



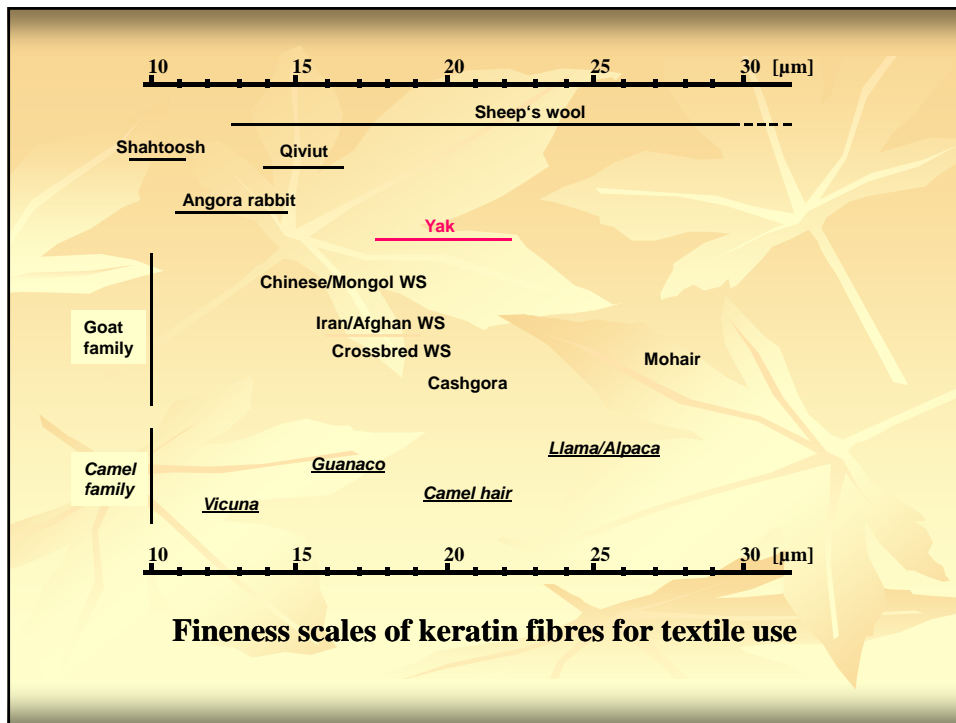
Iranian Cashmere

Breeds Fiber characteristics Scientific projects The Challenges Ahead

Dr. H. R. Ansari-Renani
Animal Science Research Institute
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World production of speciality fibres

	<u>1987</u>	<u>2004</u>	<u>Change [%]</u>
<u>Goat family</u>			
- Cashmere	5.000	8.000	+ 37
- Mohair	24.000	7.500	- 69
- Cashgora	200	?	-
<u>Camel family</u>			
- Camel hair	2.000	2.000	+ 0
- Lama/Alpaca	4.500	5.500	+ 22
- Vicuna/Guanaco	50	50	+ 0
<u>Angora rabbit hair</u>	10.000	8.000	- 20
<u>Yak</u>	200	1.000	+ 500



Indicative prices for dehaired cashmere

	<u>Length</u> (mm)	<u>Price range</u> (US\$/kg)
White		
Long hair	36 - 40	72 - 94
Medium	30 - 34	58 - 72
Short	22 - 30	42 - 58
Brown		
Long hair	34 - 36	64 - 72
Medium	30 - 34	52 - 64
Short	22 - 30	36 - 52

Source: *Wool Record*, 3 (1998)

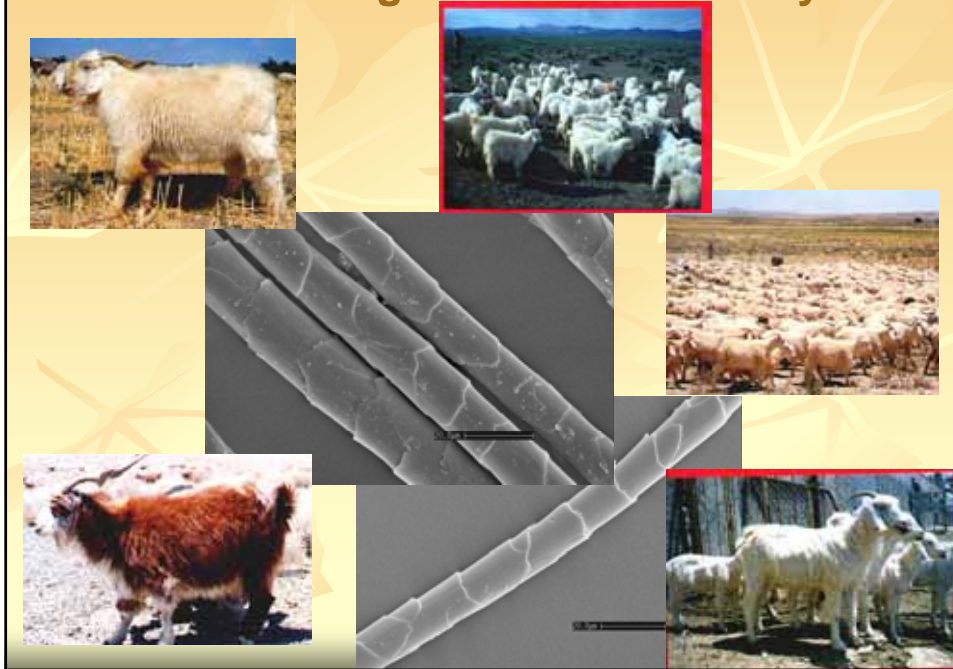
Iranian goat population and ratio

Goat breeds	Population		Ratio %		Production system
	1990	2000	1990	2004	
Marghoz	*	14,000	*	0.05	Village Semi-nomadic, mixed crop livestock and village Nomadic, semi-nomadic and village Nomadic and semi-nomadic Mixed crop livestock and Village in small family flocks
Najdi	*	50,000	*	0.19	
Native Balck	*	1,500,000	*	5.56	
Racini	*	2,000,000	*	7.4	
Tali	*	140,000	*	0.52	
Mixed Breed	*	11,000,000	*	40.7	
Unharacterized	*	4,000,000	*	14.8	
Crosses	*	829,600	*	30.73	
Total Goats*	24,635,000	27,000,000			

Iranian goat breeds



Iranian cashmere goats and their luxury fibres









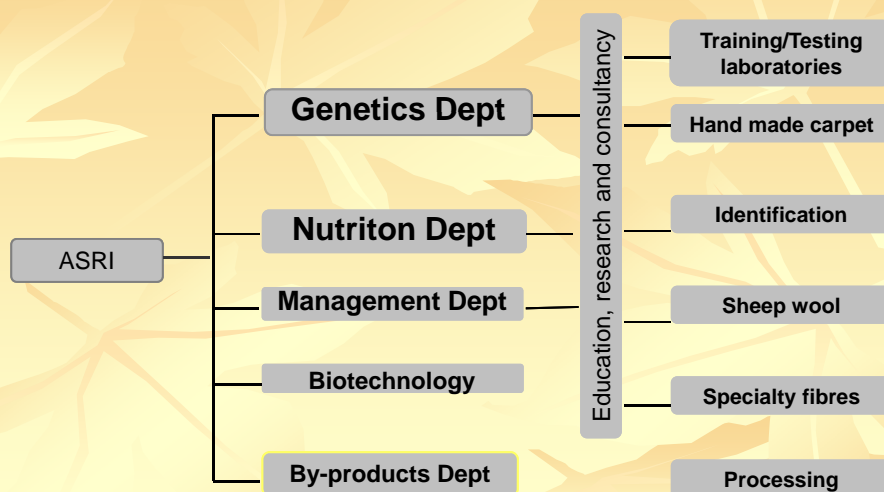
Cashmere characteristics by breeds

Name of breeds	Fiber diameter (mkm)	Non-medulated (%)	Medulated (%)
<u>"Birjandi"</u>			
Bucks	19.11	46.10	53.9
Young bucks	16.11	51.33	48.68
Does	18.61	47.46	52.54
Young female goats	17.81	42.63	57.37
<u>"Raeini"</u>			
Bucks	18.2	63.12	36.80
Young bucks	17.82	70.44	29.56
Does	17.58	56.20	43.80
Young female goats	17.65	71.36	28.64
<u>"Nadushan"</u>			
Does	17.26	41.23	58.78
Young female goats	17.21	50.39	49.61

Follicle characteristics by breeds

Name of breeds	S/P ratio	Primaries (mm ²)	Secondaries (mm ²)	P + S
"Birjandi"	8.88	2.07	24.47	20.53
Bucks	10.47	2.65	27.87	30.52
Young bucks	9.44	2.70	26.75	29.45
Does	7.37	3.00	29.03	32.03
Young female goats				
"Raeini"	12.86	3.35	37.35	40.70
Bucks	14.02	3.28	37.86	41.14
Young bucks	13.47	2.81	36.65	39.46
Does	11.87	2.37	29.50	31.82
Young female goats				
"Nadushan"				
Does	8.86	2.97	27.80	30.77
Young female goats	8.55	3.40	31.50	34.90

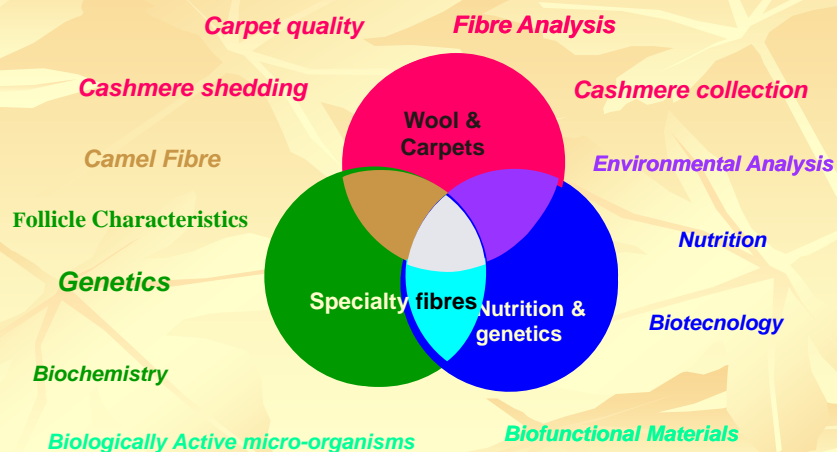
Organizational structure of Animal Science Research Institute

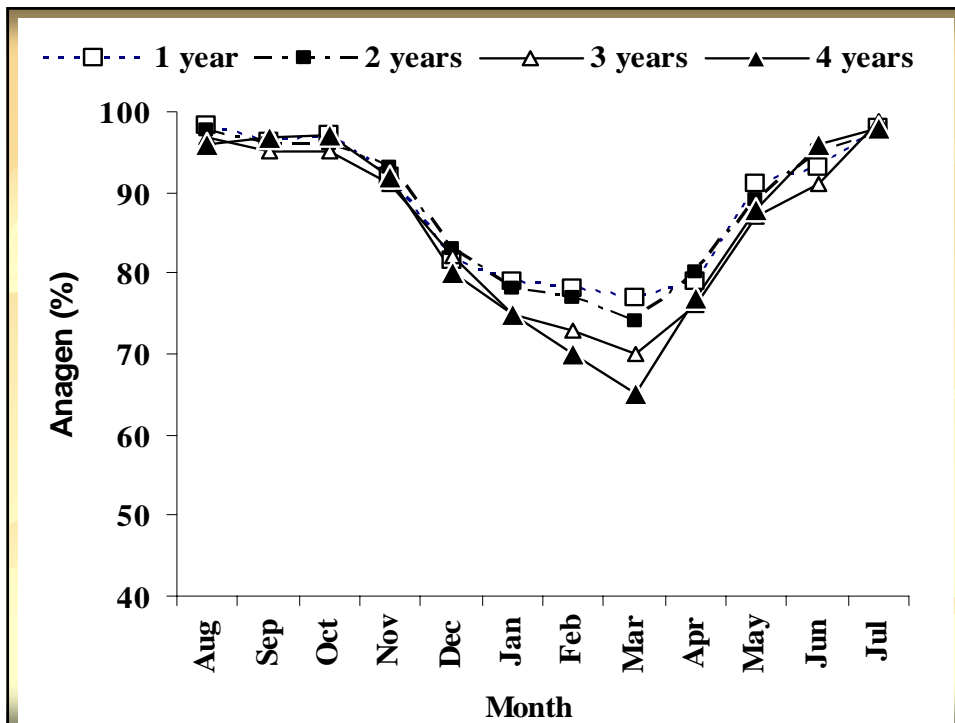


Research and technological projects on cashmere goats sponsored by the government

Name of the project	Duration	Main outcomes
Iranian goat cashmere	1990-1995	Fiber quality characteristics of different goat breeds bred in various ecological zones of Mongolia
Cashmere goats	1996-2000	Production characteristics of cashmere fiber.
Technology for breeding and selection of cashmere goats	1995-2005	New technology for breeding superior goats. Selection method based on genetic parameters of productivity and advanced reproduction techniques (AI) of cashmere goats
Cashmere shedding, nutrition, biotechnology,	2004-2006	Collection of cashmere, new feed resources, genetic relationship

Research areas





Laboratory testing

Cashmere and Wool testing
Center

Cashmere & Wool laboratory

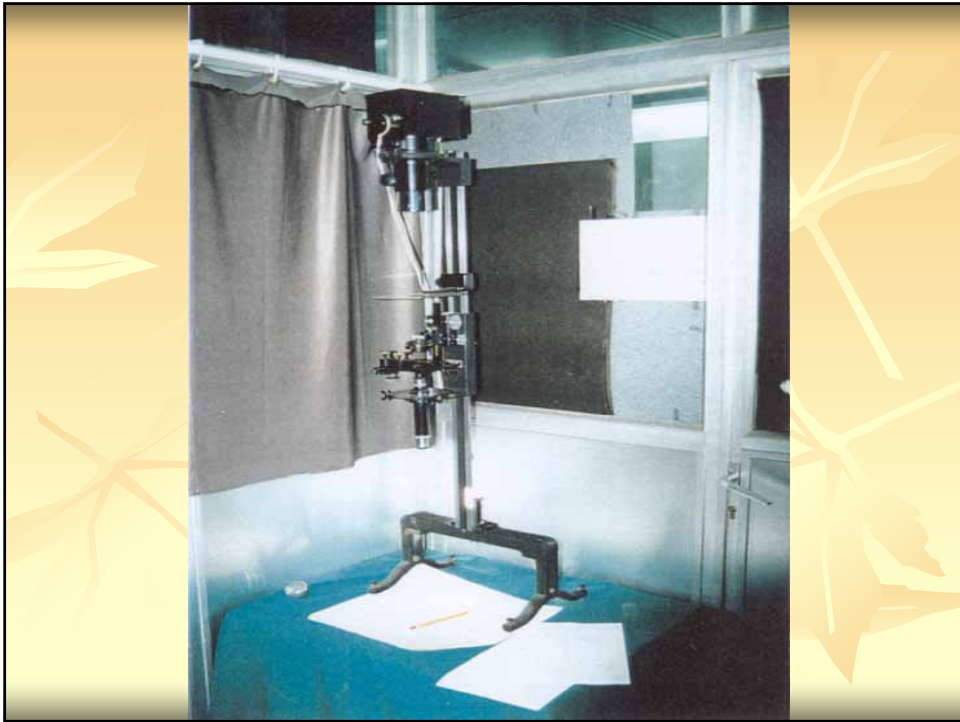
- CWL has been established as a division of Animal Science Research Institute (ASRI).
- CWTC is an independent testing laboratory determined to serving the Researchers and manufacturers.
- CWTC has skilled technicians and researchers.

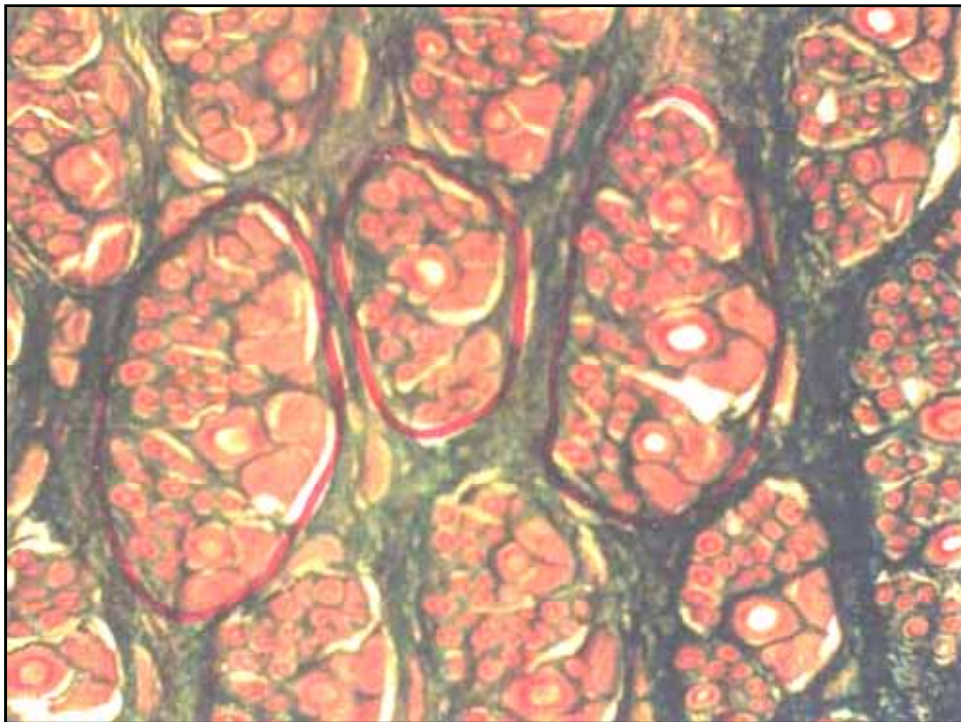
Mean fibre diameter

Projection microscopy IWTO-8, AATCC 20, ASTM D629

OFDA Technique IWTO-47









Quality criteria

Fibre fineness

S/P ratio

Fibre length

Follicle density

Staple strength

Follicle activity

Colour

Follicle morphology

Style

Follicle histology

Purity

Grease and moisture content

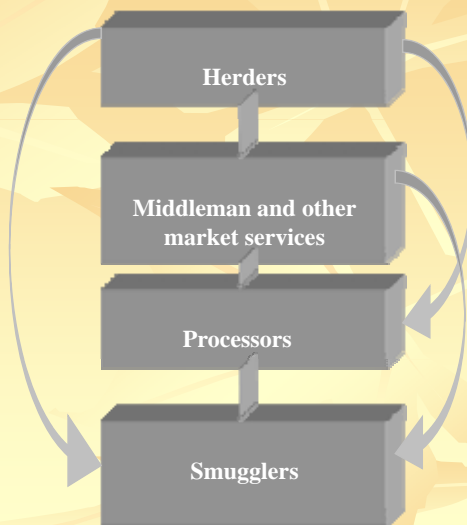
Raw cashmere

Markets and challenges

Raw cashmere sale channels

Main sales channels for raw cashmere:

- Middlemen, mostly financially exporters
- No cooperatives, other business organizations
- No direct sale to processors
- Smuggling





Iranian cashmere exports



**All cashmere is exported to Europe as
raw material**

How to support your cashmere industry

- Government:
 - attractive for FDI business environment
 - competitive financial services
 - favorable trade negotiations
 - vocational training
 - best practices benchmarking
 - better organized raw and processed cashmere markets
- Businesses: target your goal
 - Markets
 - Money
 - Management
 - Information access
- Herders
 - don't play with genetics unless you are sure
 - cooperatives – stronger voice, stronger bargaining
 - education on cashmere quality

