



# Sheep and wool production in Kyrgyzstan: status and problems

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Kyrgyzstan – mountain country, 94,2% of its territory are occupied by mountains and almost 90% are located at the altitude of over 1,500 m. above sea level.



## Structure of agricultural cropland

Out of 10,631 thousand ha of cropland 9,174 th. Ha or about 86% are under natural rangelands and about 172 th. ha (1.6%) – hayfields. In mountain regions their share is even higher. For example, in Naryn region – 95.5%, Issyk-Kul – 88.1%. Natural ranges exceed the area of arable land by 7.3 times and by 17.5 times the area under forage crops.

Steppe rangelands – 3.1 mln. ha (34.4%)

Grassland and steppe – 2.5 mln. ha (27.8%)  
meadow – 1,5 млн. га (16,7%)

Desert and semi-desert rangelands – 1.8 млн. га (20.0%)

High mountain rangelands – 0.1 mln. ha (1.1%)

About 3 mln. Ha are occupied by fescue rangelands

Availability of wide areas of natural, mainly low grass mountain rangelands, lifestyle of Kyrgyz people, that has been developed for many centuries, were preconditions for development of sheep production in Kyrgyzstan as the major and traditional sector of livestock production in this country.



## Dynamics of sheep flock and wool production

year	Sheep		Wool production		Harvested wool	
	th.heads	%	th. tons	%	kg	%
1985	10,472.7	100.0	32.5	100.0	2.8	100.0
1989	10,483.0	100.1	38.6	118.8	3.4	121.4
1993	9,115.0	87.0	32.3	99.4	3,0	107.1
2000	3,806.5	36.3	11.7	36.0	3.4	121.4
2005	3,773.6	36.0	10.6	32.6	3.4	121.4
2009	4,502.7	43.0	10.9*	33.5	3.1*	110.7*

\* - 2008 data

### Fiber production in different production systems

	1991		2008	
	th. tons	%	th. tons	%
Total	36.5	100.0	10.9	100.0
state farms, collective farms, cooperatives	23.7	64.9	0.98	0.9
Households	12.8	35.1	4.8	44.1
Farmers	-	-	5.12	55.0

### Breed distribution of sheep reared in Kyrgyzstan

Breeds	1990		2003	
	th. heads	%	th. heads	%
Kyrgyz fine wool	9,075.0	91,0	1,354.8	41.0
Tyanshyan	598.4	6,0	198.3	6.0
Alay	99.7	1,0	19.8	0.6
Indigenous	199.4	2,0	1,434.2	43.4
Australian Merino			66.1	2.0
Aykol			99.1	3.0
Other			132.2	4.0
Total	9,972.5	100.0	3,304.5	100.0

# Main sheep breeds



## Kyrgyz fine-wool

This breed was developed through complicated reproductive crossing of indigenous fat-tailed coarse wool ewes with fine wool breeds' rams: new Caucasus Merino, Siberian rambulye, yurtemberg and prekos breeds. The breed was tested in 1956. It is developed for meat and wool production. Wool harvested in the best flocks reach 4.2 – 5.0 kg in the original form and 2.3 – 2.5 kg in a washed form. Fineness of fiber is within 19-25 micrometers, length is 8-9 cm. It is reared in the entire territory of Kyrgyzstan.



### **Tyanshyan semi-fine wool**

This breed is developed for meat and wool production. It is developed through complicated reproductive crossing of fat-tailed ewes with rams of english lincoln reproduction. It is approved in 1966. It produces semifine cross bred wool with 13-15 cm length, with fineness of 25.1-36.0 micrometers. It is mainly reared in the high mountain Naryn province.



### **Alay semi-coarse wool**

This breed is developed for meat and wool production. It is developed through complicated reproductive crossing of gissarized coarse wool ewes with rams of prekos, saradja and Tajik breeds. It was approved in 1981. It produces high quality white semicoarse wool for carpet production. This breed is reared in the high mountain Alay district of the Osh region.



### **Aykol fat-tailed**

This breed is developed by crossbreeding of selected fine wool ewes with Gissar rams. It is reared in Issyk-Kul province.



## Structure of fiber production

	2003		2008	
	tons	%	tons	%
Sheep wool	10,898	93.7	10,335	94.8
incl. fine wool	3,266	30.0	3,100	30.0
- from Merinos	1,307	40.0	315	10.2
semi-fine wool	1,461	13.4	1,550	15.0
- incl. cross-bred	120	8.2	125	8.1
semi-coarse wool	2,009	18.4	1,580	15.3
coarse wool	4,162	38.2	4,105	39.7
Goat wool	724	6.2	564	5.1
Goat fluff	4	0.1	5	0.1
Total for all types	11,626	100.0	10,904	100.0

## Industrial fiber processing

	2003	2008
Washed degreased wool, tons	1041,0	205,2
Share of clothing from wool, %	16,6	11,2

## Problems

- disparity of prices for agricultural products including в том числе на шерсть;
- there is no developed fiber marketing system;
- fiber processing industry is collapsed;
- complicated access of farmers to fiber market information;
- there is no large scale breeding program directed to improvement of fiber quality;
- low technological characteristics of fiber;
- lack of production and economic conditions in households for value addition to fiber.

