

## Cashmere Industry Report

---

### **Time to Focus on Quality Instead of Quantity**



Analyst  
William Danforth  
+976 99 026399  
[william@micc.mn](mailto:william@micc.mn)

February, 2017

## Contents

I. Executive Summary .....	2
II. Mongolian Cashmere Goes Global.....	2
III. Domestic Processing Industry Expansion .....	4
IV. Quality Decline Threatens Industry’s Gains.....	6
V. Fortifying Mongolian Cashmere.....	7

## Figures

Figure 1: Gobi Cashmere International Branch Locations .....	3
Figure 2: Mongolian Cashmere Garment Exports and Exchange Rate .....	3
Figure 3: Leading Mongolian Cashmere Garment Companies Market Share .....	4
Figure 4: Cashmere Company Segmentation, MCE Registrants (total n= 22) .....	4
Figure 5: Aggregate Production Levels (Raw and Processed), 2005 - 2015 .....	5
Figure 6: Processing Value-Add Estimation.....	6
Figure 7: Goat Population and Mongolian Production, 2005 - 2016 .....	7

## I. Executive Summary

Mongolian cashmere producers have reason to be optimistic. In the past decade, recovered global demand offset weak domestic economic conditions and garment companies like Gobi established international beachheads. Cashmere production levels are breaking records. And government programs, international financial institutions, and domestic companies are promoting in-country value-add cashmere processing. However, the industry's rapid growth has degraded the average fiber quality and made the industry more susceptible to a catastrophic supply-chain shock.

- 2016 was by far the best year on record for Mongolian cashmere garment exports, with total revenue equaling **US\$ 9.6 million** — up **196%** in 7 years from 2009. Mongolian cashmere brands like Gobi expanded overseas and are on track to become global brands. A handful of cashmere companies have also **vertically integrated** their supply chain, evidencing the industry's **steady maturation**.
- Over **82%** of cashmere companies registered with the Mongolian Commodities Exchange solely process cashmere instead of producing garments, with an industry-wide record **8,900 tons** total in 2015. Despite impressive domestic production, **more than 70%** of washed (low-value processed cashmere) is exported; much **value-add wealth remains uncaptured** by Mongolian producers.
- Herders, responding to significantly higher demand, increased their goat livestock populations **66%** over the last decade and now harvest cashmere from older goats — leading to an overall **decline in fiber quality**. Processing waste increased from **18% to 30%** over the past decade as a direct result.
- Lower fiber quality threatens not only the brand image of Mongolian cashmere, but also **the stability of the industry supply chain**.
- MICC believes that the government should enact a **tradeable permits quota** system for cashmere goats to both **limit herd sizes** and **incentivize quality**.
- **Higher meat prices**, brought about by **meat exports**, might also incentivize herders to cull less productive goats and provide a more **politically feasible pathway** to raising **the quality of raw cashmere**.

## II. Mongolian Cashmere Goes Global

While Mongolia has traditionally supplied up to 25% of raw cashmere fibers, Mongolian cashmere garment companies have now expanded globally. In particular, Gobi Cashmere's expansion heralds Mongolia's newfound prominence in the global cashmere garment industry. Figure 1 depicts Gobi Cashmere's store locations. Mongolian cashmere has expanded far beyond Asia — in the form of processed garments — and is increasingly popular with European and American consumers. And from enhanced international branding to innovative garment startups like Nadaam, Mongolian cashmere is becoming synonymous with craftsmanship and quality.

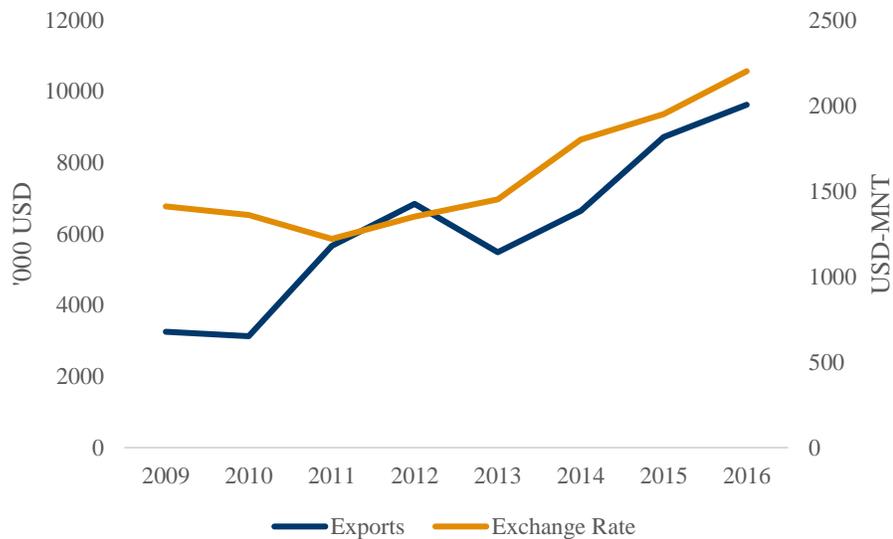
**Figure 1: Gobi Cashmere International Branch Locations**



Source: Gobi Cashmere

Nowhere is Mongolia’s garment industry growth more evident than in its record breaking export sales. Figure 2, below, shows the historical export of Mongolian cashmere garments — from overcoats, to shirts, to blankets — and the USD-MNT exchange rate. The exchange rate and export quantity are strongly correlated at 0.8. Cashmere garment exports total US\$ 9.6 million in 2016, up 196% from 2009. Of course, these numbers remain a small fraction of the global cashmere garment industry, estimated to be approximately US\$4.3 billion by Bain and Company. However, MICC expects Mongolian cashmere garment brands to continue experiencing strong growth as a result of global GDP performance, strategic pushes into international markets, and the MNT’s continued depreciation.

**Figure 2: Mongolian Cashmere Garment Exports and Exchange Rate**

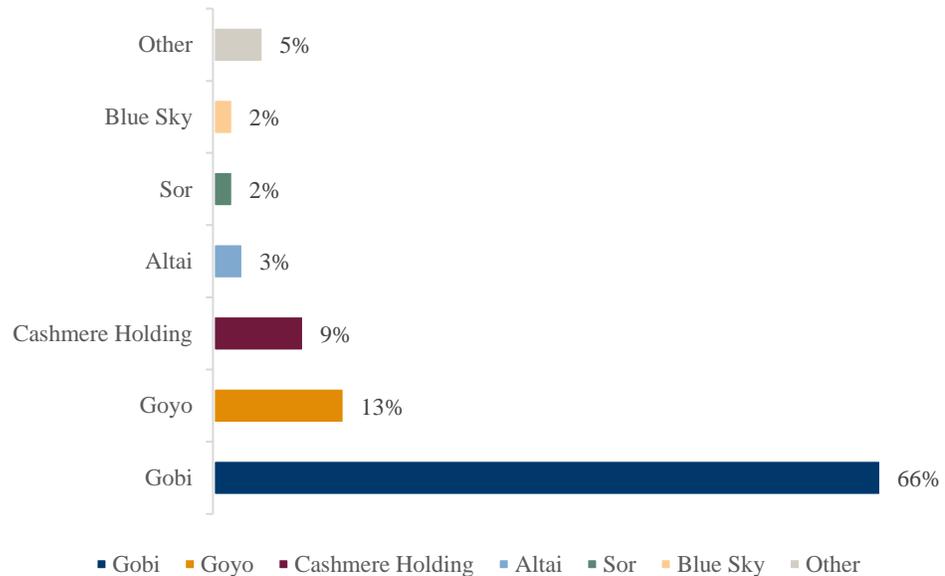


Source: Mongolian Customs Office and XE Currency

The vertical integration of major cashmere companies has driven Mongolia’s newfound presence in the global cashmere garment industry. Over the past decade, a handful of companies invested heavily in raw cashmere procurement, various

processing stages — washing, combing, and spinning — and the fashion infrastructure required for a major clothing company. These firms now enjoy enhanced efficiency and are more resilient to supply chain shocks. As Figure 3 demonstrates, Gobi cashmere remains the dominant market player with 66% market share. However, the recent entrance of newer fashion brands suggests that this market will become more competitive in the years to come.

Figure 3: Leading Mongolian Cashmere Garment Companies Market Share



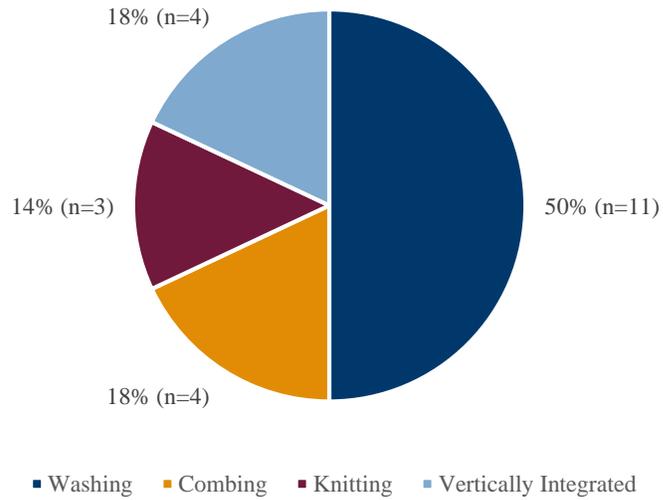
Source: MICC Analysis

The Mongolian cashmere garment industry has matured significantly over the past decade, with an export boom, vertical integration, and international-focused expansion strategy. While problems remain — acquiring sufficient working capital to purchase raw material inputs is a recurring obstacle — the near-term outlook remains positive.

### III. Domestic Processing Industry Expansion

While the success of these garment companies attracts media and investor attention, the vast majority of cashmere firms manufacture intermediate cashmere products. Over 82% of Mongolian Commodities Exchange registered cashmere companies produce some form of semi-processed cashmere, ranging from combing to washing to knitting. Figure 4 provides a visual depiction of this segmentation and numbers of cashmere companies. Note that these are companies exclusively exporting cashmere through the Mongolian Commodities Exchange, but they are indicative of the overall market composition. The vast majority of Mongolian cashmere companies are involved with processing cashmere and selling it to either export companies, foreign brands, or other domestic companies.

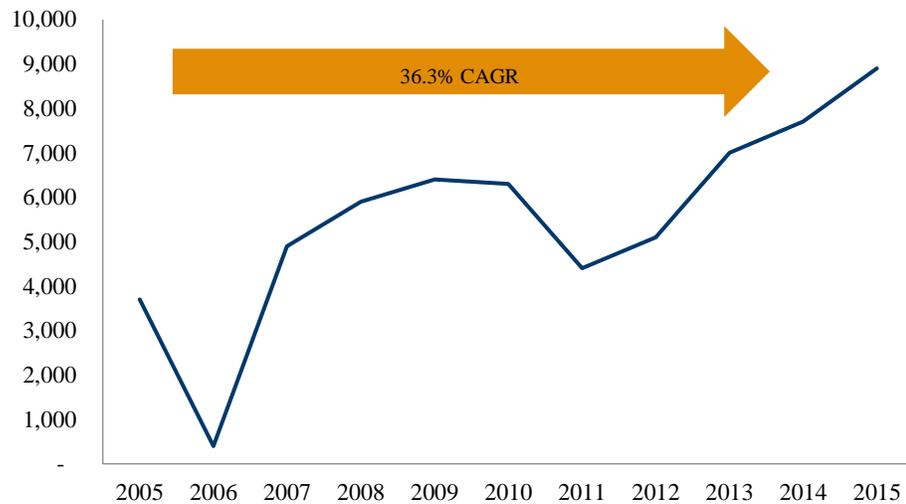
Figure 4: Cashmere Company Segmentation, MCE Registrants (total n= 22)



Source: Mongolian Commodities Exchange

Taken together, these smaller firms have driven an increase in the aggregate level of cashmere production to 8,900 tons in 2015. Production increased from 3,700 tons since 2005, a rise of approximately 140%. Figure 5 illustrates this increase which, while halted temporarily by the 2010 Dzud, has steadily increased from a 2006 low.

Figure 5: Aggregate Production Levels (Raw and Processed), 2005 - 2015



Source: National Statistics Office

Unsurprisingly, processed cashmere provides substantial returns on investment. Figure 6 below showcases the estimated value added from different stages of cashmere production. Prices are also determined by color, fineness, and length. Each stage involves a certain degree of waste, but the end-result is a more lucrative product.

**Figure 6: Processing Value-Add Estimation**

Processing Stage	Output Price (USD)	Value Add (USD)
Raw/Greasy Cashmere	25-30/kg	N/A
Sorting	27-32/kg	2-5/kg
Washing/Dehairing(50% yield)	58-74/kg	7-10/kg
Dyeing/Spinning (95% yield)	66-90/kg	8-16/kg
Knitting	80-150/kg	12-40/kg

Source: MICC Analysis

The government of Mongolia’s strategic plan involves retaining as much value-added production as possible in Mongolia. To that end, the government has enacted several export bans. Raw cashmere exports are banned and washed cashmere is expected to be as well by 2018. Because of this regulation and specifically targeted 8% loan financing, Mongolia now has the capacity to wash 60% of all locally produced cashmere. This processing expansion marks a major industry victory.

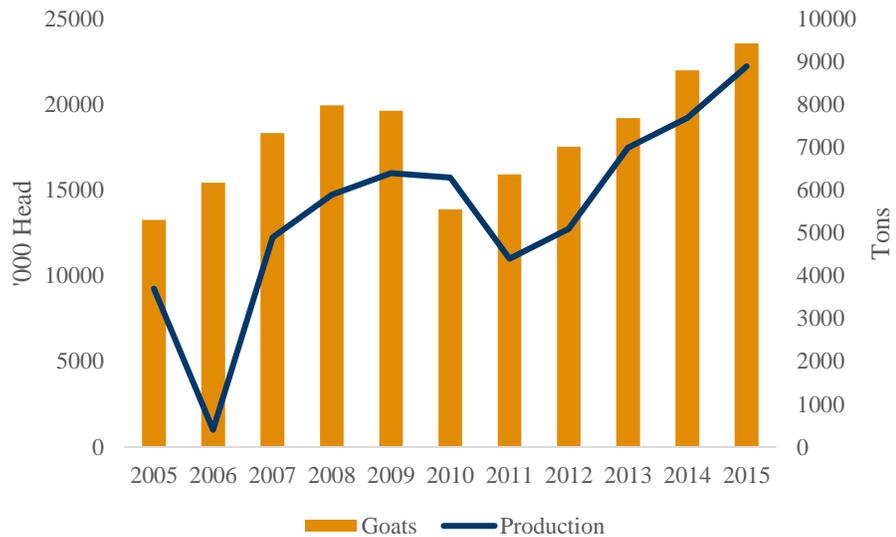
At the same time, two major problems plague domestic producers. The first is that Chinese firms with large reserves of working capital routinely capture a large portion of the available cashmere. Even as domestic processing capacity expands, raw input procurement is a growing risk — one which threatens the viability of small-to-medium sized Mongolian factories. The second problem is that the top-down export bans have led to an unintended side effect: foreign companies enter the domestic market, process cashmere only until the bare minimum level, and then export to their own factories outside Mongolia. While this phenomenon has driven a much higher rate of cashmere processing, money is still leaving the country and the processing is not Mongolian-owned.

**IV. Quality Decline Threatens Industry’s Gains**

Developments in the garment and intermediate processing segments of the cashmere industry suggest a bright future. With a few caveats, the industry is expanding and will provide valuable economic diversification. However, the industry’s processing expansion has required an unsustainable increase in the supply of raw inputs — which threatens the stability of the entire cashmere supply chain.

The expanding cashmere industry has coincided with a nearly two-fold increase in the number of goats since 2005; cashmere production and goat populations are very strongly correlated. Since the 1980s, cashmere prices have risen by more than 60% in neighboring China — one of the primary markets for Mongolian cashmere. Figure 7 below shows the intuitive connection between herd size and cashmere production.

**Figure 7: Goat Population and Mongolian Production, 2005-2015**



Source: National Statistics Office

Yet increasing the supply of raw cashmere has led to a decline in the average fiber quality. Harvesting waste has increased from 18% to 30%, as a greater percentage of cashmere fails to reach required standards. Several trends contribute to the deterioration of cashmere quality, notably poor animal health. However, there is a direct link between the increased demand for cashmere and the decline in quality. Mongolian herders reacted to the increased demand by expanding their herd, allowing goats to live longer, and not culling younger male goats (who tend to have coarser fibers). More goats are now male and, on the whole, older. Demographic shifts in goat herds, brought on by disorganized breeding, are the main culprit for substantial decreases in the average quality of raw cashmere.

The declining efficiency of individual goats is being offset by the increased herd size. Enough raw cashmere is being produced to drive the expansion of large garment companies like Gobi — even if intermediary processing firms are squeezed by foreign competitors. But what happens if a large number of goats die suddenly, as occurred in the 2009-2010 Dzud?

Millions of goats perished in a span of months, leading to a noticeably dip in cashmere production — as depicted in Figure 5 in the year 2011. Extreme weather isn't the only threat to the industry. The Swiss-Funded Green-Gold project estimated that climate change and overgrazing were responsible for the degradation of 65% of Mongolia's grazing pasture. Environmental degradation poses a major challenge to Mongolia's ability to support its livestock population, one that will increase the likelihood of another large-scale animal die-off.

Since then, however, cashmere quality has deteriorated due to herd compositional changes, disease, and breeding selection. The remaining goats will be substantially less productive than the goats that survived the 2009 Dzud. Rapid cashmere industry expansion weakened the supply chain, making it more susceptible to unexpected raw material shortages.

## V. Fortifying Mongolian Cashmere

Declining cashmere quality threatens not only the pristine Mongolian brand, but also supply chain stability. Mongolia has long been known for its unique combination of thin diameter, long-length fibers. Poor animal health, disorganized breeding, and older-goat-harvesting have put one of Mongolia's major assets at risk. Even still, Mongolia has achieved substantial gains in its processing and garment knitting industries. In order to preserve these developments and fortify cashmere quality, the government of Mongolia needs to act quickly.

Value-added processing programs are no guarantee of the industry's future. Recent investment strategies have emphasized developing spinning and garment manufacturing capacity domestically. These processing investments will generate additional per-goat revenue for the industry, but put upward pressure on domestic prices. Increased capacity alone will not slow the goat population's growth or increase the average quality of raw material.

Mongolia needs to regulate breeding to incentivize higher quality cashmere, specifically with a focus on the age and sex composition. This goal might be accomplished with a nation-wide tradeable permit scheme. Each herder would receive permits for their current goat populations, limiting future herd size. Size restrictions would increase the opportunity cost for not culling unproductive goats. Herders with goats that produce high quality fibers will in turn be interested in purchasing additional permits from less productive herders. A permit system will provide much needed oversight and management to the cashmere industry — but it is one of multiple options that could promote higher quality cashmere.

Expanding opportunities for goat meat exports would also incentivize higher quality cashmere. If the price of goat meat and skin increases, herders would be more tempted to butcher their older and male goats — rather than continue harvesting lower quality cashmere. This approach highlights a more politically feasible pathway for promoting cashmere quality, but numerous technical and disease-related hurdles prevent the Mongolian meat industry's expansion (see MICC's January 2017 meat industry report).

Ultimately, Mongolian cashmere has undergone an impressive transformation over the past decade, one that bodes well for the industry's future. Global exposure, value-add processing, and greater institutionalization have strengthened the sector. Yet capitalizing on these gains requires securing the source of the entire industry. If Mongolia wants to truly compete with other international cashmere industries, it must first fortify its precarious supply chain.