

Milk production with Awassi sheep in Kyrgyzstan

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- According to FAO there are 1 billion 87 million of sheep in the world with genofund of 603 breeds. They are specialized on:
 - wool – 321 or 53.2%
 - meat – 277 or 46.0%
 - milk – 1 or 0.8%
- 160 combined breeds are producing milk, wool and meat.

Breed composition of sheep in the Kyrgyzstan (1990)

- Fine wool – 92.0%
- Semi fine – 7.0%
- Semi coarse – 1.0%

Structure of the sheep products:

- wool – 55.0%
- mutton – 44.0%
- pelt – 1.0%

Breed composition of sheep in the Kyrgyzstan (2003)

- Kyrgyz fine wool (wool and meat) – 41.0%
- Australian merino (wool) – 2.0%
- Tyan shan (wool and meat) – 3.0 %
- Alayskaya (wool, fat and meat) – 6.0%
- Edilbaevskaya (meat and fat) – 3.0%
- Gissar (meat and fat)– and crossbreeds – 6.0%
- Local Kyrgyz (meat and fat) – 38.0%
- Others – 1.0%

Structure of the sheep products:

- mutton – 96.6%
- - wool – 3.3%
- - pelt – 0.1%

There is a correlation between milk yield of ewes and their prolificacy and the selection was directed to provide lambs by milk during suckling period and creating new genetically separated groups of polycarpic ewes. That why there wasn't any milk breed in Kyrgyzstan.

Commercialization of livestock, increase in livestock products demand, new biotechnological reproduction systems stimulated creating of possibilities to gain more income. One of this way is diversification of sheep management – milk sheep.

- The main objective is to create a pedigree base on a base of using milk breed sires on local coarse wool Kyrgyz sheep.

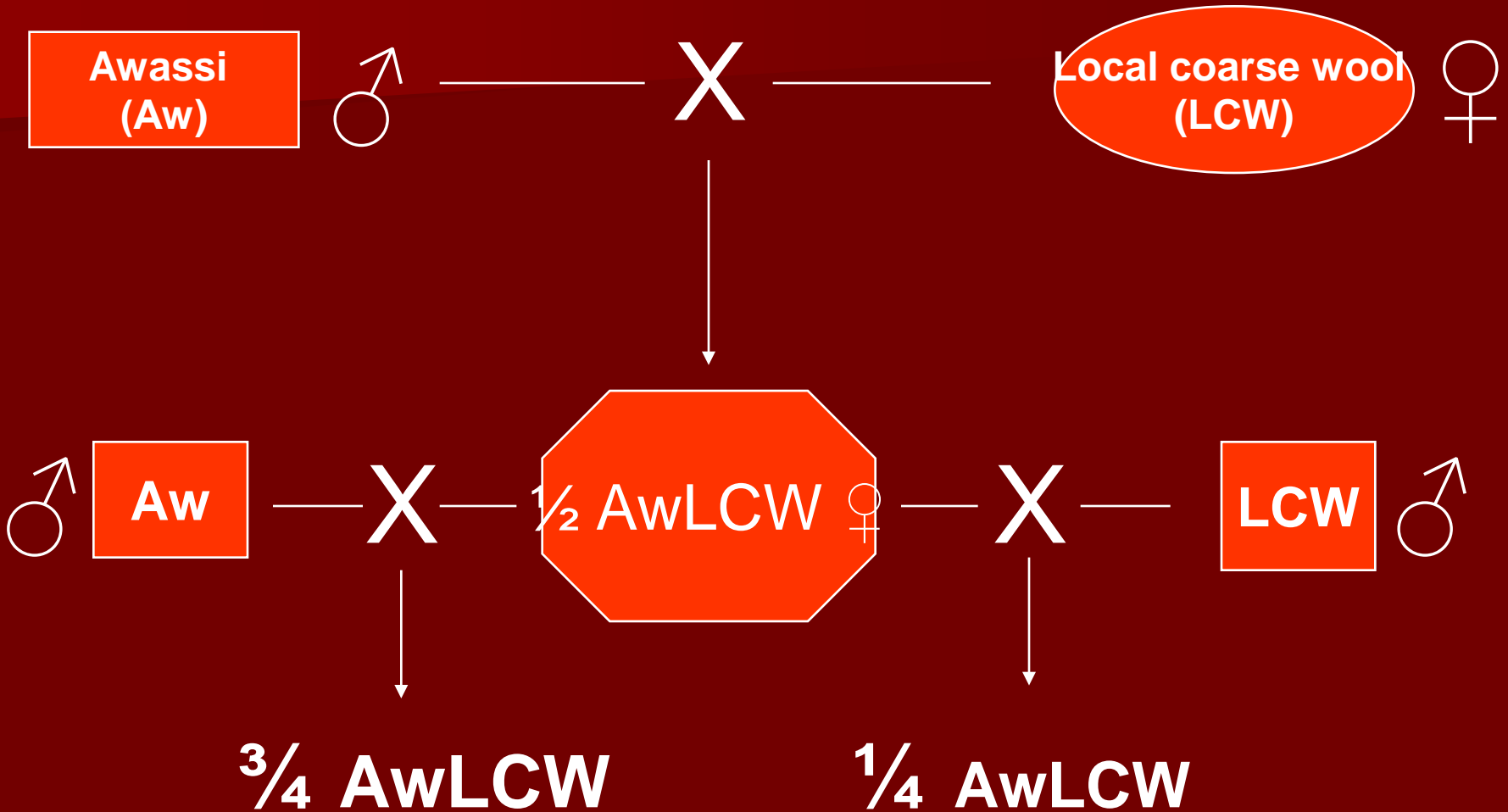
- Selection material for improving – Awassi sires.

- obtaining and processing milk
- marketing of sheep milk on local markets.

Awassi sire



Scheme of crossing



Awassi ram was brought from Kazakhstan in 2002 # 4567 for mating, with life weight 78 kg. Two rams ## 1983 and 1058 (60.5 and 65.5 kg) were brought from Kazakhstan in 2007 with the age 18 month.

Dynamics of life weight of Awassi rams, kg

#	XI 2007 (at delivery)	VI 2008	IX 2008
1058	60.5	70	79
1983	65.5	85	87

In mating season 2007 for obtaining 3/4 AwxLCW lambs was mated 33 heads of 1/2 AxLCW ewes with Awassi rams at farm Kenesh. For obtaining 1/2 AxLCW lambs was mated 26 local coarse wool ewes with Awassi rams.

Reproductive indexes of animals

	By Awassi sires	
	½ AwLCW	LCW
Ewes mated	33	26
Lambled	20	20
Lambs obtained	23 (¾)	20 (½)
Stillborn	2	1
Aborted	1	2
Barren	1	2
Farmers expenses	9	1
Prolificacy, %	113.0	100.0

Dynamics of lambs growth

Level of cross to Awassi	Пол ягнят	n	Живая масса, кг			
			At lambing	1 month	3 month	6 month
1/2	Female	9	3.8	9.9	19.8	32.3
	Male	11	4.1	10.3	23.3	33.5
3/4	Female	12	3.7	9.8	17.3	33.7
	Male	11	4.0	10.2	24.2	36.4
LCW	Female	6			19.7	32.7
	Male	6			22.2	36.4

$\frac{3}{4}$ Awassi blood lamb





Ewes' life weight, kg

Breed	n	14.06.2008	28.09.2008
$\frac{1}{2}$ AwLCW	41	54.3 \pm 1.11	60.8 \pm 1.19
LCW	37	53.4 \pm 1.09	58.9 \pm 1.11



$\frac{3}{4}$ AWLCW young ram



$\frac{1}{2}$ AWLCW ewe



- Lambs colour mostly white with brown head and brown spots on the body, neck, feet, with short legs. Tail default and comparatively large. With the increasing of blood relationship more visually phenotypic fathers breed.

- From 15 June till 5 August conducted milking of ewes (51 days). In the first 2 decades daily milk yield was high – at half-breeds 2-2.5 kg and at local coarse wool – 1.5-2.0 kg. Further it started decrease. On average in 51 days milk yield of half-breeds composed 1.6 kg, and at local coarse wool – 1.0 kg.

Chemical composition of milk, %

	Sheep		Cow
	$\frac{1}{2}$ AwLCW	LCW	
Moisture	81.70	80.1	87.0
Dry matter	18.30	19.92	13.0
Protein	4.96	5.28	3.2
Fat	6.92	6.42	3.9
Ash	0.89	0.90	0.7

Farmer makes ayran from sheep milk, that differ with low serum contain and more fatter. From ayran can be produce kurut. Price of 1 liter ayran was 20-25 soms. In next year planned to produce cheese, brynza and ejigey.



Thank you!