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Cashmere Value Chain Analysis Afghanistan



This publication was produced for review by the United States Agency for International Development. It was prepared by Frauke de Weijer, Cashmere Value Chain Development Consultant, The USAID/Accelerating Sustainable Agriculture Program (ASAP).

CASHMERE VALUE CHAIN ANALYSIS AFGHANISTAN

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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EXECUTIVE SUMMARY

- This value chain analysis is conducted by ASAP, the USAID-funded Accelerated Sustainable Agriculture Program. It will provide the basis for ASAP's interventions in the Cashmere Value Chain, and will lay the foundation for ASAP's cooperation with other agencies active in the sector.
- Cashmere is the fine, down-like undercoat of the cashmere goat. An estimated 90-95% of Afghan goats are cashmere-producing.
- Afghanistan is the third producer of raw (greasy) cashmere in the world ($\pm 7\%$), after China ($\pm 72\%$) and Mongolia ($\pm 18\%$). The quality of Afghan cashmere also ranks third, again after China and Mongolia. Currently Afghan cashmere is often equated with Iranian cashmere, in spite of its quality being considerably better.
- Currently Afghanistan exports around 1000 MT of cashmere on an annual basis, almost all from Herat. The main trade centre is Herat, where 6-8 exporters assemble and export the cashmere.
- Cashmere is harvested only in limited areas of Afghanistan, most notably in the Western provinces of Herat, Farah, Ghor and Badghis, and to a degree in the surrounding provinces. This report estimates that only around 30% of the Afghan cashmere goats are currently being harvested, which means that tremendous production increases (of 200-300%) can be obtained when farmers were made aware and trained on cashmere harvesting techniques.
- Afghanistan exports almost all of its cashmere in its raw (greasy) form, and with the exception of one newly established factory in Herat, no processing of cashmere takes place within Afghanistan. Most of the value of the Afghan cashmere is therefore captured outside Afghanistan.
- The processing and manufacturing industry is heavily dominated by China, which aims actively at controlling the entire cashmere processing and manufacturing industry. An aim which has been made easier by the expiry of the Multi-fibre Trade Agreement. China, as well as Mongolia, have an overcapacity in their processing industry, causing a 'hunger' for greasy cashmere, as evidenced by the fact that 50% of Mongolian cashmere is smuggled into China.
- Cashmere final products (shawls, scarves, sweaters and cashmere fabric for men's suits) have two distinctly different markets; the high-end market, dominated by European companies holding brand names, and the low-end market, dominated by China.
- European companies are struggling in an increasingly competitive market to maintain access to supply of raw material. This provides an opportunity for Afghanistan to enter into strategic alliances with European companies, in a bid to obtain higher prices for its cashmere. At the same time, there is a strong demand from China for raw material, which Afghanistan can also tap into. In an ideal-case scenario, Afghanistan would sell its highest quality to Europe and its lowest quality to China.
- The harvesting methods that are predominantly used in Afghanistan (shearing) entail substantial value adding activities by the farmers (hand-dehaired of the shorn fleece). Therefore within Afghanistan, most of the value sits with the farmer. Contrary to public belief, the traders and exporters do not place large mark-ups on the price.
- International experience shows that combing is a more effective method of harvesting cashmere, as it leads to cleaner, purer cashmere with a longer fibre length. In Afghanistan, very little combing takes place, and shearing / hand-dehaired dominates. The Herati exporters generally do not place a premium on combed cashmere, and some even pay a

lower price for combed cashmere, out of a fear that combed cashmere will be of inferior quality. ASAP has conducted an experiment to test these assumptions, and the results are being awaited.

- Two types of cashmere exist in Afghanistan; the more expensive spring cashmere (*bahari*) harvested of live animals during spring, and the cheaper skin cashmere harvested of the skins of slaughtered animals. The exporters tend to blend the two types together to produce an average product for an average price. International (mostly European) buyers would prefer the qualities to be kept separate, with prices paid dependent on quality.
- No quality control mechanisms exist in Afghanistan, and the trade is based entirely on trust. Most export of Afghan cashmere goes via Belgium, which used to be the wholesale market place. There is a heavy reliance on one company that acts as an agent for most of the Afghan exporters. Internationally Afghan cashmere does not have a very good reputation, due to the fact that the quality is often blended or adulterated.
- ASAP will start training the farmers in the northern provinces on the value of cashmere, and its harvesting methods. ASAP will also aim at establishing marketing channels for cashmere in areas where they are currently unavailable. Training (existing or new) traders and aiming at making working capital available to them is among the strategies pursued by ASAP.
- ASAP will encourage the establishment of a processing industry in Afghanistan, through private sector agents. ASAP will encourage (domestic and foreign) cashmere industry actors to take an interest in the cashmere industry in Afghanistan, and will facilitate private sector investment initiatives when such actors may be found.
- ASAP aims at working together closely with the World Bank Horticulture and Livestock Program (HLP), which will focus in particular on ways to improve the quality and the quantity of the Afghan cashmere.
- ASAP will also collaborate with ASMED, in particular on issues related to engaging with the current exporters to organize themselves to improve quality control measures, and improved marketing of Afghan cashmere.

INTRODUCTION

The USAID-funded Accelerating Sustainable Agriculture Program (ASAP) is committed to create broad-based, market-led agriculture development with the aim to provide economic opportunities for rural Afghans. The cashmere value chain is one of the selected value chains on which ASAP will concentrate.

This report provides an overview and analysis of the Cashmere Value Chain, linking the global context to the national context, with the aim of determining Afghanistan's competitiveness and identifying main leverage points and key strategies to improve Afghanistan's competitiveness and promote development in a pro-poor manner.

It will provide the basis for ASAP's interventions in the Cashmere Value Chain, and will lay the foundation for ASAP's cooperation with other agencies active in the sector.

METHODOLOGY

This report is based upon the collection and analysis of a number of information from a number of sources:

- 1) Structured interviews with key actors in the Western region.
 - farmers
 - shopkeepers at district and provincial level
 - main exporters
- 2) In-depth open interviews with farmers, veterinary field unit staff, and traders in other regions of Afghanistan (Mazar, Kunduz, Takhar).
- 3) Cashmere Quality survey
 - A cashmere quality survey was implemented in 311 districts of Afghanistan, covering all provinces (with the exception of Badakhshan).
 - Implementation was conducted by DCA, PRB and AVA.
 - Sample collection and filling of questionnaires was conducted by VFU staff, monitored by DCA, PRB and AVA¹.
 - Cashmere samples were collected in 311 districts of Afghanistan.
 - Questionnaires were filled in these same districts:
 - o VFU level questionnaire
 - o Cashmere buyers
 - o Farmer level questionnaire
 - Data were obtained on:
 - o Volumes
 - o Prices
 - o Breeds of goats
 - o Value adding activities
 - o Ways of transporting
 - o Specific information pertaining to the samples (breed, age, girth, etc)
- 4) Regional Cashmere Conference in Kyrgyzstan, which was held from 27th to 31st of January 2007.
 - Presentations given at the Conference
 - Continuous information exchange with leading cashmere experts

¹ In areas where security did not allow close supervision of the VFU staff, the VFU staff were called to the regional centres where they received the training.

- Literature sources

Validation of data:

Price information for the value chain analysis was obtained from the different actors along the value chain, and cross-checked with each other. Prices for raw cashmere were obtained from farmers, district and provincial level assemblers and the exporters, and margins were calculated accordingly. Export prices could not be verified independently, but physical invoices were seen. Prices for dehaired cashmere and wholesale prices for final garments are based on interviews with various international traders and processors. Retail prices for final garments were obtained from interviews with international cashmere traders, from visits to retail stores and from internet retail websites.

Information obtained and analysis conducted was shared and discussed with the Altai researchers, working on a report for various sectors including cashmere for ASMED (Afghanistan Small and Medium Enterprise Development program).

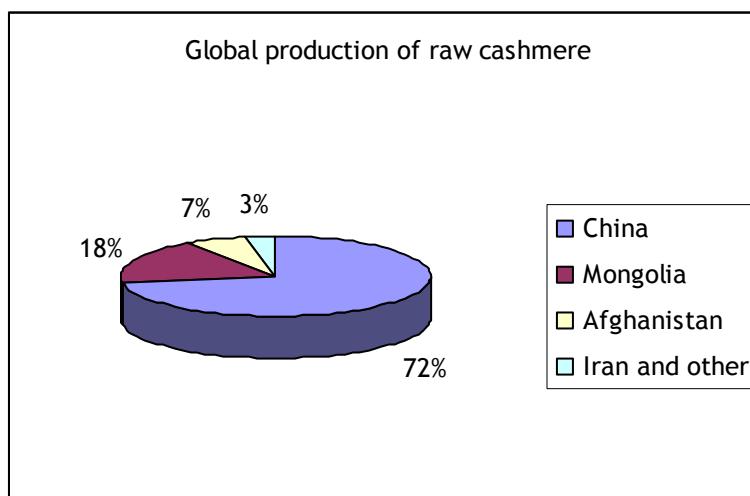
The questionnaires of the cashmere quality survey contained information provided by farmers, VFU staff, and cashmere buyers. Data stemming from the various sources were cross-checked with each other, and in case of inconsistency confirmed with the VFU staff member who conducted the interviews, or in his absence with the monitor who supervised the exercise.

Certain results from the cashmere quality survey, and the harvesting methods quality tests are still being awaited,. A revised version of this report will be prepared when all these results have been obtained and compiled.

WHAT IS CASHMERE?

Cashmere is the fine, down-like undercoat of the cashmere goat (*Capra Hircus Laniger*), which serves as a layer of insulation during the cold winter months. During the spring, the cashmere moults spontaneously, or is harvested by the farmer before it's shed.

Cashmere goats dwell in the Central Asian highlands, including Afghanistan, where the local goats are cashmere producing. The production of cashmere is dependent on genetic characteristics, and influenced by climatic and nutritional factors.



World wide production levels are estimated at around 16.000 MT annually, although statistics are doubtful and estimates vary widely per source. Main producing countries of cashmere are China, Mongolia, Afghanistan (ranking third), and Iran.

Fig 1: World production of raw cashmere (compiled from various sources)

Processing stages

The raw, or greasy, cashmere is being collected from the goat, and needs to undergo a number of processing stages before it can be transformed into high value garments.

Processing stages	
Sorting	Sorting per colour and per quality
Scouring	Removing dirt, vegetable matter and grease
Dehairing	Removing the coarse outer hair. Generally the first step is hand-dehairing, followed by machine-dehairing
Spinning	Spinning the fibre into yarn
Knitting or weaving	Producing sweaters of fabric

Table 1: Processing stages (source: Alashan Cashmere Co.)

Dehairing

After machine dehairing, some coarse hair tends to remain; the 'residual hair content':

- 3% is minimum legal definition; but essentially has no end-use
- 0.5% for weaving purposes
- 0.2% or lower for knitting purposes

Various types of dehairing machinery exist, with the most high-tech technology being produced in Europe. (source: Alashan Cashmere Co.) In China, many processing companies still use relatively cheap dehairing equipment, which tend to break the fibre.

Definition of cashmere

The most important determinants of a natural fibre are the species that produce it, and the diameter of the fibre. Cashmere fibre diameter is generally between 12 and 19 micron, which compares well to other natural fibres. The graph below represents the various natural fibres that are considered luxury products.

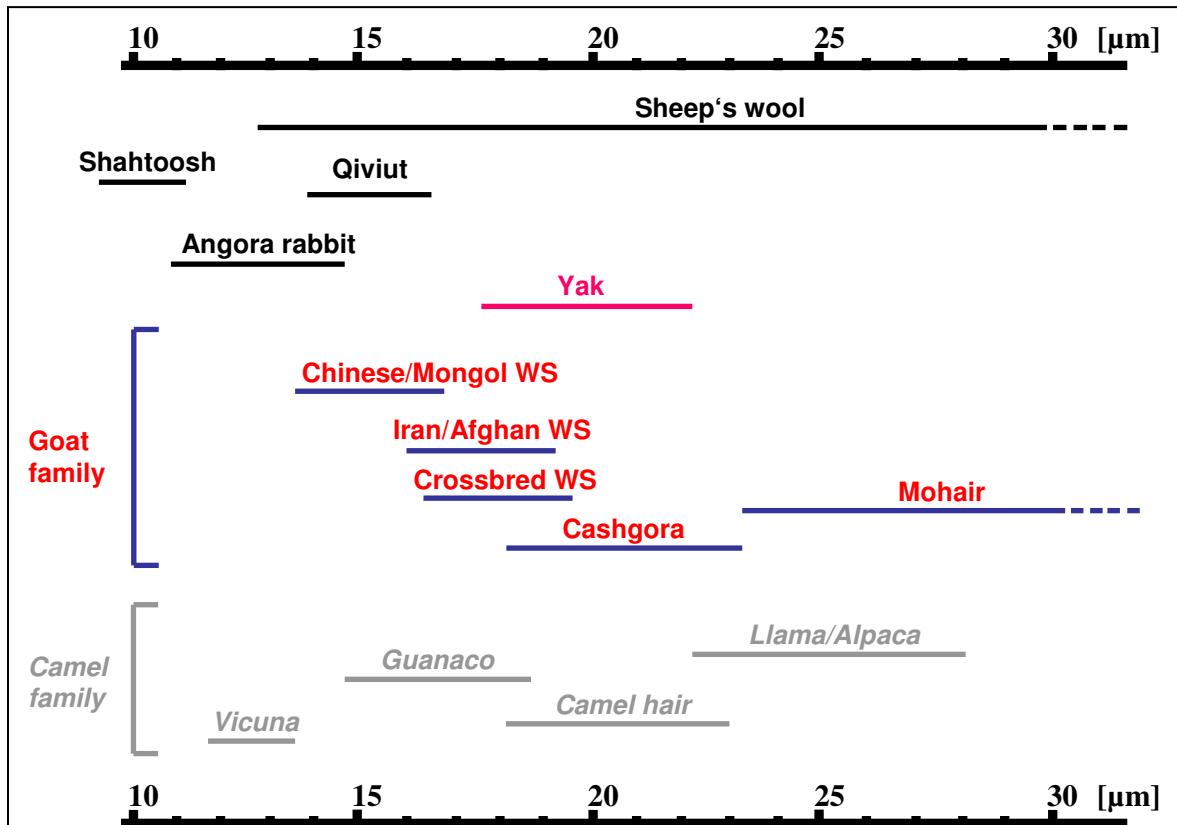


Fig 2: Fibre diameter of various natural fibres (Source: Dr. Ho Phan, Bishkek)

The graph shows that within the goat family the cashmere producing goats have finer cashmere than mohair and cashgora goats. Cashgora is a slightly vague term, with various definitions, but generally refers to a longer but courser type of fibre, which may be produced by cross-breeding cashmere and angora goats.

Chinese cashmere is generally considered to have the highest quality, with the finest diameter. Mongolian cashmere is courser but longer, which adds to the durability of the final product. Afghan cashmere is often grouped together with Iranian cashmere, and is generally considered to be courser than Mongolian cashmere.

Quality attributes

Characteristics of cashmere, which determine the quality, the price and the end-use of the fibre are the following:

- diameter
- fibre length
- colour
- style
- curvature (crimp)
- purity (residual hair content)

The three factors most directly impacting on the price are diameter, fibre length and coarse hair content (yield or purity)

- ◆ the diameter determines the fineness of the cashmere, the main determining feature of softness; only fine cashmere (below approximately 16.5 micron) can be used for hosiery (knit wear).
- ◆ the fibre length partly determines the usage of the cashmere (spinning or weaving) and affects the quality of the garment, and as such determines its end usage. Short fibre length increases pilling of knitted garments.
- ◆ the yield ratio determines the ratio of pure cashmere versus un-wanted residual coarse hair. Greasy cashmere still contains large amounts of coarse hair, which need to be removed by machine.

Legal Definitions

The cashmere diameter is the main characterizing feature from a legal perspective. The US standard for cashmere has recently been updated, but the EU directive is still very incomplete:

US Standards:

- Fine (dehaired) undercoat fibers produced by a cashmere goat (*Capra Hircus Laniger*);
- Average diameter of such fiber does not exceed 19 microns; and
- Cannot contain more than 3 percent (by weight) of coarse cashmere fibers with average diameters that exceed 30 microns.

Table 2: US legal definition of cashmere (Source: Dr. Spilhaus, Bishkek)

European Union: Directive 96/74/EG-1

Hair of cashmere goat, without differentiating between the fine undercoat fibres and the rather worthless coarse hairs

➔totally deficient, to be renewed

Table 3: EU legal definition of cashmere

(Source: Dr. Phan, Bishkek)

According to Dr. Phan of the German Wool Institute in Aachen, the latter definition is totally deficient, and needs to be renewed. (Dr. Phan, Bishkek)

Mislabeling

This lack of clarity in cashmere definitions, coupled with a weak regulatory environment in the cashmere sector as compared to for instance the wool sector has led to high levels of fraudulent labelling of cashmere products.

The table below presents an overview of the proportion of mislabelled garments over the past one and a half decade, as tested by the German Wool Research Institute (DWI) in Aachen:

	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05	'06*
Samples	185	157	139	199	360	168	238	246	196	198	242	317	425	172	213	330	467
Faked labels	121	102	62	94	196	86	122	91	81	84	175	128	123	60	81	191	277
%	69	67	51	53	57	59	56	38	41	42	72	40	40	35	38	58	59

* Until Nov. 2006

Table 4: Percentage of mislabelled garments from '90 to '06 (Source: Dr. Phan, Bishkek)

In addition to fraudulent labelling of cashmere products, a whole new range of customer deception occurs with labels specifying contents with non-existing fibres, such as 'sheep cashmere', or well-known but undefined names, such as 'pashmina'.

'Sheep cashmere' is 'wool submitted to strong chemical treatment and addition of silicon and resins. Clearly, this product is (bad) wool, and not cashmere.

'Pashmina' is not a labelling term that is recognized by the Wool Act. There is no such thing as a distinct cashmere fibre and hence it does not have a legal definition. Therefore it **cannot** be used for the labelling of a garment.

'Pashmina'

According to the US Federal Trade Commissions' brochure on the Wool Products Labeling Act: "*as with all other wool products, the fibre content of a shawl, scarf or other item marketed as pashmina must be accurately disclosed. For example, a blend of cashmere and silk might be labelled 50% Cashmere, 50% Silk or 70% Cash mere, 30% Silk, depending upon the actual cashmere and silk content. If the item contains only cashmere, it should be labelled '100% Cash mere' or 'All Cashmere'. The label **cannot** say 100% Pashmina, as pashmina is not a fibre recognized by the Wool Act or regulations.*"

(Source: US Federal Trade Commission)

ON THE ORIGINS OF CASHMERE

Early history of ‘cashmere’

The name ‘cashmere’ stems from the eighteenth century English spelling of ‘Kashmir’, a part of the British Raj under British imperial control. These ‘Kashmiri shawls’, made from goat fleece and other materials, were woven in Kashmir from the fifteenth and sixteenth century onward. The unprocessed goat hair was carried to Kashmir from Ladakh, and woven into intricate patterned shawls in Kashmir. (Maskiell, 2002)



European explorers, and in particular the employees of the British East India Company started carrying these shawls home in mid-18th century, where they soon became highly valued and fashionable. Napoleon and his officers brought Kashmiri shawls back from their campaigns in the late eighteenth century, and the empress Josephine started its fashion in Paris. The shawls very highly valued and were seen as clear markers of status, and as items of inheritance that could be owned by women. (Maskiell, 2002)

However, before the demand for Kashmiri shawls was boosted by the European demand in the 19th century, these shawls had a long record of Central Asian trade. The Persian empires, in what is now Iran, purchased Kashmiri shawls as early as the 16th century, and distributed them as ‘robes of honour’ to their political and social relations. Equally, the Moghul empire established the custom of endowing Kashmir shawls on its allies. Mughal Emperor Akbar initiated shawl production in centres such as Lahore and Agra,

outside Kashmir, and he ordered great quantities of Kashmir shawls. It was then at the courts of Ranjit Singh, who had conquered Kashmir in 1819, that Europeans first laid eyes on these Kashmir shawls. (Maskiell, 2002)

Demand for these Kashmir shawls quickly rose and demand could not be met. Britain and France were quickly up to the task, and started imitating the Kashmir shawls. The Kashmir shawls shared a characteristic ‘teardrop with a bent’ design, called ‘buta’, which can be traced back to Babylonian origins. The initiators, initially in Edinburgh and Norwich, did not have access to the goat fleece as the basic material, and started manufacturing these shawls from wool and cotton or silk. They maintained the original ‘buta’ design, which then became known as the “Paisley design”, as the city of Paisley became the dominant production. This well-known design is also still known as ‘cashmere’. (Maskiell, 2002)



The main distinctive feature of these imitation ‘Kashmir’ shawls was therefore the ‘buta’ or ‘cashmere’ pattern, more than the goat fleece from which the original scarves had been made.



Fashion trends turned around in the early 1870s, due to the Franco-Prussian war, overall changes in fashion, and the fall of the price of an (imitation) Kashmir shawl to a price affordable to near-all. Having lost its image of luxury and extravagance, it lost its appeal, and the Kashmir shawls went out of fashion

in the 1870s causing the collapse of the market. (Andrews)

Modern history of cashmere and the rise of ‘pashmina’

Around 1998 the good times for cashmere returned, when major designers started featuring cashmere shawls in their collections again. Cashmere was once again seen as a unique, luxury product, and became among most fashionable hot fashion items, that no self-respecting follower of fashion could do without. Prices of cashmere garments soared in the late 1990s, partly due to the favourable economic environment in these years. (World Bank 2003)



Perhaps to add a sensation of luxury to the product, the product was marketed as ‘pashmina’, stemming from the Persian word for wool (pashm). As such, it was deliberately distinguished from ‘cashmere’, with fashion designer Gabriele Sanders being quoted as saying the ‘pashmina makes regular cashmere feel like cardboard’. (Kelley)

As much as this advertising trick may have worked to put cashmere back into fashion, it does not hold truth. Pashmina is simply the Indian word for ‘cashmere’, there is no distinguishable fibre called ‘pashmina’. Similarly, the urban myth has been spread that ‘pashmina’ stems only from the underbelly or the neck of the goat; equally untrue. (Kelley)

Unlike ‘cashmere’, ‘pashmina’ is not recognized by the Wool Act or other regulations, and as such is an unprotected trade name, and wholesalers and retailers can brand anything pashmina; including cashmere-silk blends, cashmere – wool blends, cashmere - synthetic blends, or even full synthetic blends!

Still the confusion remains, and in the consumer’s market pashmina seems to have acquired certain characteristics of its own, as it tends to get equated more with light-weight shawls and scarves, with fringed ends, often in plain colours. Or cashmere blended with silk, to make it even lighter and give it more of a ‘summer-feel’ (and make it cheaper to produce). However, many of the cheaper ‘pashminas’ are in fact made of pure viscose.

THE GLOBAL CONTEXT

Production of raw cashmere

Of the estimated 16.000 MT annual production of raw cashmere China produces an estimated 12.000 MT per year, Mongolia just over 3.000 MT, Afghanistan around 1.000 MT, and Iran and other countries like India, Nepal, Pakistan, Tibet, Kazakhstan, Tajikistan and Kyrgyzstan produce smaller quantities².

Due to environment concerns, China has placed limitations on the number of goats by setting limits per herder. This will limit the growth of production of raw cashmere in China.

The herding sector in Mongolia is subsidized to a degree, which has already led to negative environmental effects. However, the Mongolian government has not yet shown indications of reforming the sector, hence herd growth may continue.

Afghanistan's production levels are enormously sub-optimal, with only a small proportion of the country participating in the cashmere industry. Production levels could potentially rise to close to 2000 MT, if all Afghan goat farmers would collect and market the cashmere.

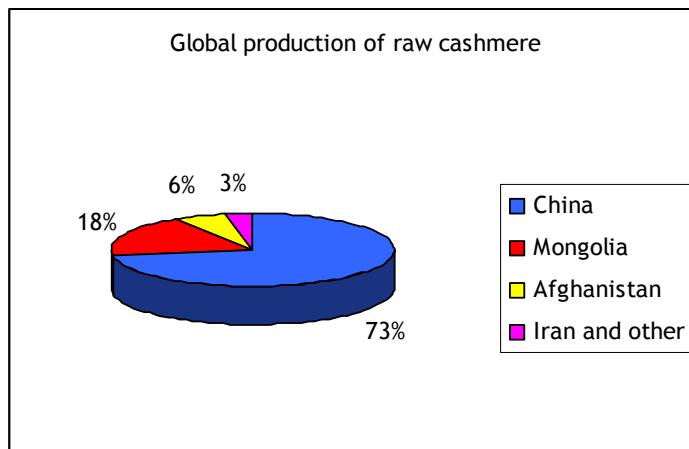
Certain processors pay differential prices for quality and colour, such as in the example below for Mongolia:

DIAMETER	Superior 13.0-15.5 micron	Grade I 15.51-16.8 micron	Grade II 16.81-17.6 micron	Grade III 17.61-19.0 micron
COLOUR				
White	34	31	29	22
Light grey	34	31	29	22
Grey	33	31	28	21
Brown	33	30	28	21

Table 5: Price difference per quality in Mongolia (source: LeCraw 2005)

However, in most cases, and in all cases in Afghanistan, there is no price premium for higher quality cashmere; a 'one-price-for-all' is paid by the traders and exporters.

On average Afghan cashmere is perceived to have an average diameter of 16 to 17 micron³, with Iranian cashmere being slightly courser (around 17-18 micron). The average fineness in Mongolia is perceived to be around 15.5 – 16.5 micron, and in China around 14 – 16 micron. Mongolian



² Production estimates must be taken with a grain of salt, since reliable statistics are scarce. Sources used: LeCraw 2005, Bishkek Regional Conference Report 2007, Afghanistan export figures obtained from the Department of Agriculture in Herat.

³ Preliminary results of Afghan cashmere show that the generally considered average of 16-17 micron may be on the high side. Samples taken from goats in various parts of the country show a cashmere of around 16 micron, with relatively long fibre length in the western region, and finer but shorter cashmere in the other parts of the country (14-16 micron).

cashmere has the longest fibre, which make it well suited for blending with shorter Chinese cashmere, to increase the durability of the final garment. (shorter cashmere causes ‘pilling’).

In addition to the fineness, colour matters. White cashmere is preferable, since it is easier to dye and only white cashmere can produce fully white garments without bleaching. China has the whitest cashmere in the world, whereas Afghanistan has very little white cashmere. Afghan cashmere is predominantly dark-coloured. The average price of Afghan cashmere is therefore lower than that of Mongolian and Chinese cashmere.

For instance in 2006, the average price for Mongolian raw cashmere at the farmer’s level was 23 US/kg whereas in Afghanistan this price was around 16 US/kg⁴.

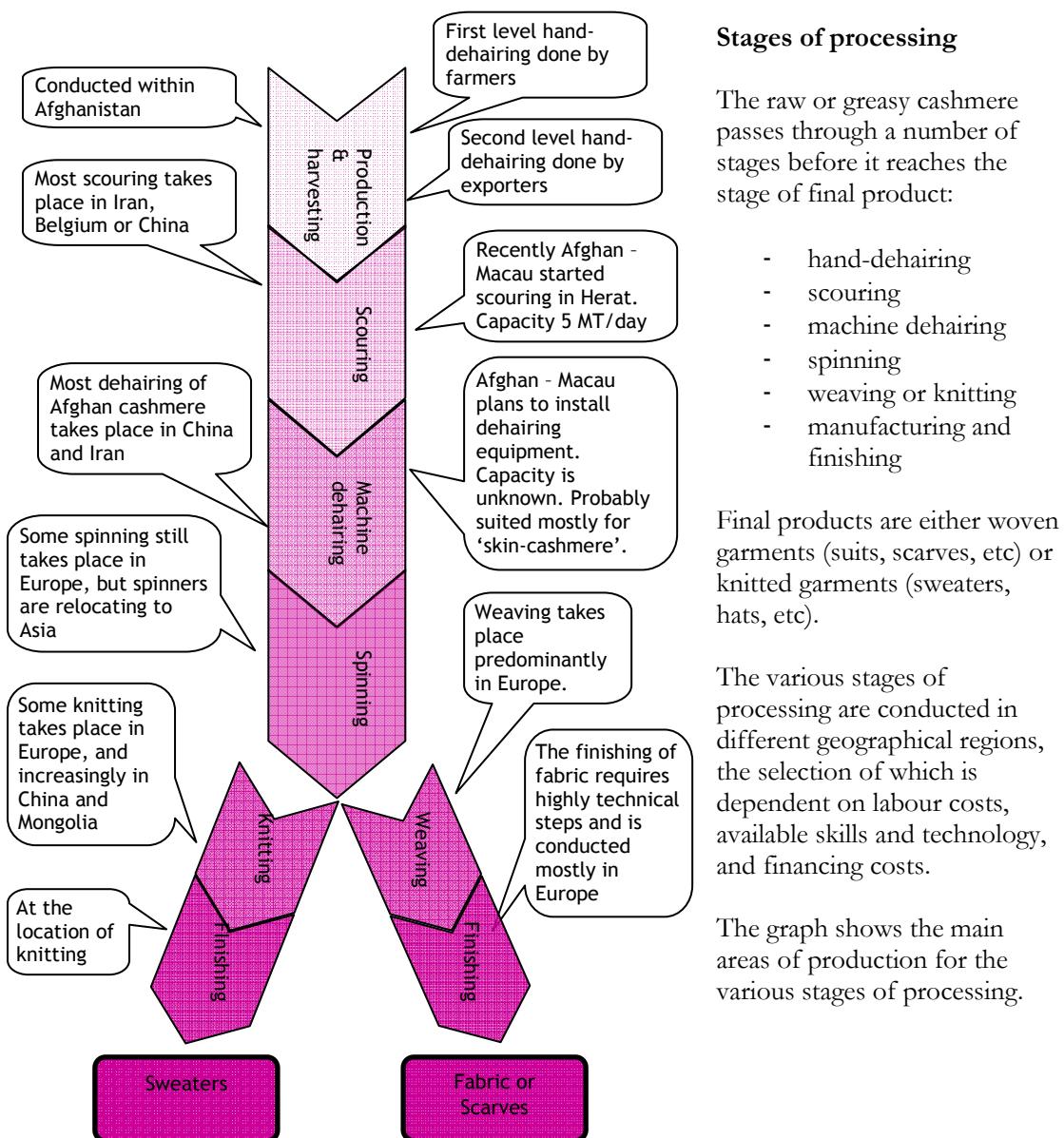


Fig 3: Main stages of processing and its main geographical loci.

⁴ Source for Mongolia: Presentation of J. Dugeree at the Regional Cashmere Conference in Bishkek.

Source for Afghanistan: interviews with farmers. Note: It must be taken into consideration that the Mongolian cashmere is combed and the Afghan cashmere is manually dehaired. The Mongolian cashmere will therefore have a slightly higher yield, with the associated effect on price. However, this difference is not expected to be more than 5%.

World market prices for dehaired cashmere

World market prices for dehaired cashmere are quite volatile, and have seen numerous boosts and busts in the last few decades:

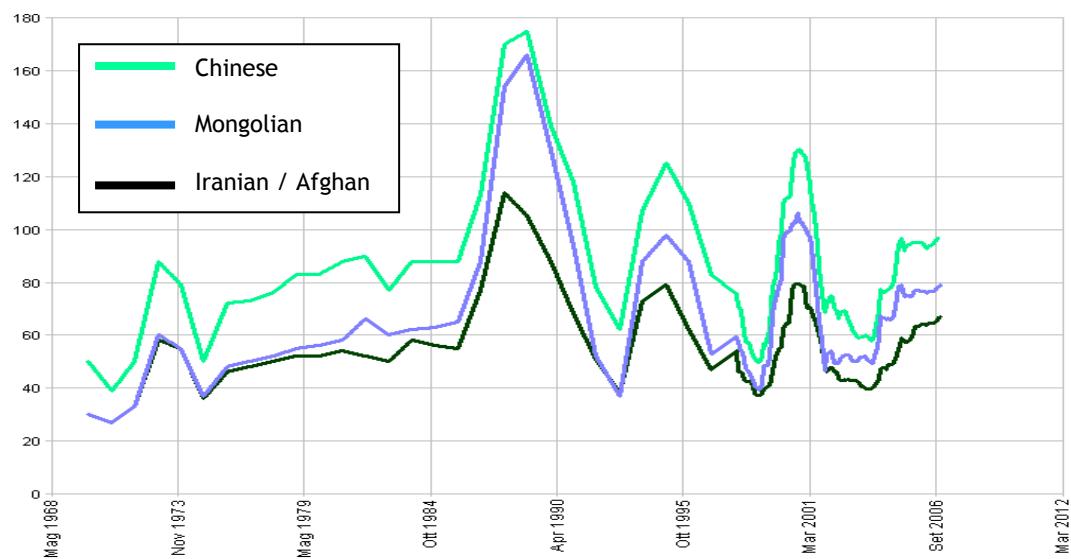
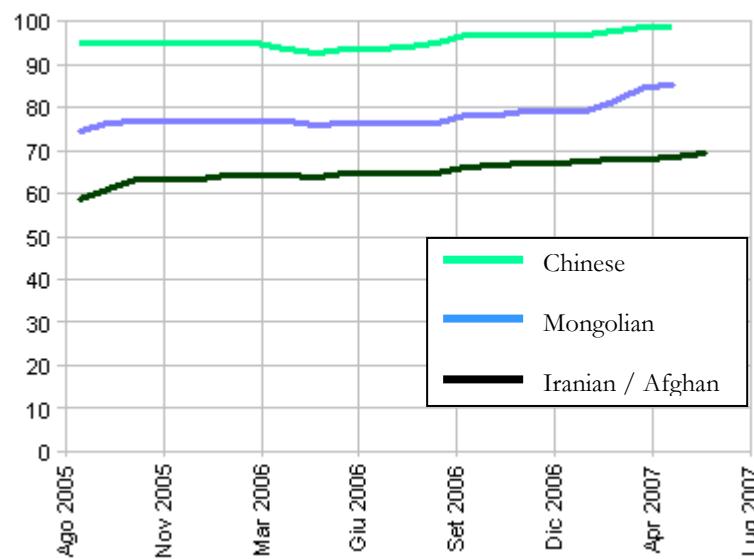


Fig. 4: World market indicators for dehaired cashmere (source: Gschneider.com)

The differences in quality between Chinese, Mongolian and Iranian / Afghan cashmere is reflected in the difference in the market indicators for dehaired cashmere, as presented by Gschneider. As noted before, Iranian and Afghan cashmere are presented together, in spite of the higher quality of the Afghan cashmere.



The price differential between Mongolia and Iranian / Afghan cashmere is relatively stable over time.

Fig 5: Price differential between Chinese, Mongolian and Iranian/Afghan cashmere (source: Gschneider.com)

Improving Afghanistan's marketing position through improved grading and quality control measures, and improvement of the national herd, can lead to a move away from Iranian price levels towards Mongolian price levels, and thus to a decrease in the price differential:

Dehaired cashmere	Date	Market indicator	Price differential
China	30-06-07	99.31	100%
Mongolia	30-06-07	85.29	86%
Afghan / Iranian	30-06-07	69.33	70%

Table 6: Price differentials (source: Gschneider.com)

The price paid to the farmer in Mongolia in 2006 was 23 US / kg, and the price paid to the farmer in Afghanistan was 15-16 US/kg. This shows that the price paid to the farmer is relatively low, when comparing to the price differential of the dehaired Mongolian and Afghan cashmere⁵.

Prices for Afghan dehaired cashmere in 2006 were around 55 - 58 US/kg⁶ for the European market.

Cashmere Processing Industry

China is strongly domineering the industry of cashmere processing, and increasingly also manufacturing. According to the China Daily of April 2005, Chinese processors control about 93% of the world's supply of raw cashmere. At the same time China still has a large overcapacity in its processing industry, for which it requires more greasy cashmere⁷.

In 2005, at the China International Cashmere Forum, Chinese officials outlined the strategy that China wants to control and regulate the entire value-added chain for cashmere by importing raw cashmere, using current excess capacity to process it into finished products to export under its own brand names (either developed or purchased), to brand name holders or under supply contracts. (LeCraw 2005)

As a result, China is hungry for supply of greasy cashmere, as witnessed by the fact that around 50% of Mongolia's greasy cashmere is being smuggled to China. An export tax has been established to reduce flows of raw cashmere from its domestic processing industry to China, but smuggling of raw cashmere continues. Mongolia's processing industry has fallen into a crisis, in particular because Mongolia's own processors are also operating at around 50% under-capacity. (LeCraw 2005)

According to the CEO of Goya factory, a Mongolian cashmere company, the Chinese have started buying Mongolian raw cashmere at the farmer's gate, indiscriminate of quality. (Baatar, Bishkek) Mongolian herders have reacted to this increased demand by increasing the yield per goat, and by decreased culling of older goats and male bucks. As a consequence, the average quality of Mongolian cashmere has dropped significantly over the last decade (LeCraw 2005)

China's need for raw cashmere needs to be viewed in the larger context of the garment industry. Over the past decades the textile industry has been transformed rapidly, and it has moved from a strategy of high retail margins with high stock levels and low turn-over, towards a strategy of lower margins and high turn-over. Garments have become available at lower prices, and an ever increasing proportion of garments is produced in low-wage countries. The expiry of the Fibre Textile Agreement, which imposed manufacturing production quota on countries is likely to exacerbate this trend. (LeCraw 2005)

In particular in the cashmere industry the prices for retail garments has steadily dropped, while prices for raw cashmere were increasing. This downward pressure on the profit margins has led

⁵ Part of the reason for the lower price paid to the farmer is the lower yield rates: eg the amount of pure cashmere available in one kg of raw cashmere.

⁶ Source: interviews with European cashmere processors.

⁷ Source: Key cashmere experts at the Regional Cashmere Conference estimated China's processing capacity to be double current processing levels.

to an overall reduction in quality of final cashmere garments. China has clearly positioned itself in the lower-end market section of cheap sweaters produced for large chains, such as Walmart and Carrefour. (LeCraw 2005)

This continuous hunger of China for raw cashmere and the reduction in quality of cashmere final products has led to concerns among the European producers. The European (notably Italian and British) cashmere companies aim at the high-end market niche, where margins are still higher. They worry about the reputation of cashmere, which derives its popularity to a large degree to its appeal of luxury, expensiveness and exclusivity. In the 19th century cashmere went out of fashion when it became available to the ‘masses’, they fear that they same may happen again. (see also ‘on the origins of cashmere’)

In addition, the European cashmere companies increasingly struggle to maintain access to high quality cashmere wool. They argue that the processing techniques used by the Chinese ruin the length of the fibre, which they require for their high-quality garments. They must start looking for alternative sources of cashmere supply. (source: interviews with international cashmere traders, and Purcell 1996) This may be a good opportunity for Afghanistan, where the Chinese traders do not have a very solid foot on ground yet. Afghanistan may be able to forge alliances with these important actors in the field.

End-markets

As touched upon above, two quite separate markets ends exist: the medium- and low-end market segment where China clearly dominates, and the high-end market where European brand name holders dominate. In the middle there is the medium-end segment, for which the garments are also mostly produced in China and Mongolia, with retail in Asia itself, Europe and the US.

Retail prices differ tremendously between these consumer markets, with a Loro Piana or a Dolce & Gabbana cashmere sweater selling for around 600 US\$, and a sweater at Walmart selling at 19.99 US\$.

Italy and the UK play a leading role in the branding, marketing and retail of the high-end garments. The balance of power for this market segment has clearly shifted to brand name holders from producers and retailers. The brand name holders have withdrawn from production operations and are relying more heavily on contract producers. Examples of the high-end market brand name holders are Loro Piana, Burberry's, Dolce & Gabbana, Ralph Lauren, and others.

The US is a major importer for cashmere, in particular for the medium- and lower-end segments. In 2006, the US imported over 13 million cashmere sweaters for a value of 493 million US\$; and this includes sweaters only.

The price per garment depends on the country of origin, with the UK and Italy leaders in the high-end market.

The market for luxury products, such as cashmere, is likely to grow. (Lecraw 2006, World Bank 2003). According to a 2003 World Bank study on the Mongolian cashmere industry, demand for luxury goods is growing worldwide and is well balanced globally despite some down years (1997-98). The main factors contributing to increased demand for luxury goods are favourable

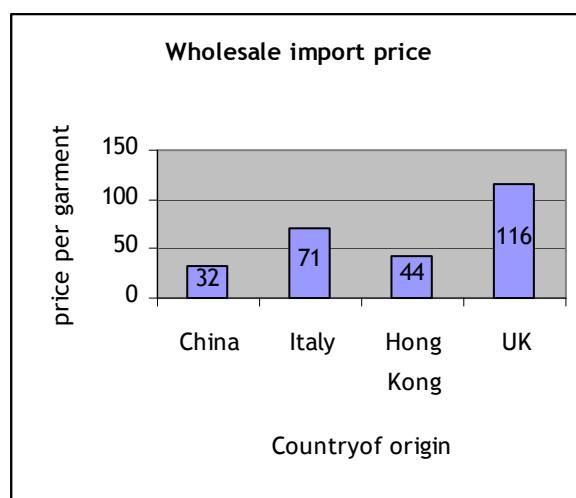


Fig 6: USA wholesale import price of a cashmere sweater (Spilhaus, Bishkek)

demographics and rising income levels—baby boomers between 36 and 56 represent the largest population group in the developed world and have the largest buying power—and consumer trends and the success of many luxury goods companies in capitalizing on their brand values. (World Bank 2003)

However, again according to the World Bank, the fastest growth will be in the middle- and lower quality range and in blends with wool, silk, cotton and perhaps synthetics. These products will be increasingly produced in the country of origin of the raw cashmere to save on transportation costs and to access low-wage labour. Retail trends indicate that the future is in the 19.99 US\$⁸ Wal-Mart sweater. (World Bank 2003)

The Camel Hair and Cashmere Manufacturers Institute (CCMI), concurs with this view, and expects the following trends in the cashmere market:

- growth in popular price garments
- trend toward lighter weight garments

At the same time, the CCMI urges caution: “*Overall quality must be maintained, otherwise the market will suffer.*” (Spilhaus, Bishkek)

The CEO of the Goya factory, one of the Mongolian processing and manufacturing companies, expressed the same in Bishkek: “*as a result of too aggressive growth strategy, the Chinese companies made the mistake of killing the market for everybody! Some large companies are starting to realize this, but as long as the smaller companies continue in the same way the effects are not likely to be seen soon*”. (Batar, Bishkek)

Critical Success Factors of the End-Market segments

Critical Success Factors	Low end market	High end market
- speed of delivery	+	+++
- reliability	++	+++
- volume	+++	+
- quality	+	+++
- price	+++	+

Table 7: Critical Success Factors

+++	very important
++	important
+	not so important

The price paid for high quality cashmere for the high-end market is higher than for lower quality cashmere. Therefore Afghanistan can obtain a higher average price for its cashmere if its highest quality cashmere is sold to the high-end market. However, selling to the high-end market has numerous implications, due to the high importance it lends to reliability and speed of delivery and quality control. High-end market firms want to have an increased control over the supply chain, and want to implement quality control measures along the various stages of the chain. Currently Afghanistan is not set up to meet these conditions.

However, perhaps due to imperfect market information, the Afghan exporters pay relatively high prices to the farmers for their raw cashmere. They struggle at receiving a profitable return on this investment, in particular for the higher quality material. They respond to this challenge by blending expensive high-quality material with cheap lower-quality cashmere, thus producing an average quality for an average price.

There is also a high demand for low-quality cashmere, that can be used for blending and/or manufacturing of cheaper garments. Price and volumes are the most important factors, and

⁸ LeCraw gives a figure of 39.99 US\$, whereas the current retail price for a WalMart cashmere sweater is in fact 19.99 US\$.

Afghanistan can already supply to this market. However, prices are lower and world price fluctuations are more likely to affect this market segment.

A third potential market is the fair-trade, eco- market. One could envisage a market for hand-produced garments, made by Afghan women, using no detergents or chemical dyes. Such a market could be created with the right marketing campaigns and partnerships with retailers / distributors. However, this market is likely to remain small, and Afghanistan has very little experience in the manufacturing of such garments. Nonetheless, potential profits can be quite high, and the option may be worth exploring further, in particular for organizations (NGOs) with a specific mandate of income generation and empowerment for women.

This will require substantial investment in research and development into appropriate technologies for manufacturing in the Afghan context. The risk and cost associated with this R&D will need to be borne by the public sector, and shall not be placed on the shoulders of women start-up entrepreneurs. Considering the potential this option may have for increased SME activity for women entrepreneurs, it is an option well worth exploring.

CASHMERE PRODUCTION IN AFGHANISTAN:

The Afghan cashmere industry may be estimated at an overall 18 million USD in export of greasy cashmere.

As figure 3 on page 10 showed, most of the stages along the value chain are conducted outside of Afghanistan; in Afghanistan itself only the production and the harvesting take place. The only exception is an Afghan – Chinese Joint Venture that has just been established in Herat, which has established a scouring line and plans to install dehairing equipment in the near future.

This chapter will focus on the stages of production and harvesting, which take place in Afghanistan itself. (All prices are based upon 2006 prices)

Types of cashmere in Afghanistan

Cashmere in its purest form is called ‘raw’ or ‘greasy’ cashmere.

There are two types of greasy cashmere in Afghanistan; ‘bahari’ and ‘pusti’ (or ‘kardi’)

Type of cashmere	Alternative names	Characteristics	Seasonality
‘Bahari’ cashmere	‘Spring’ cashmere	Relatively clean No chemicals applied Obtained from live animals Often hand-dehaired by the women at farmers’ level	Spring: march – may
‘Skin’ cashmere	Tannery cashmere Kork-e-pusti Kork-e-kardi	Obtained from (dead) skins Chemicals applied to the skin Unclean Shorter fibre-length More brittle	Winter to early spring

Table 8: Types of cashmere

The value of ‘bahari’ cashmere is substantially higher than for the ‘skin’ cashmere.

The Herati exporters tend to mix these two qualities together, in a certain ratio which is dependent on the quality of the cashmere, the demand for various qualities and the agreement with the buyer.

The majority of the ‘bahari’ cashmere is indeed mixed with ‘skin’ cashmere before export, often in a 30:70 or 40:60 ratio⁹, to reduce the price of the overall product. A smaller proportion is kept separate and sold as pure ‘bahari’ for a higher price.

Area of production and harvesting

Export volumes from Herat, which is the only real trading hub for cashmere from Afghanistan, reached **930 MT** in 2006.

Estimates are that the cashmere from only around 30%¹⁰ of the Afghan cashmere-producing goats is being harvested. The main reason for this very low harvesting rate is the fact that the majority of the Afghan farmers (estimated at 70%¹⁰) is not aware of the value of cashmere, and

⁹ Based on numerous interviews with exporters and their personnel.

¹⁰ Source: data from the cashmere quality survey conducted by ASAP

hence does not harvest the cashmere. In most of these areas there is no cashmere marketing system at all, and as such no incentive for cashmere harvesting is present.

The map below shows the areas in which the farmers have a degree of awareness of the value of cashmere.

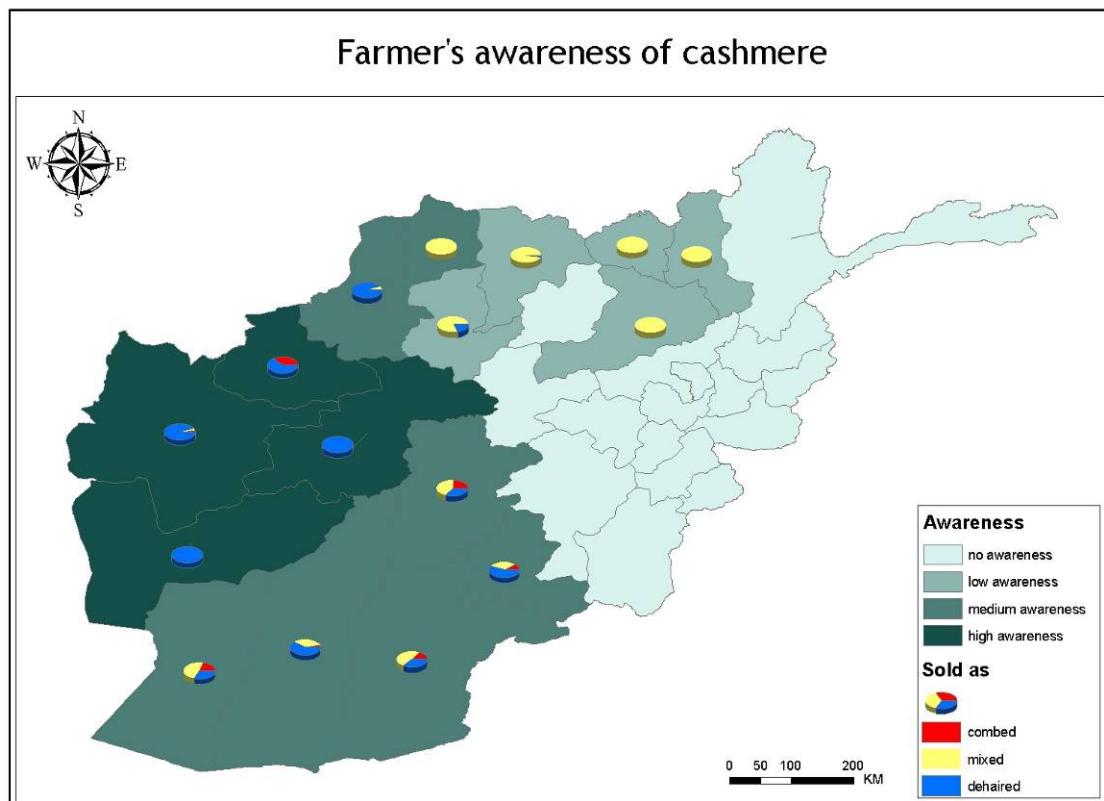


Figure 7: Farmer's awareness of cashmere and selling state

The distribution pies in the graph reflect the state in which the cashmere is being sold by the farmer to the first trader, e.g. the harvesting methods used by the farmers. Combing is mostly seen in Badghis and to a lesser extent in Uruzgan, Zabul, Kandahar, Helmand, Nimroz and Farah. In the northern areas, where the awareness is lower, the cashmere is mostly sold mixed with hair. The price received for cashmere mixed with hair is much lower than dehaired cashmere.

On average the price for cashmere mixed with hair is around 3 US / kg, versus 15 US/kg for hand-dehaired cashmere. Thus, less value is added by the farmer, and more by the trader who subsequently hires the women who hand-dehair the cashmere.

The map below shows the estimated distribution of current cashmere production levels in the country.¹¹

¹¹ These production levels are estimated on the basis of the number of goats, using an assumption of 150 gr yield per goat, the herd size of 2003 (FAO livestock census) assuming that 90% of all goats are cashmere producing goats, corrected for the estimated % of goats harvested. These harvesting percentages come from the cashmere quality survey.

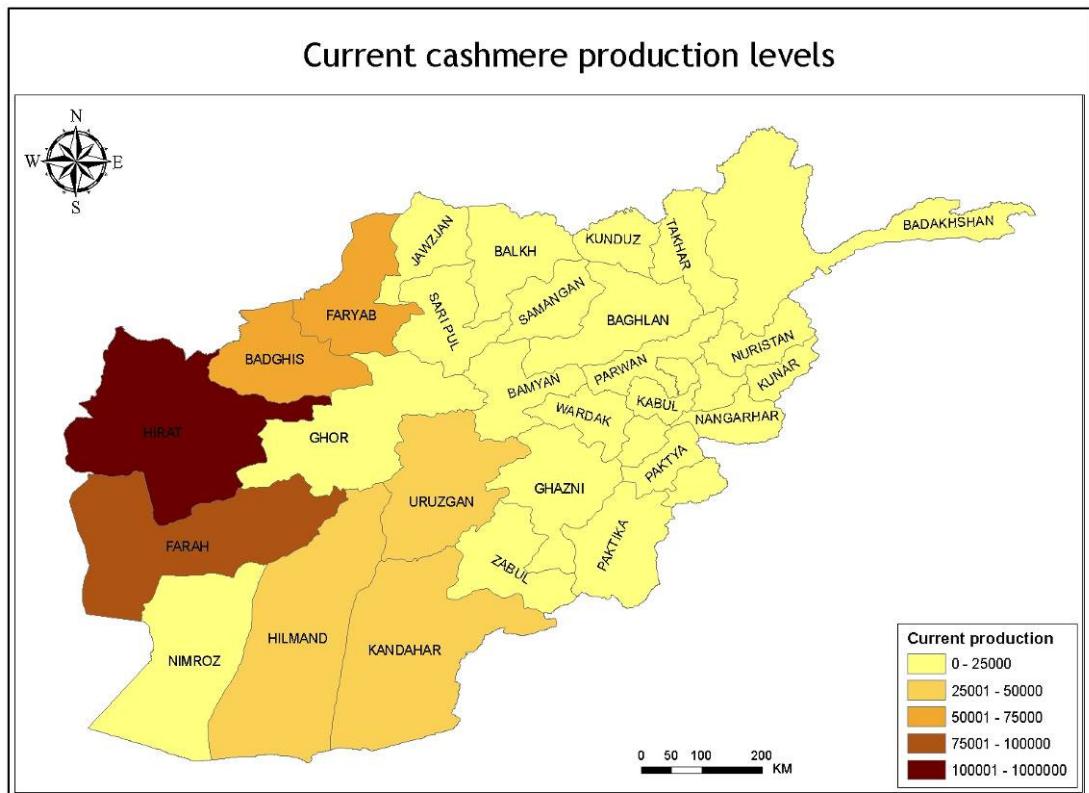


Figure 8: Current cashmere production levels

Methods of harvesting

In Afghanistan two methods of harvesting are in use:

- combing
- shearing (and hand-dehaired)

Shearing is by far the most prevalent method of cashmere harvesting in Afghanistan. The men shear the animals using large clippers.

The shorn coat is either sold directly, or dehaired by the women at household level.



Fig. 9: Shearing of a goat



Fig 10: Hand-dehairing

The goat hair may be sold, or spun into a yarn for making ropes, tents, rugs, or even for the outer lining of carpets due to its insect repelling characteristics.

Combing is employed by a small number of farmers, most notably in Badghis province and to a lesser degree in Kandahar, Nimroz, Zabul and Uruzgan.

Impact of harvesting methods on cashmere quality

International experience and earlier consultancy reports all describe the advantages of combing and strongly recommend that the Afghan farmers change their harvesting techniques to combing. Combed cashmere is cleaner, has a higher yield (cashmere : hair) ratio, and has a longer fibre length. The longer fibre length stems from the fact that the cashmere often gets cut during shearing, which reduces the fibre length.

However, the Afghan exporters on average do not see the advantages of combing, with some claiming the combing will actually reduce the quality of the cashmere, because it will cause the fibre to break. There is therefore no price premium paid for combed cashmere in Afghanistan, and some exporters may even pay a lower price for combed cashmere.

To settle this difference in view, ASAP conducted two experiments to compare the two harvesting methods. The first, small experiment consisted of comparing yield and time required per goat when harvested or combed. Each goat was shorn on one side and combed on the other side, and the weight of the cashmere plus the time required for combing or shearing + dehauling was compared. In addition, the men and women of the household were interviewed regarding their views and preferences. These results are based upon a sample of 15 goats, so these results may need to be confirmed with larger numbers in the next season.

The first experiment showed that the effect of harvesting methods (combing versus shearing and hand-dehauling) on cashmere yield per goat was very small (4%). This experiment was not able to measure cashmere diameter and fibre length.

The second experiment aimed at obtaining more scientific data on the effect of combing and shearing on yield, fibre length and diameter in dehaired cashmere. The yield rates and fibre length can only be determined accurately after machine-dehauling and laboratory testing. ASAP therefore harvested the cashmere from 331 goats, each shorn on one side and combed on the other. These samples were sent to Mongolia for dehauling. The results are being awaited.

Impact of harvesting methods on labour requirements and gender

However, in addition to the ways harvesting methods are expected to impact on the quality of the cashmere, there are other factors that need to be taken into consideration, such as labour requirements and gender issues:

During the first experiment on 15 goats, the time required for shearing and dehaired was also measured. Overall, differences between individual goats and people was large, but per goat results could be compared:

Labour requirements for combing and shearing	
Combing	Shearing and hand-dehairing
- For inexperienced people, combing a goat consumed a lot of time (over 120 minutes).	- Shearing itself only took on average 10 minutes per goat
- With increased experience combing became much quicker; and one goat could be combed in 38 minutes.	- Dehaired consumed more time, at an average of 97 minutes per goat.
- It was found that following the Chinese example, of cutting the tip of the hair before combing, made combing easier (though not necessarily much quicker)	- Total time for shearing and dehaired averaged 106 minutes

Table 9: Comparing labour requirements per harvesting method.

With increased experience, combing did become significantly quicker than shearing and manually dehaired.

From interviews and observations the following additional advantages and disadvantages were found:

Advantages of combing:	Disadvantages of combing:
- The cashmere is cleaner	- The work has to be done on the goat, which means it can only be done when the goat is close to the house / tent (transhumance!, remote pastures!)
- With increased experience combing does become faster than shearing and dehaired	- Afghan goats have very long hair, which makes combing a difficult task
- Combing becomes easier when the tip of the hair is cut	- Combing is considered more difficult than hand dehaired by most women (though experience may change this perception)
- The hair remains on the goat, and continue to protect them from the cold, which is important when the animals are still taken to higher pastures	- If the farmers want to use the goat hair they still have to shear the goat afterwards
- Goats that shed early (in particular young animals) will lose all their cashmere before the time of shearing; if they are not combed, the cashmere is lost.	- If the tip of the hair is cut the farmers can not spin the hair into yarn for domestic use or sale.
	- One-year old goats are very difficult to comb, since the hair is still very fine and the cashmere soft
Advantages of shearing & hand-dehaired	Disadvantages of shearing / hand-dehaired
- More flexible use of time: the shearing	- The cashmere is not as clean as when combed

can be done at any time, and the hand-dehairing can be done by women whenever they have time	and the yield (cashmere to hair ratio) will probably be lower.
- They use the goat hair for making rope/tents/ kilims	- When the cashmere has not yet started to separate itself from the skin, there is a high risk for the cashmere to be cut in the process of shearing. This reduces the fibre length and hence the value of the cashmere
- When the shearing takes place after the cashmere has started separating itself from the skin the risk of cutting the fibre becomes minimal	- Optimal harvesting times vary widely per individual animal (depending on age, and general health status)
- There is a tradition of shearing and hand-dehairing in the Western region	- Shearing techniques used in Afghanistan are very traditional and could use upgrading
- The exporters express a preference for shearing and hand-dehairing, but this may change with time	

Table 10: Comparing advantages and disadvantages per harvesting method

As final technical quality results are being awaited, the preliminary conclusion may be drawn that there are advantages to both combing and shearing.

Timing of both shearing and combing is essential, and partly dependent on the specific livestock keeping systems (in particular when taking the animals into the mountains).

Another main issue is the labour availability of the women, who would do both the combing and the hand-dehairing. Combing they can only do when the animals are near the house; which means that if the animals are taken to far-away pastures they can not be combed at all, or only in the evening time when women are already busy doing other chores. Dehairing of shorn fleeces can be done at all times.

The preliminary recommendation on harvesting techniques therefore must be that ***combing shall be promoted among farmers, but information will be made available pertaining to the advantages and disadvantages of both so that farmers can take an informed decision.***

However, in the western provinces, combing shall only be promoted when the exporters have been convinced that combing produces higher value cashmere, justifying a higher price. The current reluctance to pay a premium price for combed cashmere would lead to value destruction, rather than value addition.

Volumes of production

The 2003 FAO livestock census places Afghanistan's goat population at 7.3 million animals. When assuming a 150 gram yield per goat in those provinces where cashmere is being harvested¹², the total volume of harvested cashmere only adds up to 330 MT; only one third of the actual export volume.

FAO acknowledges that the nomadic populations were essentially not captured in the survey. Including estimates of no of goats kept by the nomadic populations¹³, the total number of goats rises to 10.3 million goats, of which an estimated 90% are cashmere producing. The annual volume of harvested and traded cashmere will then total 432 MT; still only 46% of total cashmere exported out of Herat.

¹² 150 grams cashmere per goat is based upon experiments conducted by ASAP on 365 goats in various districts of Herat and Badghis province, showing an average yield of 150 grams.

¹³ Based on data derived from the National Multi-sectoral Assessment on Kuchi (de Weijer 2005)

The main reason for this discrepancy between the calculated production of cashmere - when calculated on the basis of the number of goats - and the actual export volumes, is the fact that 'skin' cashmere is blended in with the '*bahari*' cashmere. Assuming a 40% blending in of 'skin cashmere'¹⁴ the total volume produced reaches up to 719 MT, which is still considerably lower than the actual exported amount of 930 MT¹⁵.

Reasons for this discrepancy probably are the following:

- import of cashmere from Iran
- increase in herd size since 2003

These calculations however do show clearly to what extent Afghan cashmere gets blended and adulterated in Afghanistan; only around 60% of the Afghan cashmere that reaches the market is high-quality '*bahari*' cashmere, at least 40% is 'skin cashmere'.

Potential production levels

As figure 7 and 8 clearly show, cashmere is only harvested in a limited number of provinces in Afghanistan. It may be estimated that only around 30% of the goats in Afghanistan are being shorn or combed. This leaves tremendous space for increased production of raw cashmere in Afghanistan.

Only around 30% of the Afghan cashmere producing goats are being shorn or combed!

Afghanistan's cashmere production could more than double if all goats were combed or shorn!

Assuming all cashmere producing goats in Afghanistan (estimated at 90% of the national goat flock) were combed or shorn, production of cashmere in Afghanistan could rise to just under 2000 MTs.

It may be assumed that the production of skin cashmere will not rise substantially when the proportion of goats combed increases. Therefore the ratio *bahari* : *skin cashmere* will improve with increased coverage of cashmere harvesting, which will positively impact the quality of the Afghan cashmere.

Main potential production areas:

Potential *bahari* cashmere production is shown in figure 11. The following assumptions are used for the calculations:

Assumptions:

Increase in herd size since 2003: 15%

Yield per goat: 15%

Total number of goats (including kuchi flocks): 10.3 million

% of total number of goats that are cashmere producing: 90%

¹⁴ Assumption based on several interviews with exporters, cross-validated by price calculations for pure *bahari* and certain blends, as compared to real export price.

¹⁵ The small discrepancy can be caused by the assumptions chosen, and in addition some cashmere does get imported from Iran.

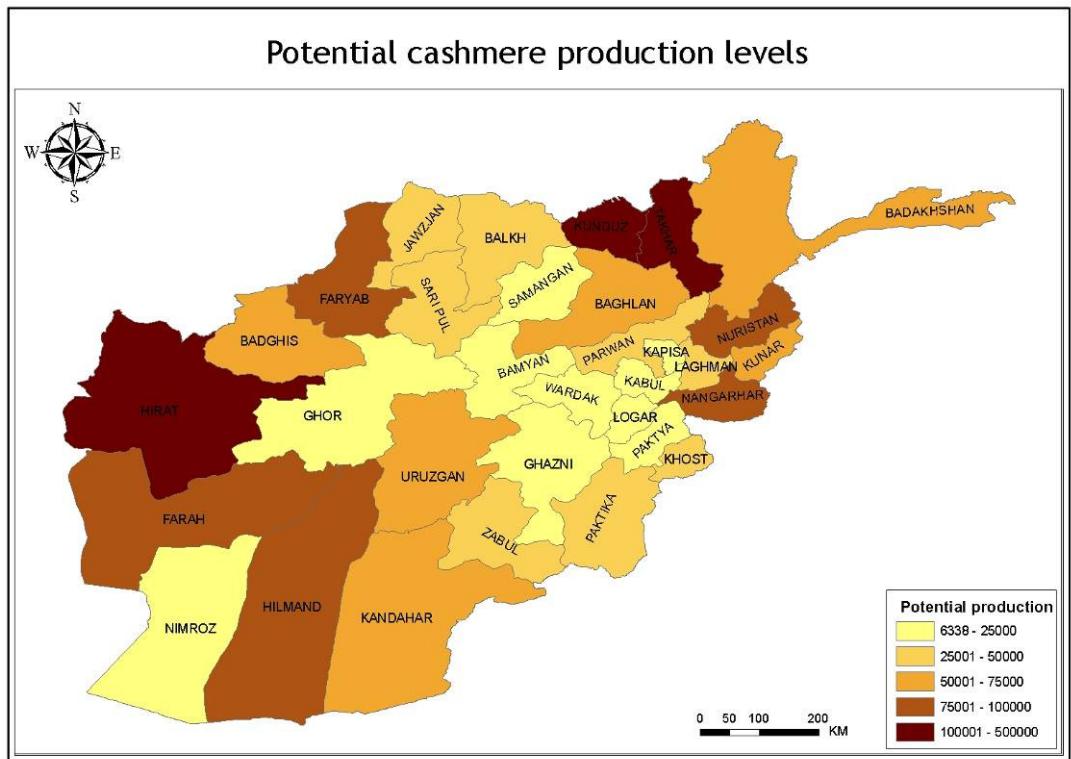


Figure 11: Potential cashmere production levels

The actual (estimated) *bahari* cashmere production and projected potential cashmere production per market centre is visualized in figure 12.

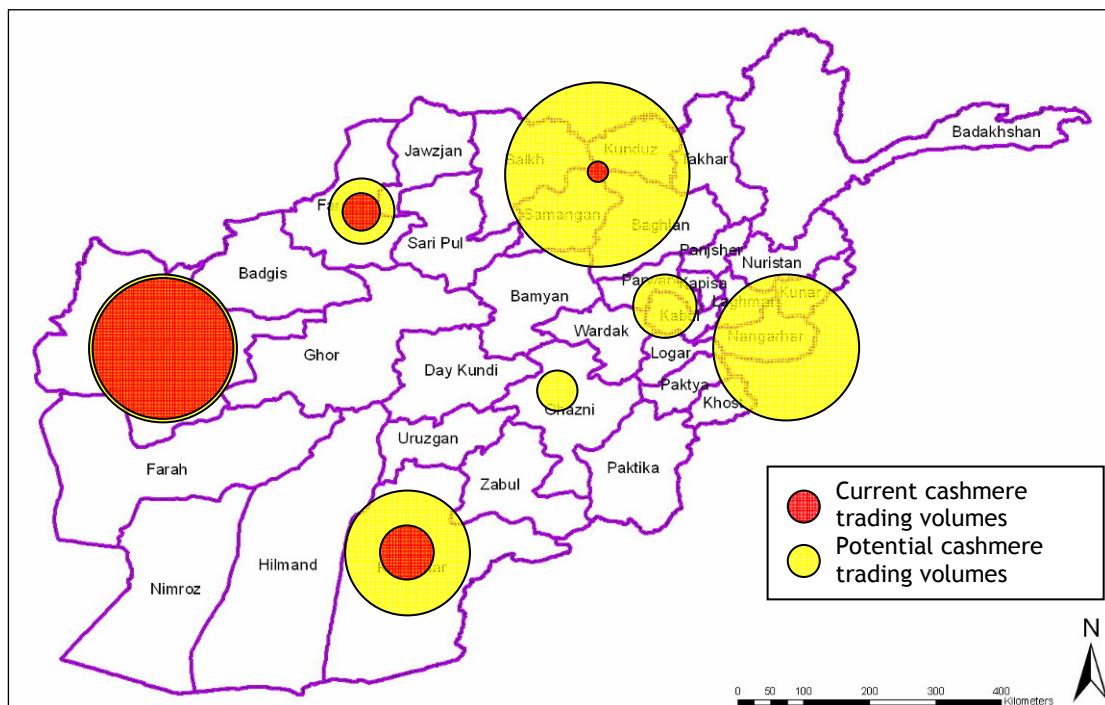


Fig 12: Actual (estimated) cashmere production and potential cashmere production.

The graph shows that in the regions of Mazar-e-Sharif and Nangarhar cashmere production can increase tremendously, with high volumes of cashmere potentially to be traded.

VALUE CHAIN ANALYSIS

Value addition along the value chain

The graph below shows the value added along the different stages of the value chain. The graph represents the transformation of 1 kg of greasy Afghan cashmere to a hypothetical sweater, selling to the mid-level market at 80 US\$ per sweater wholesale.

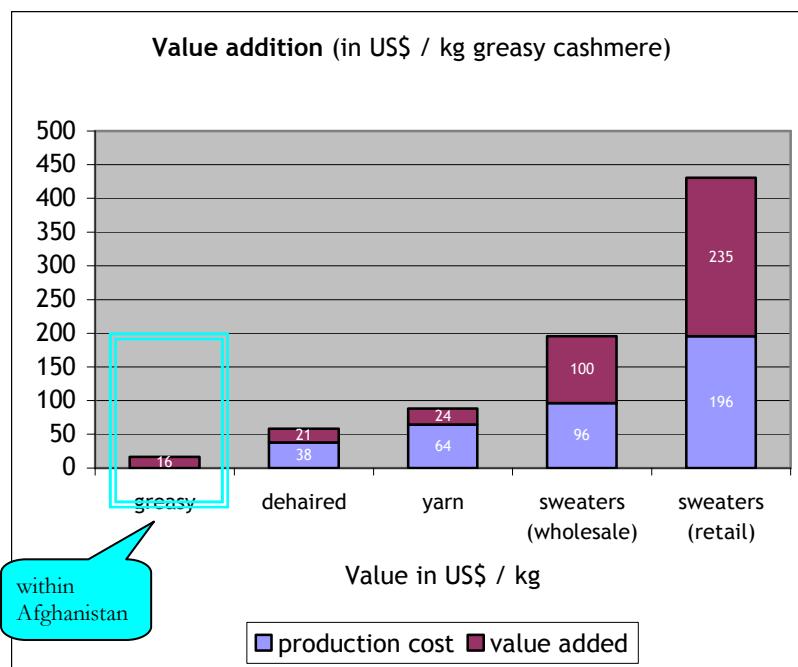


Fig 13: Value addition along the value chain

The graph shows that value addition takes place at different stages of the production chain, with the highest added value activities at the upward sections of the chain. When producing for the more high-end market niche this tendency will be even greater.

Currently Afghanistan is only engaged with the cashmere production and harvesting of the greasy cashmere, e.g. the very first stage of the cashmere value chain. And, as upcoming chapters will show, within Afghanistan most of the value actually sits with the farmer, rather than with the traders.

This chapter focuses in particular on the production of *babari* cashmere.

Cashmere Value Chain within Afghanistan

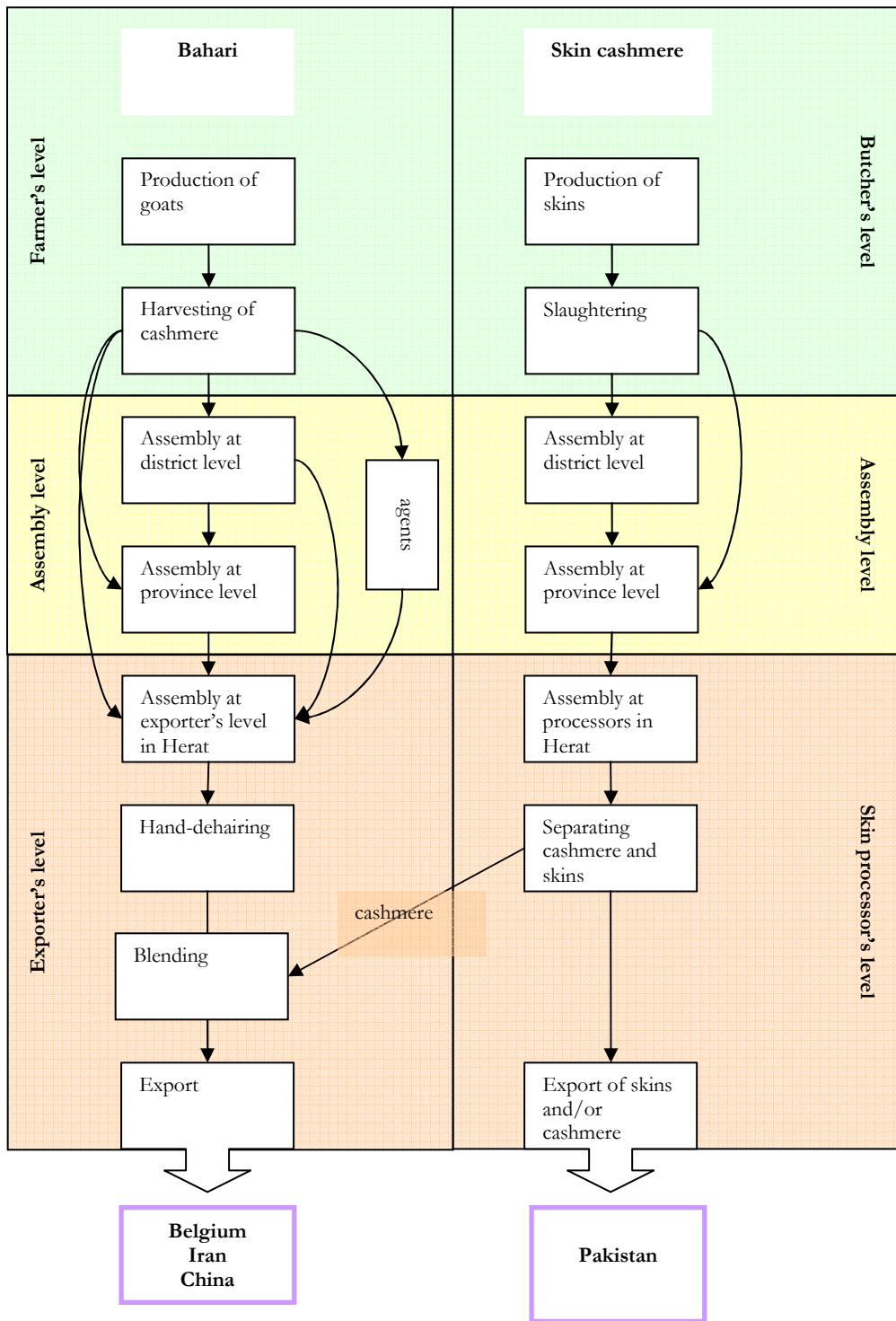


Figure 14: Cashmere Value Chain within Afghanistan

Actors in the value chain

- Farmer's level
- Assembly at district level
- Assembly at provincial level

- Exporter's level
- (Processors level)

Farmer's level:

- As shown in the map above, only in selected provinces do farmers participate in cashmere production and harvesting. There lies great potential in increasing the numbers of farmers that harvest the cashmere, and obtain the additional income from its sale.
- The farmers produce the cashmere on their goats, and harvest the cashmere in the spring. In most provinces the goats are shorn, after which the fleece is manually dehaired at the farmer's level by the women. In certain areas, most notably in Badghis province, women also comb the cashmere of the goats.

Assembly at district level:

- In each district of the main 4 provinces there are one or a number of district shopkeepers active. (ranging from 1 to around 6)
- There are many¹⁶ middlemen operating from Herat, operating either as an agent for an exporter on commission-basis or as independent middlemen, or often as a combination of both.

Assembly at province level:

- In the main province centres (other than Herat) there are around 5-15 main traders active
- In the provinces other than Herat, Farah, Ghor and Badghis most of the cashmere is brought to the ship when still mixed with hair. The wholesalers at provincial level may conduct dehairing before sending it on to Herat. This happens in particular in Balkh, Jawzjan, Faryab, and to a lesser degree in Helmand, Kandahar, Uruzgan, Zabul, and Saripul.
- In Herat city there are around 40-60 main wholesalers active. These wholesalers are mostly located around Dar-ba-malik and Dar-ba-Khosk (mostly *bahari cashmere*), and around Dar-ba-Kandahar (mostly *skin cashmere*).
- Many of the wholesalers have a specific relationship with one of the exporters, and obtain working capital from these exporters. However, this does not lead to exclusivity or real vertical integration between the wholesalers and the exporters.

Export:

- In Herat city there are around 8 exporters active. These exporters conduct a second-level dehairing, which is labour intensive. An estimated 1200 men and women are employed for this purpose in Herat city, of which an estimated 60% are women).
- The exporters then export *bahari* cashmere and *skin* cashmere, and most often a blend of these.

Processing:

- In Herat city a new company was established in March 2006; Afghan Macau, an Afghan – Chinese joint venture. The company has established a scouring line, with a capacity of 5 MT/day, and aims at installing dehairing equipment in the near future. The capacity of the dehairing equipment is yet unknown. Currently they export skin cashmere in un-dehaired form to China, in addition to ‘wet blue skins’. In the future they will export dehaired (or partly dehaired) cashmere to China.

Value addition within Afghanistan

Price paid to the farmer for raw cashmere depend on the type and the quality of the cashmere:

- In large quantities a higher price is paid for the yellow and the brown cashmere, since it is known to be finer.

¹⁶ Estimating the number of middlemen is very difficult, but will be over 100.

- White cashmere tends to fetch a lower price, since it is known to be of lesser quality
- Cashmere from certain districts is known to be of higher quality (such as Badghis)
- The expected yield¹⁷ (ratio cashmere : guard hair) impacts the price heavily
- In 2006 prices for *bahari* cashmere differed between 14 US\$/kg to 20 US\$/kg
- The prices in 2007 were much higher than in 2006; between 16 and 22US\$/kg.
- The price for *skin* cashmere is much lower than bahari cashmere, and again depending on the quality and the yield is between 9 and 13 US\$/kg.

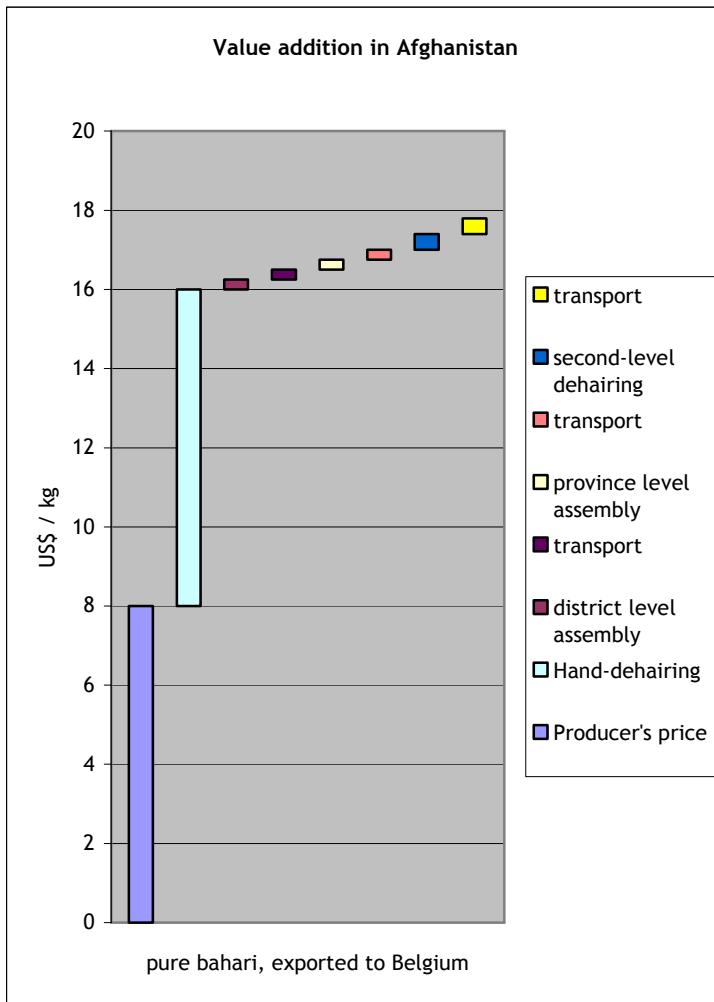


Figure 15: Value addition within Afghanistan, based on 2006 prices

- The producer's price is calculated according to the price paid to farmers for the cashmere mixed with the goat's hair. This assumes that there are no input costs for the farmers to produce the cashmere, which is realistic to the degree that cashmere is not the main reason for goat keeping. Hence the income derived from cashmere is considered as additional, and therefore 'free' income.
- The majority of the value addition takes place at the farmer's level; 16 US\$ out of 17.8 US\$.
- In the process of assembly and transportation from the farmer to the exporters level in Herat, no value is added to the cashmere, and the price increases with 1 US\$.

¹⁷ The exporters do recognize differences in yield and pay accordingly. However, further down the value chain 'one-price-for-all' is paid to the farmers, which leads to increased contamination of the cashmere.

- At the exporter's level value is added through second-level hand-dehairing, which is labour intensive. In total an estimated 1200 men and particularly women are employed for this purpose. The value increase is 0.4 US\$/kg.
- Transportation costs to Belgium is calculated on the basis of shipping a 10 MT container to Belgium at 4.000 US\$, e.g. 0.4 US\$/kg.

Export price

Prices paid to the exporters vary between approximately 13 US/kg and 18 US\$/kg¹⁸, with perhaps an absolute maximum of 22 US\$/kg for pure *bahari* cashmere, again depending on the quality and the expected yield (2006 prices). The yield of their cashmere was estimated by the exporters to be around 45-47%, but this has not been independently confirmed.

Comparing the export price with the production price, it becomes clear that the margins are very small or even negative. This is the main reason why the Herati exporters generally blend the *bahari* cashmere with the *skin* cashmere; to reduce the price and create an average quality. They can, and do also deliver pure *bahari* cashmere, but the majority is blended. Ratios differ, but may be around 30 : 70 or 40 : 60%.

The blending of the cashmere decreases the quality of the Afghan cashmere, and limits the end-use of the cashmere. This is one of the main reasons why the quality of the Afghan cashmere is often under-rated; the cashmere that reaches the market is of inferior quality to the cashmere that may be obtained in Afghanistan. Many international traders have complained that they can not access the 'pure' Afghan cashmere; by the time it reaches them it has already been 'adulterated'.

Export markets

The Afghan cashmere was traditionally all transported to Belgium through Iran. Iranian traders played an important role, which may explain why most of the cashmere prdocution and trading is still taking place in the West. Verviers, in Belgium, used to be the main market centre for cashmere, as it was situated in the core of the textile centre in Europe. Nowadays, the role of Verviers as the main market place has diminished, but for Afghan cashmere Verviers is still a major destination.

One of the main reasons for Verviers is the presence of one agent, the 'American Wool – Cashmere Inc.', who is the main agent and distributor for Afghan cashmere. Through a working loan obtained through OPIC in 2003 (OPIC 2003) he managed to establish himself firmly in the market. Most of the Afghan cashmere that enters the world market is channelled through this company.

In Iran dehairing facilities have been established in which Afghan cashmere is being processed. Iranian processors have established relations with certain Herati exporters, who supply these dehairing factories.

China has started entering Afghanistan directly, and anecdotal information has confirmed their presence, but it still seems to be with limited scale and scope. The main Chinese purchaser of Afghan cashmere was the company which has currently entered into a partnership in Afghan – Macau, and has established its own scouring facilities.

¹⁸ These export prices have been confirmed from physical checking of the invoices.

Belgium	Iran	China	Dubai	Kyrgyzstan	Hong Kong	Kazakhstan	TOTAL (MT)
384	269	122	65	52	22	16	930
41%	29%	13%	7%	6%	2%	2%	100%

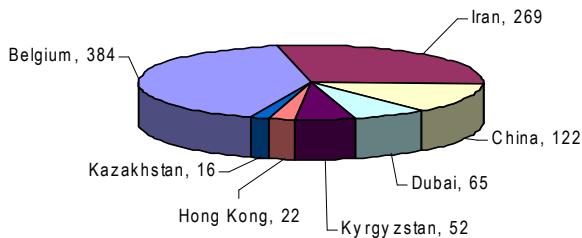


Figure 16: Export of raw cashmere from Herat in Metric Tons (March 05 - March 06)¹⁹

SUPPORT SERVICES

Veterinary services

The network of Veterinary Field Units, supported by AVA, DCA, PRB, AKDN, Madera and others is a solid service delivery infrastructure, which provides veterinary services on a full-cost recovery basis.

These VFUs will increasingly broaden their scope, with an increased focus on animal husbandry practices, delivery of extension services and market information collection and dissemination. As such, they are a powerful tool that can be used to reach out to the farmers, and can be used as a two-way information channel.

Currently the VFUs have a very low level of knowledge and understanding about cashmere, its value and preferred methods of harvesting, nor about the effect of general animal husbandry practices on quality and quantity of cashmere. These skills will need to be imparted to them before they can have a direct impact on cashmere production.

Extension services targeted specifically at the cashmere value chain may consist of:

- animal health interventions, in particular ecto-parasite control
- herd management and selective breeding
- nutrition practices and supplementary feeding
- cashmere handling practices
- visual assessment of cashmere quality

¹⁹ Source: Veterinary Department of the Provincial Directorate of Agriculture in Herat, confirmed with data from the Chamber of Commerce.

Infrastructure / transportation

Raw cashmere is transported in containers containing 10 MT or 20 MT of cashmere in pressed bales. Transportation routes are predominantly through Iran to Europe or through Turkmenistan and Kyrgyzstan overland to China.

Transportation costs are around 4.000 US\$ per 10 MT to Europe and 3000 – 3500 US\$ to Hong Kong.

High transportation costs from Afghanistan is generally perceived to be one of the main impediments for export of commodities from Afghanistan. In the case of cashmere, the value of the commodity (in particular after value addition) is very high, which reduces the impact of high transportation costs on profits. Finished garments, if they were to be produced in Afghanistan, would most likely be air freighted out of Afghanistan.

Quality control

There are no testing facilities in Afghanistan, with the exception of the newly established, private laboratory at Afghan – Macau. None of the exporters have their cashmere tested before shipment, and they judge the quality (in particular fineness and projected yield after dehairing) through visual and tactile assessment, based on years of experience.

Feedback on the quality (e.g. the yield after dehairing) is often obtained from the customers, in particular from direct sales customers.

The reputation of the Afghan cashmere world-wide is sub-optimal, due to:

- contamination of the cashmere with foreign material:
 - o remnants of poly-propylene bags
 - o sand
- low yields after dehairing
- weak fibres
- blending the bahari cashmere with the skin cashmere
- some anecdotal evidence points to blending the cashmere with inferior fibres or even sheep's wool.

Afghan cashmere sold through Verviers, is often stored there for long periods of time or remains unsold, which international traders blame on the above factors.

Due to the lack of quality control within Afghanistan, and the lack of a monitored system that ensures quality standards, individual traders within or without Afghanistan may succumb to the temptation of quick gains. However, this damages the reputation of the Afghan cashmere, which affects all Afghan producers and traders negatively in the long-term.

Institutional environment

The cashmere traders in Afghanistan are not yet organized in any type of business association. The Herati exporters are members of the Chamber of Commerce, where all export figures are recorded and the custom's export value of the cashmere is established.

The Industrial Union of Herat reiterated the need for such branch organizations, and disclosed its plans to initiate branch organizations for all industrial sectors in Herat. This is not likely to occur in the near future, due to the absence of a clear implementation plan.

Currently there is no coherent vision development and no cooperation between public and private sector.

Afghanistan's business environment

The private sector is recognized as “the principal engine of sustainable economic growth and development and the instrument of social inclusion through creation of opportunity”²⁰. The government is committed to ‘creating an enabling environment for the private sector, and legislation such as the Banking Law, the Private Investment Law, and the Customs code provide the environment for a liberal economy’.²¹

Afghanistan charges no export duties on the exported raw cashmere, and is exempted from import duties to the US and the EU. This places Afghanistan on an advantage, since neither Mongolia nor China benefit from both these exemptions (Mongolia is exempted in the EU, and China in the US).

Import duties for investment-related equipment is low; in the case of import of cashmere processing equipment, import duties will be between 0.5 and 1.0%. Import of raw cashmere²² will be charged with a 1% import tax in Afghanistan.

Foreigners can not own land in Afghanistan, but long-term leases are available, and the maximum duration of the lease has recently been extended to a 99 year period.

In spite of this rapid transformation of the business environment in Afghanistan, certain contextual risks are still associated with Afghanistan, such as:

- Political risk
- Insecurity
- Weak judicial system
- Limited access to finance
- Weak infrastructure / landlocked country
- Relatively unreliable and expensive service delivery (water, electricity)

²⁰ Quote from the speech of the president of the Afghanistan Investment Support Agency

²¹ Quote from the interim Afghanistan National Development Strategy

²² One could envisage importing Mongolian cashmere into Afghanistan, if a processing industry was established in Afghanistan. Mongolian cashmere would contribute fibre length and light colours to the Afghan cashmere.

AFGHANISTAN'S COMPETITIVENESS

The main contextual factors affecting the cashmere industry in Afghanistan are presented in the diagram below:

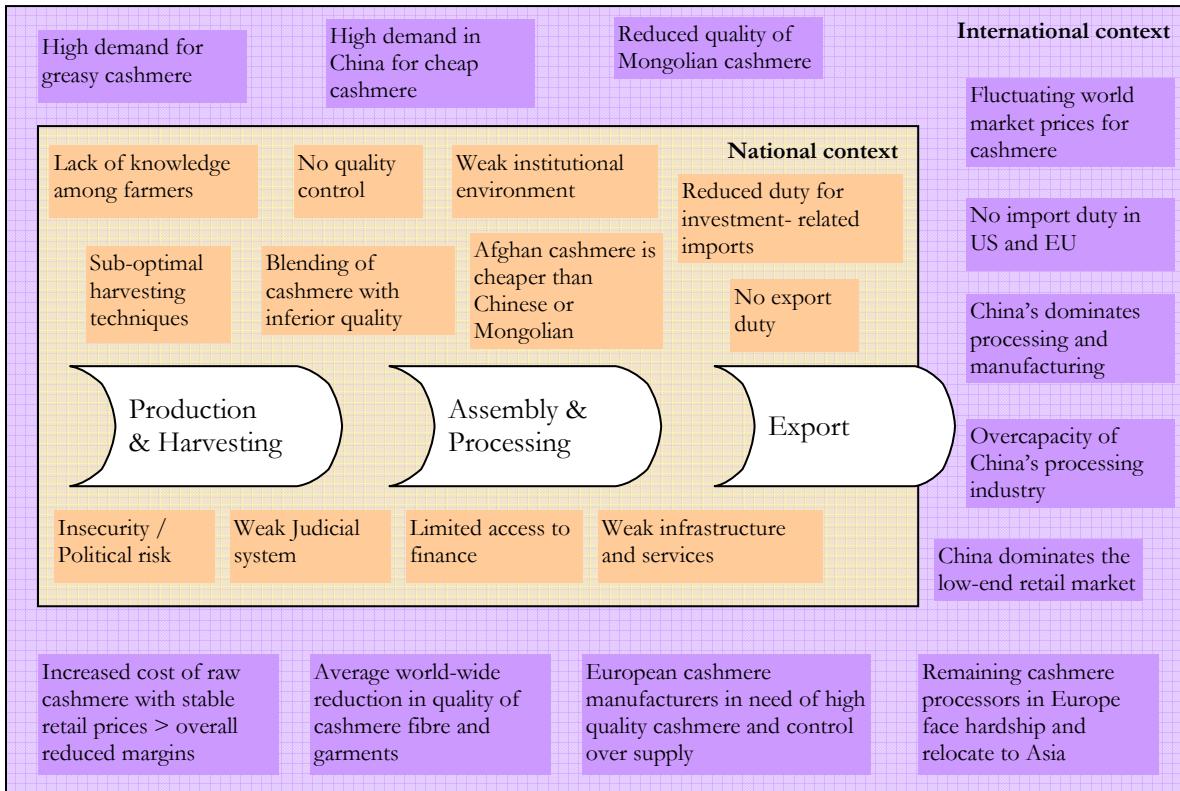


Figure 17: Main contextual factors affecting the cashmere industry in Afghanistan

SWOT Analysis

The **strengths** of the Afghan cashmere industry, when viewed in the perspective of the world market lie in the facts that:

- Afghan cashmere is cheaper than Chinese and Mongolian, and there is a strong demand for cheap cashmere for the production of cheaper garments. This market is dominated by China.
- There is tremendous scope to expand production levels in Afghanistan with the existing goat numbers. With decreasing size of the national goat flock in China and an already over-stretched goat numbers in Mongolia, this improves Afghanistan's competitive position.
- Import and export duties are favourable.

The **weaknesses** of the Afghan cashmere industry are:

- The Afghan cashmere is of lesser intrinsic quality, and has less light colours than Chinese and Mongolian cashmere. This reduces the potential to use Afghan cashmere as a single source for final garments. (only dark sweaters?) Also, reputedly, Afghan cashmere is better suited for the manufacturing of cloth than sweaters. The cashmere quality survey shows that the quality is actually better than generally perceived, but it remains to be seen whether the quality (fibre length in particular) is sufficient for knit wear.
- The quality of the raw cashmere is reduced through improper handling of the cashmere in all stages of the supply chain.

- The fluctuating world market prices are likely to affect Afghanistan before Mongolia and China, due to its lower price and quality.
- The post-war situation, its relative instability and unreliable service delivery do not provide a very secure environment for foreign direct investment.

The main **opportunities** to improve Afghanistan's competitiveness position are:

- Improving the awareness among farmers and expanding production levels
- Harvesting and handling techniques can quite simply be upgraded
- Increased quality control within Afghanistan can quickly increase yield rates and cashmere quality, and can serve as the foundation for repairing Afghanistan's international reputation.
- There is a trend towards processing of the cashmere closer to the source. There is very limited competition in Afghanistan at the moment for establishing processing facilities. Afghan – Macau is concentrating on skin cashmere, leaving the *bahari* market wide open.
- The European companies still stand strong in the high-end retail market, and maintain this control through controlling branding and marketing.
- The European companies still stand strong in the high-end retail market, and maintain this control through controlling branding and marketing, and superior technology. In order to maintain this position European companies need to control the supply of raw cashmere and exercise quality control over the supply chain. Strategic partnerships between Afghanistan and European companies present great opportunities.

The main **threats** to Afghanistan's cashmere industry are:

- China dominates the processing industry strongly, and intends to procure greasy cashmere from the entire region. China is very cost-competitive with favourable interest rates, low labour costs and a strongly established human capital base in the textile industry.
- China has a strong competitive position in the low-end retail market, and have reduced the margins to such a degree that competition is strangling.
- The European companies base their competitive position in the high-end market to a degree on their access to the most refined technology and skills. It is likely however, that China will catch up within a few years, leaving the European companies at a lesser advantage.

The Global Cashmere Value Chain and its barriers to entry

The global cashmere value chain phases, its governance systems, barriers to entry, and its implications for Afghanistan are presented in table 11.

Table 11: Cashmere value chain processes, its governance systems, barriers to entry, and its implications for Afghanistan

Process	Governance	Barriers to entry	Implications for Afghanistan
Retail: - Sale to customer - Branding and advertising	- Retailers control branding and marketing to a large degree > buyers' domination. - In particular the high-end, high-fashion market is most dominated by the retailers - The medium and low-end market is less strictly controlled by the retailers.	- High-end market has highest margins, but difficult to penetrate - High-end market requires control over branding and marketing - Supplying to the high-end market requires high degree of responsiveness and market knowledge - Medium- to low-end markets are more easy to penetrate, but offer lower margins, and suffer from strong competition from China	- Afghanistan is not likely to be able to penetrate the high-end market in the near future - Afghanistan currently has no manufacturing industry and is thus far removed from the retail level. - Developing its own manufacturing is a precondition, as well as strong end-market linkages - Opportunities may exist in the 'fair trade' or 'ecological clothing' in relation to a 'made in Afghanistan label'. This will require substantial input since practically no input transformation or manufacturing takes place in Afghanistan at the moment
Manufacturing - weaving - sewing - knitting	- Separate firms for scouring, dehairing, spinning, weaving and knitting exist. - These firms either perform services for a fee, or act as traders and add value.	- Highly technology-dependent - Capital intensive - Certain components are labour-intensive; in particular sorting and dehairing.	- Opportunities exist to establish a input transformation and/or a manufacturing industry in Afghanistan.
Input transformation - sorting - dehairing - spinning - dyeing	- There is a trend towards increased vertical integration of the manufacturing and the input transformation processes. - There is a trend towards moving the more labour-intensive manufacturing processes to countries with low-labour costs - The input transformation and manufacturing industry aims at creating stronger control over the supply chain, which allows them to maintain great control over quality and quantity of supply. There is therefore a strategic advantage to being close to the source.		- The high-technology dependency of such an industry requires building an entirely new skill set, which will initially require substantial foreign input. - Substantial investment is required, for which Foreign Direct Investment may be the only opportunity, since this comes with both the technological know-how and the end-market linkages - Current input transformation processes may be upgraded - Collaboration between foreign know-how and afghan investment provides opportunities for increasing input transformation processes in Afg.
Input supply - greasy cashmere - chemicals	- Arm's length relationship between exporters and processors - Directed network relationship between the exporters and the main agent in Belgium, who acts as a wholesaler for Afghan cashmere, which is almost a monopsony. - Arm's length relationship between producers and buyers. Little quality control over the supply by the exporters.	- Very low barriers to entry for goat herders. Very low investment and immediate income; only awareness is lacking - Working capital and end-market linkages are limiting factors for expanding scale of the intermediate traders and the exporters	- Great opportunity for Afghan farmers to enter into production and harvesting - Support to building end-market linkages can expand the operational scale of the exporters - Access to finance for the intermediate traders and exporters can expand the operational scale of the exporters

KEY STRATEGIES TO IMPROVE AFGHANISTAN'S COMPETITIVENESS

There are a number of key strategies that Afghanistan can pursue to strengthen the competitiveness of its cashmere industry:

- ◆ Expand the trade in raw cashmere through increased production levels
- ◆ Increase quality differentiation and target specific markets for the specific qualities:
 - low quality → China
 - high quality → Europe
- ◆ Improve the marketing position of the Afghan cashmere
 - Improving the quality and reputation of Afghan cashmere
 - Establish more direct market linkages
- ◆ Increase the level of value addition within Afghanistan

To achieve these goals the foundation lies in the development of Afghanistan's the human capacity, its technological know-how and its access to information.

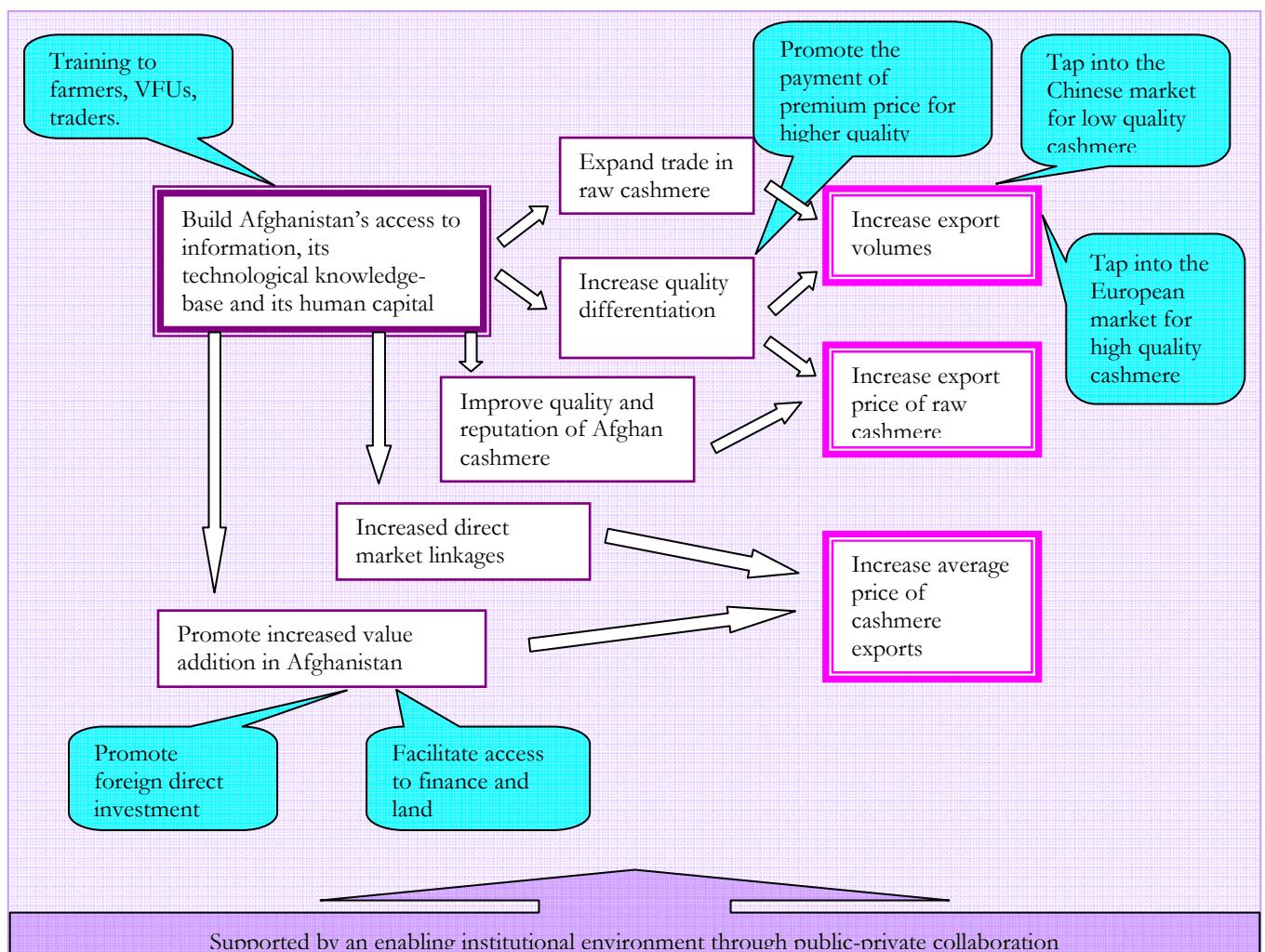


Table 12: Key factors affecting Afghanistan's competitiveness

The overall goal of any Cashmere Value Chain development strategy should include more than increasing the overall competitiveness of Afghanistan in the world market, and expanding its size.

It should also ensure that optimal benefits accruing to the poor so that it supports the overall poverty eradication strategies of the Afghan government.

Pro-poor strategies include:

- ◆ support the bargaining position of the producers to obtain good prices for the cashmere
- ◆ improve the efficiency of the supply chain, with relatively higher prices paid to the farmers
- ◆ promote value adding activities at the farmer's level
- ◆ expand the level of participation of the poor in the market
- ◆ encourage the development of high-trust market relationships between the actors in the market, in particular vis-à-vis the poor
- ◆ promote business practices that meet environmental, labour and social standards

To achieve these key objectives, there is a need for an active institutional environment, in which the private and the public sector cooperate to create a joint vision for development of the cashmere value chain, and together work towards an enabling business environment for the cashmere industry as a whole.

The private sector needs to be the driving force in strengthening the cashmere value chain. Public sector agencies, such as the government and its supporting agencies (ASAP, ASMED and others) shall only play a facilitating role, with a minimum footprint in the market.

A strong public-private sector partnership, in which a joint vision is developed, is pivotal to success. The role of the public sector shall remain limited to regulation, provision of training and information, and quality control.

The key objectives can be achieved through the following implementation strategies:

KEY STRATEGIES TO ACHIEVE THESE OBJECTIVES

- 1. Increase the volumes of Afghan cashmere that reaches the market***
 - 1.1. through awareness campaigns
 - 1.2. through extension to farmers
- 2. Improve the quality of Afghan cashmere***
 - 2.1. through improved harvesting and handling
 - 2.2. through increased quality differentiation
 - 2.3. through improving the genetic potential of the afghan cashmere goats (in terms of quality and quantity)
 - 2.4. through improved quality control mechanisms
- 3. Increase the efficiency of the cashmere assembly and processing systems with optimal benefits accruing to the poor***
 - 3.1. Increase the participation of farmers in cashmere collection and marketing
 - 3.2. Strengthen forward and backward linkages within the supply chain to streamline supply and demand (in terms of volumes and quality)
- 4. Improve Afghanistan's marketing position and create more direct end-market linkages, thereby increasing its responsiveness and resilience to global demands***
 - 4.1. through supporting the establishment of a business association (or guild) to act as the institutional change agent
 - 4.2. through developing an afghan cashmere quality communications campaign
 - 4.3. through supporting the establishment of more direct end-market linkages

5. Promote private investment in cashmere processing and manufacturing in Afghanistan

- 5.1. Establish contacts with potentially interested investors in the cashmere industry
- 5.2. Encourage direct investment in processing and/or manufacturing

MODE OF IMPLEMENTATION

A number of agencies have expressed interest in addressing bottlenecks and expanding on opportunities in the cashmere value chain; most notably the USAID-funded ASAP (Accelerated Sustainable Agriculture Growth) and ASMED (Afghanistan Small and Medium Enterprise Development) and the World Bank-funded Horticulture and Livestock Program.

It is essential that a coordination mechanism is established in the early stages, to avoid duplication and obtain maximum synergy between the approaches.

Preliminary discussions between ASAP, HLP and ASMED have roughly determined the following division of roles:

- 1) **ASAP** will:
 - a) Collect baseline information and Value Chain Analysis
 - b) Carry out awareness campaigns and extension to the farmers
 - c) Increase the outreach and efficiency of the supply chain
 - d) Support the Ministry of Agriculture in acting out the public sector part of the quality control mechanism (in collaboration with HLP)
 - e) Promote private investment in the cashmere processing industry
- 2) In collaboration with **ASMED, ASAP** will:
 - a) Facilitate dialogue between private sector and public sector actors; notably providing technical support
 - b) Facilitate the establishment of a cashmere business association; notably through the provision of technical support
 - c) Encourage the involvement of the Cashmere Business Association in the establishment of a quality control mechanism through a public – private partnership
 - d) Support the Cashmere business association to develop a Afghan cashmere quality communications campaign
- 3) **ASMED**, in collaboration with ASAP, will:
 - a) Facilitate dialogue between private sector and public sector actors; notably providing process and business development support
 - b) Facilitate the establishment of a cashmere business association; notably providing process and business development support.
 - c) Encourage the involvement of the Cashmere Business Association in the establishment of a quality control mechanism through a public – private partnership
 - d) Support the Cashmere business association to develop a Afghan cashmere quality communications campaign
- 4) **HLP** will:
 - a) Improve the quality of the Afghan cashmere through breeding and nutritional programs
 - b) Support the Ministry of Agriculture in acting the public sector role of the quality control mechanism (in collaboration with ASAP)

ASAP's specific plan of implementation is presented in a separate document '**ASAP Plan of Implementation for the Cashmere Value Chain**'

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