for buying more or less pelts					
Province	Less	More	NA	Number of Respondents	Percentages of Respondents who expected to sell less
Balkh	11	12		23	47.83
Faryab	12	7		19	63.16
Jawzjan	19	2	1	22	86.36
Kunduz	1	40		41	2.44
Samangan	2	7	9	18	11.11
Sari Pul	9			9	100
All	54	68	10	132	40.91

Overall, sheep producers had a somewhat optimistic view of the pelt market.

Table 127 Interest of customers for buying more or less wool

Province	Less	More	NA	Number of Respondents	Percentages of Respondents who expected to sell less
Faryab	12	7		19	63.16
Jawzjan	12	9	1	22	54.55
Kunduz	1	34	6	41	2.44
Samangan	8	7	3	18	44.44
Sari Pul	9			9	100
All	51	71	10	132	38.64

The same result was obtained for wool. Again, farmers in Kunduz were the most optimistic.

Finally, farmers were asked if they would be interested in producing more pelts, and which colour obtains the best price for pelts.

Table 128 Interest of customers for producing more or less pelts

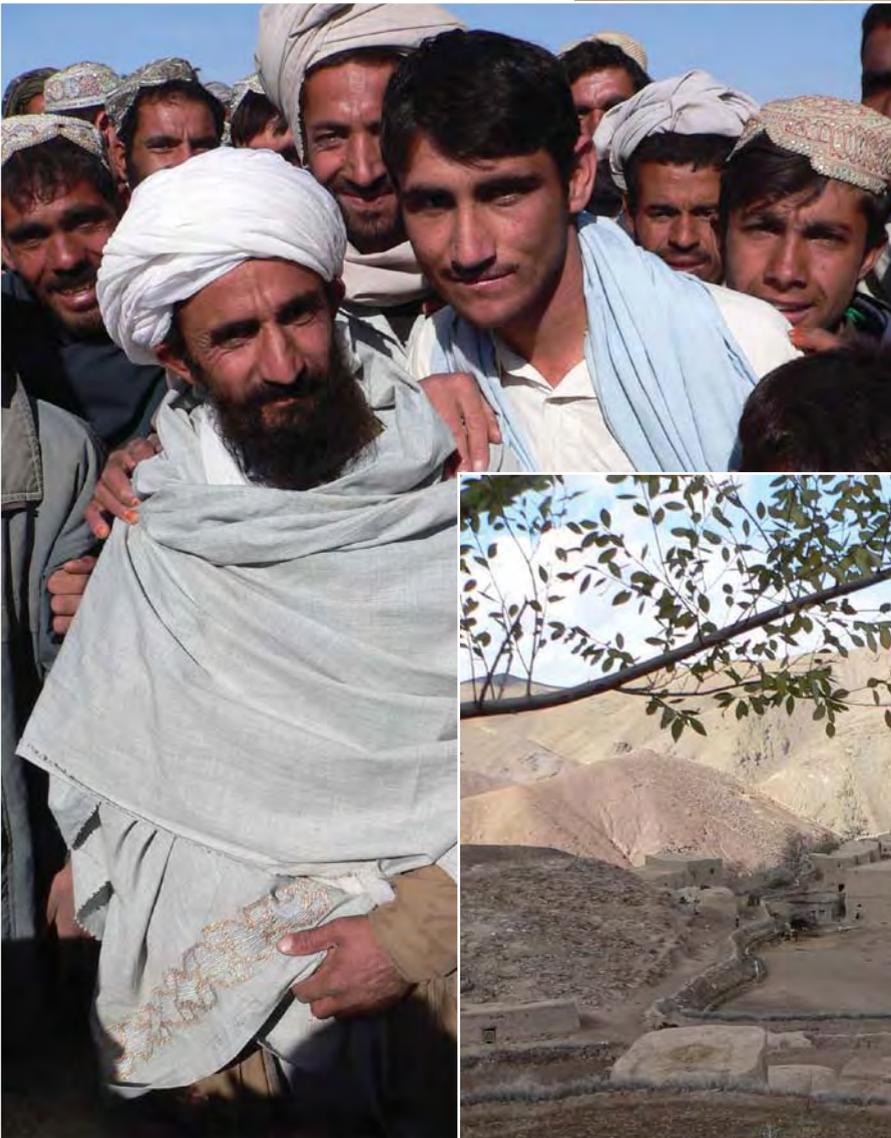
Province	Less	More	NA	Number of Respondents	Percentages of Respondents who are interested in producing more
Balkh	2	21		23	91.30
Faryab	7	12		19	63.16
Jawzjan	10	11	1	22	50.00
Kunduz		39	2	41	95.12
Samangan	9		9	18	0.00
Sari Pul	3	5	1	9	55.56
All	31	88	13	132	66.67

With the exception of Samangan, farmers were clearly interested in Karakul production. It would definitely be of interest to conduct follow up work in Samangan to clarify.

Table 129 Colour of pelts for which best price was obtained

Province	Grey	Sur	NA	Number of Respondents	Percentages of Grey
Balkh	23			23	100
Faryab	19			19	100
Jawzjan	22			22	100
Kunduz	34	7		41	82.93
Samangan	3	12	3	18	16.67
Sari Pul	9			9	100
All	110	19	3	132	83.33

In international markets, the SUR colour usually achieves the highest price. The fact that with the exception of Samangan province most farmers listed GREY as the colour fetching the best price suggests perhaps a preference for that colour that is typical for the market in Afghanistan itself. This further demonstrates the need for market studies to design interventions that help revitalize the Karakul sheep sector in Afghanistan.



photos by Pittroff

6. DISCUSSION

6.1 CENSUS DATA SUMMARIES

Previous data on livestock numbers can be found in FAO surveys undertaken since 1995 (1995, 1997/98 and 2000). Some areas covered in 1995 were omitted from the larger coverage of 1998, because of security and accessibility problems. Previous surveys, due to numerous constraints, could not attempt a systematic estimation of comprehensive livestock numbers. Further, in the absence of reliable human demographics and consistent information about location and administrative settings of human settlements (as explained above, there is no consistent district database), it was impossible to develop a sampling frame that would have allowed for truly randomized sampling on either of the two levels. Consequently, the method of total enumeration was used for Level 1.

No reliable data exist on which to base estimates of the proportion of families or communities included in prior surveys. Accordingly, a comparison of the Afghanistan National Livestock Census data to total numbers reported in previous surveys is not sensible, but nevertheless the numbers per household may give a general indication of livestock numbers pre-drought, together with the changes that have occurred between 1995 and today.

Livestock owned per family, and sheep numbers in particular have clearly fallen sharply. Although the decline between 1998 and 2003 appears steeper than between 1995 and 1998, changes were already underway during the earlier period. There are reports of trans-border movements of livestock by emigrating families, and of returnees leaving stock behind while they investigated the situation in Afghanistan for themselves.

The time of year of the surveys is also important because the Kuchi herds may or may not be present. The Kuchi population in the south and south-east of Afghanistan spend the winter in Pakistan or in districts of Afghanistan close to the border (FAO, 1999). With the current security situation along the border area, it is probable that many would have chosen to remain in Pakistan. During the 1995 survey, the average sheep flock for Kuchis was 100 head, and nationally the total livestock owned by Kuchis was equal to the number owned by the resident population. The present census only captured records from 29,000 Kuchi families, far fewer than were recorded by the limited surveys during 1995 (59,000 families) and 1998 (75,000 families).

Table 130 A comparison of livestock numbers per family from FAO surveys and census results between 1995 and 2003

Species	1995 Survey		1998 Survey		2003 Census
	All	Resident	All	Resident	All
Cattle	3.66	3.75	2.51	2.75	1.22
Sheep	21.93	12.59	14.20	7.93	2.88
Goats	9.40	5.67	5.76	4.38	2.40
Donkey	1.09	0.96	0.71	0.62	0.52
Camels	0.41	0.12	0.23	0.07	0.06
Poultry	11.56	11.86	6.84	7.01	4.00

Given that a far smaller Kuchi population was captured by the 2003 Census, a comparison would be better made with the stock holdings of resident families in previous years. On this basis it is still clear that livestock holdings have declined and that sheep have been particularly hard hit by adverse conditions.

Limited livestock data can be found in the Agricultural surveys undertaken by FAO twice yearly, winter and summer. In the current census, livestock numbers per family have been shown to be considerably reduced from pre-drought values. The survey undertaken in May-June 2002 collected data from 5000 farms in 540 villages across all 32 Provinces and agro-ecological zones. The results indicated that on average a typical farm owned two cattle, four sheep, four goats and six birds. Compared to the previous year, livestock numbers and the proportion of farms keeping livestock had decreased. Survey data over the years 1998-2002 indicated livestock numbers had fallen faster in the later years of the drought.

Preliminary results from the Agricultural survey in winter 2002 indicated that both livestock numbers and proportion of farmers with livestock had started to increase compared to earlier in the year. More information is needed on the marketing patterns for livestock to understand the significance of these observations.

The present Census shows that over the country as a whole, livestock numbers per family are lower than found in the surveys.

6.2 REGIONAL PRODUCTION SYSTEM AND PRODUCER CHARACTERISTICS

The classification of provinces into agro-ecoregions was based on expert opinion. Provinces that are similar in terms of production calendar, natural resource endowment and climatic conditions were grouped together. Badakhshan is different enough from all other provinces to merit definition as a unique agro-ecological region. From Level 1 data, several summary statistics were computed that demonstrated regional differences in livestock wealth, including species-specific differences. These data help understand subsequent summaries on the basis of agro-ecological region.

Forage production

The forage production identified wheat straw, Shaftal (Persian clover), Lucerne, maize straw and maize as the important cultivated and crop-aftermath forages produced on farm. There were considerable differences between agro-ecological regions in some forages, but clearly the most important on-farm feed resource across the whole country is wheat straw. Among the purchased feeds that are currently used, cotton seed cake, wheat straw, wheat bran and Lucerne are the most popular. When asked about preferences for purchased feeds, farmers tended to favour concentrate feed.

When planning interventions for on-farm forage production, the differences between regions should be taken into account. Except for the northern region, farmers seem to favour forages and crop aftermath. Shaftal was particularly popular in the East and Centre-East regions.

Length of feeding period

On average livestock is out on pastures for more than half of the year. Animals need to be fed in the winter between 4 and 8 months, depending on region. The very long period for Centre-East is clearly conditioned by Kabul (see Appendix for province-level data), due to the limited grazing capacity around Kabul City. Information about grazing periods was not asked separately for the different livestock species. However, it is clear that large numbers of the lactating cattle, especially in the East and Centre-East, are also stall-fed during most of the spring and summer months.

The length of the winter feeding period compounds the generally extremely low forage production capacity to create a 'winter feed gap', probably the most critical constraint for livestock production in most parts of Afghanistan. This is definitely the most critical intervention needed. However, it must be recognized that this constraint limits the number of animals grazing rangelands the rest of the year. Given the extremely deteriorated condition of rangelands in Afghanistan (appropriate quantitative data are lacking and should be urgently procured), the 'winter feed gap' may currently be an important safety mechanism preventing further, perhaps irreversible destruction of rangelands. This implies that in locations, where grazing of livestock is important, forage interventions must not take place outside a watershed rehabilitation context, lest incentives be created to even further increase pressure on already overstressed rangeland grazing resources.

Production calendar

The forage year appears to begin in March for most of the country. This coincides with the main calving and lambing periods and the begin of lactation for a large proportion of the livestock. The average early turnout in the northern and western regions is somewhat surprising. Certainly, the begin of the forage year or grazing season in higher elevations occurs much later. The distribution pattern for end of grazing season was much less clear. For most of the country, the grazing season ends in September - November. The western region is relatively late with most respondents indicating November as the end of the grazing period. However, Kuchi nomads begin leaving higher elevation pastures in some areas as soon as late August.

Supplementary feeding can begin as early as September; in the northern and western areas, farmers start supplementation in November, which coincides with the end of the forage year. The end of the supplementary feeding period again mirrors the answers given for the grazing period.

Markets, Trading Partners and Sales Decisions

March and September are the months most livestock are sold. In March, farmers have cash needs for inputs for crop production. In the autumn, farmers typically sell animals either ready for market (lambs/kids) or sell those animals in excess of available feed resources. Autumn markets, therefore, are good indicators of the forage supply situation. Fluctuations in numbers of animals sold on autumn markets and associated price changes are a good indication of the severity of the 'winter feed gap', especially if high numbers of draft animals are sold. These dynamics should be monitored as they are a good indicator of the ability of farmers to successfully plant their spring crops.

Farmers were asked what type of animal they sell first, and which type of livestock they will try to keep under all circumstances. The species most often mentioned in both categories was cattle. What appears to be contradictory at first sight makes perfect sense when considering the dynamics of the forage situation. Farmers with low winter feed supplies will often take chances and try keeping small stock. However, they plan carefully their available forage supply for cattle and when insufficient, they will sell their most valuable animals rather than risking losing them. Although autumn market prices are lower, draft animals are still needed until November for ploughing in most places and will get acceptable prices. These answers are consistent with the general conclusion that cattle are the most important livestock species in Afghanistan.

Priority categories for livestock sales were further broken down. Multiple answers could be given to these questions. Across the entire country, the most frequently given answer for selling cattle was to purchase feed. There were some differences between regions in terms of the age category sold first, but not within region. The average distance to markets was about two hours.

Local traders were the most important business contact for most farmers, followed by regional traders. This suggests that butchers seem to rely on traders when procuring animals for slaughter. Farmers generally reported an increase in livestock prices in 2003, which is reflective of the fact that the drought had broken and demand for animals was higher. Most farmers reported that they had sold more animals than in the year before, and that they earned more money. Cows sold best in most locations.

Wealth distribution

The data on wealth distribution show a rather clearly regionally differentiated picture. Ghazni, Jawzjan, Badghis and Hirat are cattle-poor, the three last provinces especially because they had been hit hard by the drought. In the case of Jawzjan, traditionally a sheep production region, this may have to do more with the agro-ecological conditions than true poverty, as sizeable sheep holdings can be found in this province. However, in Jawzjan there is also a higher than average number of farmers not owning any livestock at all. The data provide clear evidence of a correlation of drought effects with livestock wealth. The western region had the highest number of farmers with no cattle at all, and the lowest number of farmers with more than 10 head of cattle. The central region was also cattle-poor, a consequence of the past drought and years of conflict. The eastern region, on the other hand, is relatively cattle-rich. Numbers for sheep and goats reflect regional characteristics discussed before (most larger sheep holdings in the north, most large goat holdings in the east).

Age structure

The Level 2 age structure data are similar to Level 1 although they indicate a more positive situation. It must be taken into account that no truly randomized sampling frame could be developed for the Level 2 surveys, which is discussed in more detail in the chapter about Methods. Accordingly, comparisons between Levels have inherent shortcomings. The conclusion that the off take potential of Afghan livestock populations is generally low due to inherently low reproductive performance is upheld, however. Livestock dynamics models (for example BAPTIST, 1992) can be parameterized with Level 2 and more detailed off take scenarios can be simulated on the basis of these data.

The reasons given for culling support the interpretation of the market data given above. While obviously the most important reason to sell an animal is old age, feed shortage is the second most frequently cited reason to sell animals.

6.3 WOMEN SURVEY

The women survey focused on three areas: work distribution between men, women and children, decision making authority, and goals, preferences and problems formulated by the women farmers. Questions about work distribution and decision making were by livestock species. The results indicate that the responsibility for specific tasks is distributed among genders and age groups in characteristic ways independent of livestock species. Activities that would require work outside the homestead compound are mostly handled by men and children. Feeding livestock (at the homestead) is typically a task for which women are responsible, whereas herding grazing animals is a task performed by children and to a lesser degree by men. Watering animals, tending young and milking animals is the responsibility of women. Treating sick animals is a task performed mostly by men; however, for small ruminants, the involvement of women in animal treatment is larger. These clear patterns of division of labour suggest the need to consider gender in interventions. For example, tuberculosis prevention should specifically target women since they are most exposed to lactating animals. Likewise, they are responsible for feeding animals on farm. Feeding improvement interventions targeting especially dairy animals should be aware of the need to consider special training needs for women, but also the fact that decisions about input supply are largely made by men. Since the herding of grazing animals is largely a task of children, interventions increasing work load due to herding will likely impact school enrolment and should be carefully monitored.

Decision making in livestock production is mostly a domain of men, but for some important activities, such as purchasing cattle, or selling livestock in general, more than a third of the respondents reported that women make these decisions. Women also decide milk and wool sales. Women play an important role in decision making about treating sick animals and this should be reflected in the design of veterinary programs.

The vast majority of women selected cattle as the species preferred for expansion of their livestock holdings. The most frequently cited intention of using cattle was milk production for sale. The next most important species for women was poultry; the most frequent reason given was egg production for sale. Sheep were selected only by about 15 percent of all respondents as the livestock species which they preferred for future investments. More than half of those respondents preferring sheep did not actually own sheep, but all of the women who wanted to have (more) sheep, also owned cattle. Preferences for sheep were explained by milk and meat, and to a lesser degree by wool production. Goats were not a preferred livestock species for women farmers, and proposals to expand goat production or introduce specific goat systems such as dairy-emphasis goat production should be carefully piloted and evaluated for adoption.

Most women named problems with feeding as the most important for cattle, sheep and goat production, followed by better veterinary health care. Answers for other possible problems were heterogeneous and should be consulted for the planning of specific improvement interventions.

Answers given for desired improvements largely reflected the corresponding answers for the main problems. Improvement of feed supply and veterinary health care were the most frequently requested interventions. In general, the respondents did not seem to perceive labour, market access or lack of knowledge as burning problems. Especially the answers regarding the lack of knowledge suggest potential difficulties in implementing farmer training programs.

6.4 KARAKUL SURVEY

The Karakul survey produced some limited information about production parameters and market opportunities. However, the high variability of the given answers precludes strong conclusions. It is also not clear from the survey how much Karakul sheep production in general is contributing to the livelihoods of the farmers. Large Karakul sheep herds exist and most interviewed farmers expected to sell more, and were interested in producing more. Karakul production was traditionally an important livestock sector in Afghanistan; considerable market research is necessary to determine its future potential.



photos by Pittroff

