

Impact of Globalisation on the Nomadic Goatherd

Molintas, Dominique Trual

9 March 2012

Online at https://mpra.ub.uni-muenchen.de/96262/ MPRA Paper No. 96262, posted 12 Oct 2019 04:34 UTC

Impact of Globalisation on the Nomadic Goatherd

ABSTRACT

The story of the Mongol goatherd and the cashmere industry is a classic example of institutional overconfidence ultimately to undermine public trust. The fact that world trade manoeuvres along political undertones and historical nuances, policy exists as the interpretive and questioning touchstones to discern and reflect upon practices and outcomes. Policy seeks to create specific, deliberate futures for communities. Thus it is the crucial role of Government to determine policy intent, if not to shape the meaning and the form of societal conduct. Significance implies a degree of importance on the issue well within context of the economic, ecological and ethnic orientation of a specific region. This reasons appropriate action is due any inconsistencies or consequences that could result policy formulation.

In the examination of the capabilities of the cashmere industry across its strategic priorities, policy issues such as access to financing, simulation of tax and survey results—there is no sufficient evidence to show that policy supported the nomadic goatherd in the adaptation to Globalisation.

This document is a desk review for the evaluation of policy with regards to the Mongolia cashmere industry. It should be read as a compilation and synthesis of findings, rather than in conclusion of any particular line of enquiry.

Keywords: Mongolia, Nomadic Goatherd, Multi Fiber Agreement, Cashmere

JEL Classification: F6 Economic Impacts of Globalization



Figure 1. A Mongol Goatherd (Meacham, C. 2007, National Geographic)

INTRODUCTION

Mongolia is a majestic country in a landlocked elevation comprising broad stretches of grassy plains, snowy mountains, and windswept desert. The climate is a harsh extreme of bitter cold and dry, in two seasons set out in a short dry hot summer and a long winter way below freezing point. The culture and tradition of the Mongol is greatly influenced, if not restraint by the natural features of the place (Jolly, 1999). Life is rife of human adaptations resulting of the ecological precinct and harsh climate that has shaped the mainstay country economy as the nomadic goatherd.

Mobility alongside the ability to cope with difficulty, by fleeing from environmental threats is the fundamental nomadic culture. People readily move to other resources when resources within the vicinity are depleted. Consequently, the accumulation of material wealth, or the cultivation of the earth is not practiced. Both qualities contradict a majority of Asian culture which evolved around a life of settlement and farming (Worden, 1989).

Nomadic goat herding is a tradition shared by 75000 shepherd families living in grasslands and deserts, at about the size of Alaska. Grazing is a simple chore to the shepherd on horseback to pasture, breed and comb cashmere off goats in the spring moulting season when the winter coat is naturally shed. Herdsmen camp by the herds in tents (Wallack, 2008) usually in a group of three gers. At times the camp could last ten years on the same spot depending on vegetation. A herder family could have more than 300 animals; some of which are bartered for food and other staples from time to time. Skins and hides are also crafted during the last quarter while cashmere combing is done midyear (United Nations, 2000).

The culture of the Mongol perpetuates from the underlying principle that life is anent to land. The people who belong in it share the abundance of the natural resource in respect self-reliance and equal responsibility: *Land is the epitome of life. Our perceived worth of the land lays bare our value for life* (Jolly, 1999).



Figure 2. *Mongol shepherds in the snow and must often cope with extreme climate* (Drozdov A. 2007, National Geographic)

LITERATURE REVIEW

Cashmere is a rare fibre of extraordinary softness, warmth and lightness, named by the British but is also known as the *pashmina* or *pashm* (Encyclopedia Britannica, 2000) in the Middle East region. Its origin,Persian woollen fabric fashioned into Kashmir shawls, sometime between the third century BC and the eleventh century AD (Encyclopaedia Britanica, 2000). In the 15th century, Kashmir Aayn-ul-Abidin established a cashmere wool factory, which introduced the craftsmanship of the Turkestan weavers. Throughout the 18th and 19th century, fibre from Tibet was sailed into Europe that for hundreds of years the Kashmir became the luxury fabric exclusively for royalty (Mongolian Statistical Yearbook, 1997).

Cashmere as an industrial raw material bartered in commercial quantity, traces back to the Treaty Port Agreements in the 19th century, between Asia and Europe (Mongolian Statistical Yearbook, 1997). In the 1830s weaving cashmere shawls using French yarn turned up as the foremost Scottish industry. About the same time a 300 pound sterling reward was put out for the first Scotland cashmere woven in French fashion. Captain Charles Stuart Cochrane was granted a Scottish patent for the process in 1831, which he sold to Henry Houldsworth and sons of Glasgow in the later part of the year. In 1833, Henry Houldsworth and sons of Glasgow received the award (Scotland Society for the Benefit of the Sons and Daughters of the Clergy, 1845). These days, Scotland still produces luxury cashmere clothing. The sector employs 17000 workers in more than 450 Scottish textile firms (Scotland Society for the Benefit of the Sons and Daughters of the Clergy, 1845).

The earliest listing of some sort of manufacture of into cashmere fabric is by Frenchman Valerie Audresset in 1836. By 1906 Dawson International invented the first commercial dehairing equipment and began purchasing cashmere fibre in volume from China (Blackburn, 1990). By the 1920s, the fabric was used for designer clothing by the Parisan designers Jean Patou and Coco (Campi, 2001). Following the liberalisation of trade in 1978, Dawson International broadened its shipping horizons into the provinces of Beijing and Tianjing. The firm ventured briefly in several innovations in the Australian cashmere industry (Holst, 1992) for the most part of the 1980s (Anonymous, 1981). In the midst of the 1987 stock market crash, Dawson International withdrew support in the Australian continent, to establish joint ventures in China.

Behind all that the industry persevered with disruptions in the international trade scene given the poor quality control implements on the Chinese cashmere. This prompted market instability and miserable prices (McGregor, 2000).

For the entire socialist era from 1921 until 1990, Mongolia was a Soviet Union satellite. Back then, grazing herds functioned through a collective system of state employees, comprising nearly half of the country population of about 2.7 million. A guaranteed pension served as incentive and production targets pegged fixed quotas for a range of herd count that a citizen selects to tend. The bulk of the cashmere fibre and meat went to the Soviet Union and to the state owned facility: Gobi Cashmere (Ulan, 1999).

Between the late 1970s and early 1980s, Mongol goatherds began cross breeding indigenous goats with Russia Don goats of inferior hair and fibre characteristics, to scale up production yield. The practice increased production output but reduced fibre quality to adulterated value. Furthermore, herd ship was practiced without appropriate training on cross breeding, or the right feeding methods, or herd age population balance. Fibre deterioration was the tolerated danger. It was fortunate that during the 1970s, the Japanese consulted in the institutionalisation of the Gobi Cashmere first quality control system. This put forward the trade label *pure Mongolian cashmere* in the global market (Wallack, 2008).

Subsequent to the collapse of the USSR in 1991, the Government of Mongolia shifted briskly away the state run economy. But because certain socio political rudiments exist, the free market changeover caused upon industry chaos as breeding stations transitioned for privatisation. Since then, the GoM policies have attempted to shelter or even advance the cashmere industry and yet failed.

In 1997, the GoM cancellation of the cashmere export ban served to ease the accession to the World Trade Organization: WTO. The cancellation of the export ban was replaced with an Export Tax instated in the amount of 4000 tugrugs or USD3.63 each kilogram of raw cashmere. 'But because the instated value is exorbitant, this resulted to nothing collected on export tax, more susceptibility to corruption, and increased bribery at the border; while half of the Mongolian cashmere produce is smuggled over the border to China' (Dugeree, 2008).

The abolishment of the Export Tax was promised and actually announced in 2007, however with postponement of its enforcement for several years afterward, or by 2012 (Tsedendamba, 2002).

China's interest in Mongolia has changed from that of the post Mao era. In August 1991, the Yang Shangkun visit to Ulaanbbatar forged friendly relations based on a five point peaceful coexistence of: territorial integrity, choice of development, sovereignty, respect for independence and economic cooperation (Dongyan, 2002). In June 2003, the famous Hu Jintao official visit to Mongolia is the explicit gesture of new generation leadership. Insofar the economic progress of China has created opportunities for the landlocked Mongolia, and is for now the most influential trading partner. In 2004, about 48 percent of GoM export goes to China, vis a vis 38 percent of investment in Mongolia originates from China (Yang, 2000).

These are aside the fact that both nations share the longest land border, markedly of crucial geopolitical interest. China exerts a low cost industry, and is the main artery of access for the landlocked Mongolia for international trade. In the cashmere trading scene, China's sheer existence weakens the Mongolian cashmere industry by creating an excess capacity on the processing facilities since the raw materials are purchased cheaply in volume (Shurhuu, 2005).

Four fifths of country cashmere production goes into the huge processing capacity of China. Given so, a nomadic shepherd is vulnerable to the Chinese hardnosed traders, who purchase in bulk for \$13.7 a kilo of raw material in cash up front. A Mongol purchaser affords the same for a modest \$9.92. Plenty of the oversized cashmere fibre is still purchased by Chinese factories to combine with just about anything: yak, merino wool, camel hair and nylon. Unsurprisingly, these adulterated fabrics find its way across the globe, inaccurately labelled as the pure Mongolian cashmere (Ulan, 1999).

SECTOR SCALE

Mongolia sits as the legendary figure of international cashmere trade as goatherd of the finest, unadulterated fibre. This achievement is associated with centuries of culture and traditions, given the contextual underpinning in nomadic shepherding and the utter features of the land.

Cashmere is a key sector of Mongolian and third vital component in country export next to copper and gold. The sector is the livelihood to more than one third country population, roughly 3.1 million, and single largest employer representing 16 percent of labour (Wallack, 2008). With country GDP in 2006 at USD2.6 billion, there is an estimated 36 percent of the population below the poverty line and over 43 percent of all households to steadily rely on livestock for some portion of income (Mongolian Statistical Yearbook, 1997).



Figure 3. Global Resources of Raw Cashmere (China international cashmere forum. April 2005)

Mongolian cashmere constitutes 30 percent of Global output with 60 percent produced in China; and the rest in Afghanistan and Iran. On the average, Mongolia produces about 3500 tonnes of cashmere or one third of the 12500 tonnes of China. There are an estimated 19 million cashmere goats in Mongolia, comprising 46 percent of livestock as key source of liquidity in rural regions (Shurhuu, 2005).

Forty firms officially list cashmere production and fourteen manufacture finished garments including end goods. Others simply produce semi-finished materials such as dehaired cashmere, scoured cashmere, and tops for export to China, Japan, Italy, the US, and the UK. The sector also represents 400 small knitting outfits made up of five to ten people (Namkhai, 2009).

Gobi Corporation was the sole state owned firm in the cashmere industry, which was privatised early 2008. The on-going company restructure is focused on improving efficiency, productivity, and quality (Wallack, 2008). As a first processing facility built in 1975 through the technical assistance of UNIDO, the complex takes up all phases of cashmere production from the processing of raw fibre all through the final stages of a finished product. The facility operation in 1981 would not have been without the technical assistance of Japan (Enkhbayar, 2002).

From this single cashmere and camel wool-processing facility, the sector has developed into 85 facilities through local investments and joint ventures. 60 percent of these foreign investments belong to the Chinese. Others are Japanese, Italian, Swiss and American (Saikhanbayar, 2007).



Figure 4. Six Major Export Commodities (Statistical Yearbook 2000-2008)

Key Export Commodities

In today's global textile market, cashmere sales average between 760 and 1050 million USD each year. The top consumers are USA, Japan and EU countries. Since 2006, Mongolia is one of those selected in the European General System Preferences program that identified 7200 types of products entering the European market without import duty. Another trading partner of Mongolia is Japan, which accounts for 78.7 percent of Mongolian Export, whereas cashmere products represent 90 percent (Chimedtseren, 2006). De-haired cashmere is the larger portion of product export and less volume of finished garment. Typically, foreign facilities ship semi processed yarn and export the finished material (International Wool Secretariat, 1996).

Trade balance closed at a deficit in 2007 by USD288.3m, while the earlier year showed positive export growth at 22.5 percent for USD1888.9m and an importation growth at 42.5 percent with USD2117.3m (Asian Development Bank, 2006).

Goat Share In Livestock Inventory

Mongolia ranks 21 in goat farming worldwide with cashmere goats to constitute 20 percent of country GDP on livestock. Between 1990 and 1999 the count of goats doubled to make up 46 percent of total herd. These numbers are still rising at an accelerated pace that the dilemma of desertification lingers.

Previously, the fine haired cashmere oat was referred as the Capra hircus laniger, seemingly as a subspecies of the domestic goat Caprs hircus. Later on the animals are more considered as part of the domestic goat species Capra aegagrus hircus (Enkhbayar, 2002).

Table 1: Goat Share In Livestock Inventory (Mongolia Statistical Yearbook 2000-2008)

Livestock in thousands	25857	28572	33568	30228	23898	25428	30398	43288
Goats in thousands	5126	8521	11034	10270	9134	10653	13267	19969
Percentage of goats in total								
livestock	20%	30%	33%	34%	38%	42%	44%	46%



Figure 5. Desertification in Inner Mongolia (Smith 2011)

Industry Capacity

The cashmere industry operates within the larger web of international textile and garment trade, which in recent decades has accelerated the flow of fashion from four seasons year into two design fractions a season, otherwise one to every month (Batchimeg, 2005). In the same context, the global cashmere industry has experienced the same fate of costs and price volatility alongside a shrinking high end segment and vertical disintegration and dominance of brand name market shareholders (Bakei, Cashmere Market: processing requirements for raw cashmere, 2003).

Table 2: Indicators Of The Sector Scale In Country Economy (MSY 2001-2008)								
Percentage of Industrial Sector	19.7	22.3	22.6	25.1	26.7	41.3	37.4	28.3
Percentage of cashmere products in								
GDP	3.7	6.8	11.8	7.7	8.5	3	2.5	4.1
Percentage of goats in total								
livestock	33.6	62.9	32	36.8	40.1	42.3	44	45
Export of cashmere in total export								
in millions USD	90.1	70.7	45.2	57.3	85.1	88.2	163.5	188
Labour count in cashmere processing facilities in millions	2417	2580	2848	3462	4780	5601	5506	5072

A quite informal group engaged in herding cashmere goats as a way of life. In the early part of the 1990s, which was followed with an abrupt increase in goat population, from 5 million to over 11 million in the decade of liberalisation (The World Bank, 2003), then a drastic decline by 25 percent since many of the offspring did not survive (Research Institute of Animal Husbandry, 1999) with massive death of the young goats during extreme weather affecting the age group balance is a determinant of fibre quality. A deteriorating quality of raw cashmere produced in Mongolia is noted (Hamilton, Umnugovi Herders Producer Association NGO-Driven Cashmere Market Days 2003, 2003). This circumstance has created market fluctuations and price variations based on fibre quality.



Figure 6. Fibre Yield and Diameter by Goat Age and Gender (Zagdsuren 2008)

A feared dilemma for the herder is desertification given. That is the total carrying capacity in equivalent sheep forage units, or SFUs is thought to have been surpassed in the 1990s as a consequence of overgrazing (Bank, 2003).

Total	41.6	34.6	30.9
with engineering construction	24.6	14.6	8.2
simple mine well	17	20	22.7
Located in pasture	38.3	26.3	21.7
Unused	1.1	6.2	5.8
Tank for livestock	4.1	1.9	1
Capacity 000 cub meter	39.4	27.7	14.9

Figure 3: Livestock Watering Facilities In Thousands Of Units (World Bank. 2003)

Processing Segment

There are 85 processing facilities with a total installed capacity of 5500 tonnes raw cashmere and annual average output of about 3000-3500 tonnes, accounting for scouring, dehairing, spinning and knitted product .Roughly 70 percent of the industry processors engage only in the first stage of processing, with just 20 percent in the manufacture of finished products. Either way, the cashmere sector enjoys affordable skilled labour and tax rebates on a quota system (Warner, 2000).

Gobi is the largest integrated facility which was established in 1981 by way of Japanese Government investment (Wool and Cashmere Federation, 2003). 74 percent used to be under state ownership, with the other 26 percent traded in the Mongolian Stock Exchange. Gobi has been privatised and is presently under the joint venture of a Mongolian-Japanese organisation.

The Gobi facilities has an installed capacity adequate for 1000 tonnes of raw cashmere, 68 tonnes of cashmere and camel wool tops, 120 tonnes of cashmere yarn, and 350000 units of knitwear plus 153000 meters of fabric. The entire complex completes six interfaced processing sections that employ 1941 workers. The equipment can be described as advanced machineries in top shape for Japanese and German standard. 83 percent of all production is exported to Europe, South East Asia and North America (Batchimeg, 2005).

Of these resulting added values, one alternate action is for the forward integration of the Mongolian cashmere industry. The recorded net cashmere export is at about 57 million in USD, without smuggled exports if at all could register to about USD97 million

Table 4: Fodder Production and the Evolution of Fodder Supply (World Bank. 2003)											
Sown areas under fodder crops in thousand hectares	53	26	11	6	4	5	5	2	1	2	3
Harvest of fodder crops in thousand tonnes	138	112	29	19	19	14	15	5	4	3	4
Hay harvest thousand tons	669	689	672	744	655	688	667	715	689	831	767

Table 5: Compos	sition of Insta	lled Processing	g Capacity (G	REGI2003)	
Company	Scouring	Dehairing	Spinning	Knitting	Weaving
Altai Cashmere LLC	240	100		50	
Buyan Holing	650	500	200	150	0
Cashmere Products LLC				100	
Eermel LLC	250	150	70	150	
Loro Piano Mongolia LLC	150	78			
MCCWC	450	150	150	200	
Mon-Forte LLC	300	300			
Mon-Italy LLC	720	150			
Osin LLC		22			
Sanshiro LLC	75	40	75		20
Sor Cashmere LLC	300	90			
T&L Cashmere LLC		72			
Tuul Cashmere	50				
Tuya Company	300	50			
Others	1165	2339		6000	47
Total	5500	3880	805	7000	200

Quality and Cost

The cost of producing semi-finished and finished cashmere products in Mongolia is far more costly than compared to the costs in China. This considers the cheaper labour at about 25 percent less, and the downtime lost to ship equipment for repair or replacement into China or Europe. Furthermore, China has established cashmere clusters of herders, processors, machinery and support or services providers for the industry. Garment designers are easily to find and cheaper in Mongolia. In the overall, production costs in Mongolia are more expensive in each stage of the value added chain at about 30-40 percent higher when compared to China (Roningen, 2003).

Table 6: Cashmere Value Chain (The World Bank 2003)								
Raw, greasy cashmere	\$24-\$30 per kilogram	\$24-\$30						
Scouring and dehairing in 50% yield	\$58-\$74	\$7-\$10 each kilogram						
Dieing and spinning 95% yield	\$66-\$90 each kilogram	\$8-\$16 each kilogram						
Knitting	\$80-\$150 each kilogram	\$12-\$40 each kilogram						
Weaving	\$80-\$95 each kilogram	\$8-\$20 each kilogram						

Cost of capital is one of the key cost drivers in the value chain of the cashmere industry. Herders all the way to the export traders all require a particular working capital financing. This helps each segment be competitive in world markets (The World Bank, 2003). Credit from commercial lenders in Mongolia is expensive and cost of money constitutes a bigger share of operating costs. The interest rates for a year loan in Mongolia are between 1.8 and 4 percent each month for borrowings made in Mongolian tugrik (MNT). Typically the loan

duration is between three and six months (Hamilton, Umnugovi Herders Producer Association NGO-Driven Cashmere Market Days 2003, 2003).

Chinese cashmere traders have quite a cost advantage because the access to credit for both cashmere production and processing is more affordable and can be accessed repeatedly. The monthly financing rates of 0.4 and 0.6 percent per month allow for the latitude to purchase at higher prices for raw cashmere in Mongolia, in order to secure volume requirements (Bakei, Cashmere Market: processing requirements for raw cashmere, 2003).

To raise the herder income, the decrease in fibre diameter of two microns must be recuperated by an increase in price that is at least enough to compensate for the decrease in yield per goat between 20 and 25 percent. Chinese traders habitually purchase all output at one price no one else can match. Making it all the more impossible to maintain fibre quality.

Cashmere fibre quality is different in local and international standards. The criteria uses: micron fibre or fibre diameter <16 micron, average fibre length >30mm, moisture, coarse hair content <0.1%, colour and contamination level (Bakei, Cashmere Market: processing requirements for raw cashmere, 2003).

There are several herders and animal factors could change the quality of cashmere, such as the pureness of mixture between coarse hair and fine fibre is achieved though sorting details in the processing segment. Goatherd practices on culling for age and gender herd composition results to fibre coarseness. In general, adulterations on yield reduce fibre quality, however breeding or cross breeding is most important (Ripley, 1861).

Leaders in the industry are dogged to preserve the uniqueness and trademark label 'pure Mongolian cashmere' with quality standards for both processors and manufacturers that produce soft, durable fabric (Wallack, 2008). A good cashmere fibre falls between 13 and 16.5 microns in thickness (Ulan, 1999). Fibre diameter, tensile strength, colour, and freedom from contamination are qualities known of the pure Mongolian cashmere; aside the insulating properties at about eight times warmer than wool for new business engagements and as a forum for market reforms away traditional practices (Wallack, 2008).

Table 8: Price Variation Of Processors In Colour And Fibre Diameter In								
	(Mongolia cash	nmere industry p	project survey 2005)					
		Grade I	Grade II	Grade III				
	Superior	15.51-16.8	16.81-17.6	17.61-19.0				
Diameter	13.0-15.5 micron	micron	micron	micron				
White	40000	37000	34000	26000				
Light grey	40000	37000	34000	26000				
Grey	39000	37000	33000	25000				
Brown	39000	37000	33000	25000				

Table 9: Cashmere Micron Counts (Khishigjiargal Ts. and Sedvanchig Ts. 2008)

Fibre	Length (mm)	Diameter (microns)
Mohair	90-150	23-45
Camel hair	29.2-33.2	18.63
Vicuna	Too short	13-45
Yak hair	23.3-24.8	19-52
Short fibres are noter	tially very low in micron counts	A micron is the measure of the fibre

Short fibres are potentially very low in micron counts. A micron is the measure of the fibre fineness or diameter, and the finer is softer. 1 micron is 1 millionth of a meter.

METHODOLOGY

The theoretical construct underscored in this study is disequilibrium in triangulation of the Realistic Evaluation and survey results on strategic priorities. Fundamentally this is a case study of the nomadic goatherd of Mongolia.

Disequilibria or disequilibrium is characterised as the loss of equilibrium that is most profoundly associated with price stability alongside demand and supply. Mercantilism is the common economic practice pursued by Western Governments since the 16th century for the accumulation of the largest possible share of wealth by way of Tariffication. Whereas MFA or the Multi Fibre Agreement¹ no longer exists to discriminate open trade through Tariffication; the nomadic goatherd is caught up in the disequilibria.

Development economist John Kenneth Galbraith asserts that development must consist of a series of disequilibria. Development Economics is a segment of economics that deals with the causes and cures of the perpetuating nature of poverty. That is: A less affluent society is constantly confronted with deprivation making it rather difficult to envision for an aspiring nation.

Globalisation is disequilibria per se. Perceived as new wave colonialism, these advanced nations penetrate less developed emerging economies to trade in foreign soil and advantage oneself with low cost production.

CMO is a diagnostic tool for evaluating how particular approaches within a circumstance to produce an outcome. Realistic evaluation assumes that any policy is crafted for a purpose to which an intervention shall occur.



Figure 10 Strategy Criteria Ranking (Sun Yat Sen survey 2003)

Figure 10 states the strategic priorities in lieu adaptation to Globalisation. The Sun Yat Sen survey (2003) finds Quality as first priority with a score of 0.365 followed by Technology & Equipment with a score of 0.234. Capital & Finance sits third priority with a score of 0.224 with Raw Material Quality to rank fourth and score 0.202. Differentiation Strategies ranked fifth with a score of 0.202 with Cost Leadership following as sixth in score 0.170. Human Resources comes seventh priority with a score of 0.151. Procurement Competition is priority eight & scored 0.146; priority nine is Innovation Design scored 0.136; priority ten is International Alliances scored 0.104 and priority eleven refers to Locations which is scored 0.057.

¹ The Multi Fibre Agreement established formal quota agreements and restrictions to regulate trade between developed nations and developing countries—clearly for the protection of advanced textile industries then curtailed the potential of low cost competing developing nations. Quotas imposed on a subset of countries on exports from a subset of exporters can set out consumer segments or restrict trade flows with chances of opportunity loss.

RESULTS AND FINDINGS

Disequilibria is examined in the matrices by way of simulation of scenarios with 30 percent tax and total export ban (Roningen, 2003).

	TH DIS	EQUILI	BRIA
	MONGOLIA	CHINA	REST OF WORL
HERDER INCOME	A scenario of the cashmere export ban in effect the price for the herder plunges 46 percent on the long- term. Herder income contracts 51 percent A scenario in full enforcement of the 30 percent export tax on raw cashmere: Finding shows the Herder income drops 16 percent resulting 2 percent slump in production on the long term.	A scenario of the cashmere export ban in Mongolia, herder income in China increases by 27 percent A scenario in full enforcement of the 30 percent Export Tax on raw cashmere: Finding shows Chinese herder income escalates at 5 percent	A scenario of the cashmere export ban in Mongolia, herder income in the rest of world is up by 27 percent
MANUFACTURER	A scenario of the cashmere export ban in effect the manufacturer's income increases 26 percent Quality as first priority with a score of 0.365 followed by Technology & Equipment with a score of 0.234 Legislation as priority particularly weak in access to financing and cost to do business scored 0.411. Again the statistical equivalence of the figure is of weak importance.	A scenario of the cashmere export ban in Mongolia the income of manufacturers in China drop by 4 percent	
TAX EARNINGS	A scenario of the cashmere export ban in effect: Tax revenue for the cashmere sector drops 20 percent at roughly 7 million. Tax earnings on processed cashmere up 34 percent with volume rising 35 percent A scenario full enforcement of the 30 percent export tax on raw cashmere: Study finds additional USD1 million in tax revenue is collected.	Results of the Sun Yat Sen survey finds Tax Rebate is a priority in Globalisation adaptation and scored 0.355. Finance & Institutional Support as the strategic priority. Relative to other criteria: Supply chain inputs scored 0.231 followed by Raw material collection scored 0.150, Finance and Institutional Support scored a high 0.494 although this statistical weight equivalence would mean of weak importance	

Change over time			Mongolia	ι ι		China	,	Rest of World		
Change over time		Short	Med	Long	Short	Med	Long	Short	Med	Long
Income of Herders	M\$	-16	-30	-31	20	53	55	3	8	8
Income of neruers	%	-28%	-53%	51%	11%	28%	27%	11%	28%	27%
Processed cashmere sales	M\$	6	14	17	-5	-12	-15	-1	-2	-2
Flocesseu casimiere sales	%	12%	27%	26%	-2%	-4%	-4%	-2%	-5%	-5%
Manufactured sales	M\$	0	0	0	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Quantity, raw	t	-55	-277	-286	58	307	317	8	45	46
produce	%	-2%	-9%	-9%	1%	3%	3%	1%	3%	3%
Quantity, processed	t	113	263	268	-100	-229	-232	-15	-34	-34
cashmere	%	12%	27%	26%	-2%	-4%	-4%	-2%	-5%	-5%
Quantity cash Manuf.	t	0	0	0	0	0	0	0	0	0
goods	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Daw cashmara prica	\$/kg	-5	-9	-9	2	5	4	2	5	4
Raw cashmere price	%	-27%	-48%	-46%	10%	24%	23%	10%	24%	23%

Table 10 Simulation impact of Mongolian export ban on raw cashmere (Roningen 2003)

rubie if Simulation impact of the full concetion of export tax on full customere (Rommgen, 2005)
--

Change over time			Mongolia	ι		China		Rest of World		
Change over time		Short	Med	Long	Short	Med	Long	Short	Med	Long
Income of Herders	M\$	-2	-7	-10	2	8	11	0	1	2
	%	-3%	-12%	-16%	1%	4%	5%	1%	4%	5%
D	M\$	0	2	4	0	-2	-3	0	0	0
Processed cashmere sales	%	1%	4%	6%	0%	-1%	-1%	0%	-1%	-1%
Manufactured calas	M\$	0	0	0	0	0	0	0	0	0
Manufactured sales	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Quantity raw cashmere prod	t	-5	-41	-70	5	39	67	1	6	10
	%	0%	-1%	-2%	0%	0%	1%	0%	0%	1%
	t	10	43	58	-8	-38	-51	-1	-6	-7
Quantity cashinere	%	1%	4%	6%	0%	-1%	-1%	0%	-1%	-1%
Quantity cash Manuf.	t	0	0	0	0	0	0	0	0	0
goods	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Down ooghmono mioo	\$/kg	-1	-2	-3	0	1	1	0	1	1
Raw cashinere price	%	-3%	-11%	-14%	1%	4%	5%	1%	4%	5%
Dreased asshmana price	\$/kg	0	0	0	0	0	0	0	0	0
Processed cashmere price	%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Quantity cash Manuf.	\$/kg	0	0	0	0	0	0	0	0	0
goods	%	0%	0%	0%	0%	0%	0%	0%	0%	0%

The next pages are the statement of cause-mechanism-outcomes of policy, otherwise called the realistic evaluation method using the Pawson and Tilley CMO. Mathematical simulations of the impact of policy are used to verify the consistency of the earlier defined strategic priorities and the CMO chart. These simulations are referenced to the Gobi initiative report (Kathuria, 2001) (Mongolian Agricultural University Research Institute of Animal Husbandry, 2004), (Martin, 2004), (Naumann, 2004), (Norwood, 1969), (Forum, 2004), (Silberston, 1984), (Beddoes, 2004), (Velia, 2003) (World Trade Organisation, 2004).

REALISTIC EVALUATION

	CONTEXT	MECHANISM	OUTCOME
	Competitive pressures from low wage countries forced producers in high wage countries to adopt faster, more efficient, and capital intensive equipment to produce ever higher quality output. High end market for cashmere is controlled brand name designers such as Gucci, Dunhill, Ralph Lauren, and retailers such as Brooks Brothers and J. Crew	Poor foreign investment system contrary to China subsidy on its cashmere processing segment with very low interest rate loans, reduced contributions to social benefits and export bounties. No incentives given to processors to integrate forward into international channels of distribution or for developing a brand name	Worsening cost disadvantage. Real exchange rate of Mongolia has appreciated against the dollar by 10% and against the Yuan by 25%, while the Yuan rate has devalued against the dollar of 15% Unemployment rate increased
-	Competitive pressures from low wage countries forced producers in high wage countries to adopt faster, more efficient, and capital intensive equipment to produce ever higher quality output. High end market for cashmere is controlled brand name designers such as Gucci, Dunhill, Ralph Lauren, and retailers such as Brooks Brothers and J. Crew	High corporate income tax rate at 30% and15% for SMEs, matched with a short tax holiday for newly established businesses. Domestically-owned firms are currently not entitled to any tax holidays No accelerated depreciation and loss carry forwards for tax purposes	Firms in the processing segment ceased to operate or have downsized operations over the past eight years due to low productivity and high labour cost, resulting to at least 50% excess capacity
	Competitive pressures from low wage-countries forced producers in high wage countries to adopt faster, more efficient, and capital intensive equipment to produce ever higher quality output. High end market for cashmere is controlled brand name designers such as Gucci, Dunhill, Ralph Lauren, and retailers such as Brooks Brothers and J. Crew	 Exuberant interest rates on loans: The cost of funds for a medium- sized, privately-owned processor in Mongolia is 37%/year compared to 1%-6% in China and 6% abroad in dollars. Banks in Mongolia typically do short-term loans, so that loans to finance capital investments are difficult to arrange. The banks also impose stringent requirements for collateral and typically will not lend against inventories, purchase orders or projected cash flows. 	Dampened business environment Competitive disadvantage to Mongolian cashmere sector relative to Chinese business access to funds at very low rates

REALISTIC EVALUATION CONTEXT MECHANISM OUTCOME Size of market for luxury clothing A bounty is usually paid when No protection for fibre quality has contracted over time. commensurate to yield. A 2 smuggled goods are microns fibre diameter raises intercepted that appears as a Chinese strategy looks at quality but results in a reduction in subsidy of the processing worldwide dominance through the yield of about 24%. Yet the price segments at the expense of the control of supply and pricing of raw differential both in Mongolia and herder. cashmere and as the world factory, Changers buy raw cashmere in on international markets is not for finished cashmere products as commensurate to the cost of Mongolia, at prices that a contract producers or alliances with processors cannot match and quality. international brand holders, and, make profits ONGOLIA INDUSTR developing or acquisitioning brand names A price differential offered by Mongolia remains as the raw Mongolian processors between materials supplier of China, high quality (13.5-15.5 micron) and easily coerced into price and lower quality (15.5-17.5 distortions micron) cashmere of is only about Fashion trends have resulted in 15%. Herder income is reduced higher quality garments at and alteration of the fibre lower prices with a large of continues production done in low wage countries

CONCLUSIONS

Globalisation places the Mongolian Goatherd at disadvantage therefore policy instruments ought to be defined to turn the disequilibrium to an advantage. The findings state: A first priority of the international and local consumer preference is pure natural cashmere fibre. Needs assessment priority determines the Mongolian goatherd is disadvantaged without access to financing and instating taxation rebates for entrepreneurs as incentive. Notwithstanding the scale of the sector and composition of country population, future policies in the advancement of the cashmere industry should reconcile cultural acclimations of the ethnic groups, and with greater care on ecological balance.

REFERENCES

Encyclopaedia Britanica. (2000). Kashmire shawl. Chicago: Encyclopaedia Britanica.

- Research Institute of Animal Husbandry. (1999). Program for improvement of goat's fiber quality of Mongolia. Mongolian Agricultural University.
- Anonymous. (1981). *The challenge of cashmere*. Melbourne: Australian Rural Communicators.
- Asian Development Bank. (2006).
- Bakei, A. a. (2003). Cashmere Market: processing requirements for raw cashmere.
- Bakei, A. a. (2003). Cashmere Market: processing requirements for raw cashmere.
- Bank, T. W. (2003). From goats to coats: Institutional reform in Mongolia's cashmere sector. New York: WB.
- Batchimeg, M. (2005). *Future challenges for the PRC and Mongolia*. Beijing: Jamestown Foundation China Brief.
- Beddoes, Z. (2004). The Economist global agenda . New York: The Economist.
- Blackburn, D. (1990). A lifetime with cashmere. *The Journal of the Bradford Textile Society*, 49-60.
- Campi, A. (2001). Cashmere Industry. Seattle: Book Rags.
- Chimedtseren, B. (2006). Issues concerning the development of Mongolia's cashmere processing industry.
- Dongyan, L. (2002). *The interaction between Northeast Asian cooperation and Chinese development strategy*. Ulaanbaatar : Mongolian Development Research Center.
- Dugeree, J. (2008, May 28). USAID-AATCC Economic Policy Reform and Competitiveness Project. (M. b. advisor, Interviewer)
- Encyclopedia Britannica. (2000). Cashmere. Chicago: Encyclopedia Britannica.
- Enkhbayar, S. (2002). *The Mongolian livestock sector: Vital for the economy and people but vulnerable to natural phenomena*. Ulaanbaatar: Mongolian Agricultural University Research Institute of Animal Husbandry.
- Forum, O. S. (2004). *The future of nomadic pastoralism in Mongolia*. London: Center for Policy Studies.
- Hamilton, J. (2003). Umnugovi Herders Producer Association NGO-Driven Cashmere Market Days 2003. Umnugovi: Event Assessment for the Gobi Initiative.
- Hamilton, J. (2003). Umnugovi Herders Producer Association NGO-Driven Cashmere Market Days 2003. Umnugovi : Event Assessment for the Gobi Initiative.
- Holst, P. a. (1992). Development of the Australian fibre goat industries. *Recent Advances in Goat Production' Proceedings V International Conference on Goats* (pp. 1554-1560). New Delhi: International Goat Association.
- International Wool Secretariat. (1996). Future market opportunities in wool apparel. *Market Research Public Seminars*. Melbourne: International Wool Secretariat.
- Jolly, R. (1999). UNDP Human development report. London: Oxford University Press.
- Kathuria, S. M. (2001). Implications of MFA abolition for India and South Asia: Policy Research Working Paper No. 2721. New York: World Bank.
- Martin, W. M. (2004). *Dealing with diversity: Analysing the consequences of textile quota abolition*. Purdue: Purdue Agricultural Economics.
- McGregor, B. (2000). Quality attributes of cashmere. *Proceedings 10th International Wool Textile Research Conference*. Aachen: DWI Leibniz-Institut für Interaktive Materialien e.V.

- Mongolian Agricultural University Research Institute of Animal Husbandry. (2004). *Program for Improvement of Goat's Fiber Quality of Mongolia*. Denver: Colorado State University.
- Mongolian Statistical Yearbook. (1997). Agriculture in Mongolia, 1971-1996: A statistical profile. Ulaanbaatar: Mongol Ulsyn Undesnii Statistikiin Gazar.
- Namkhai, E. (2009). Mongolian cashmere industry expert . (Wallack, Interviewer)
- Naumann, E. (2004). *Implications of the removal of quotas in textiles and clothing trade: Brief, No 8.* Cape Town: Tralac Trade Law Centre.
- Norwood, B. (1969). The Kennedy Round: A Try at Linear Trade Negotiations. *Journal of Law and Economics* 12(2), 297-319.
- Ripley, G. a. (1861). Cashmere.
- Roningen, V. (2003). The impact of a ban on Mongolia's raw cashmere exports.
- Saikhanbayar, B. (2007). *Methods for improving the Cashmere manufacture competitiveness*. Ulaanbaatar: Government of Mongolia.
- Scotland Society for the Benefit of the Sons and Daughters of the Clergy. (1845). *The New Statistical Account of Scotland: Lanark*. Michigan: W. Blackwood and Sons.
- Shurhuu, D. (2005). *China's new diplomacy and Mongolia-China relations*. Berkeley: Institute for International Studies.
- Silberston, P. Z. (1984). *The Multi-Fibre Arrangement and the UK Economy*. London: Her Majesty's Stationery Office.
- The World Bank. (2003). From goats to coats: Institutional reform in Mongolia's cashmere sector. New York: WB.
- Tsedendamba, B. (2002). *Mongolia's Foreign Policy in 1990's: New identity and new challenges*. Ulaanbaatar: Institute for Strategic Studies.
- Ulan, B. (1999, August 12). The cashmere crash. The Economist.
- United Nations. (2000). The Mongolian Action Programme for the 21st Century. Paris: UN.
- Velia, M. (2003). *Trade and Investment, Background Briefing No. 4*. New York : Institute of Development Studies.
- Wallack, R. (2008). *Cashmere from the land of misery*. Durham: American Association of Chemists and Colorists.
- Warner, G. (2000). *Globalisation of the cashmere industry in Mongolia*. Ted Case Studies. Wool and Cashmere Federation. (2003).
- Worden, R. a. (1989). *Federal Research Division Country Study*. Washington: Library of Congress.
- World Trade Organisation. (2004). Textiles trade reform: Unstitched by China. Paris: WTO.
- Yang, F. a. (2000). *The strategic significance of west development*. Hong Kong: Economic Selections.