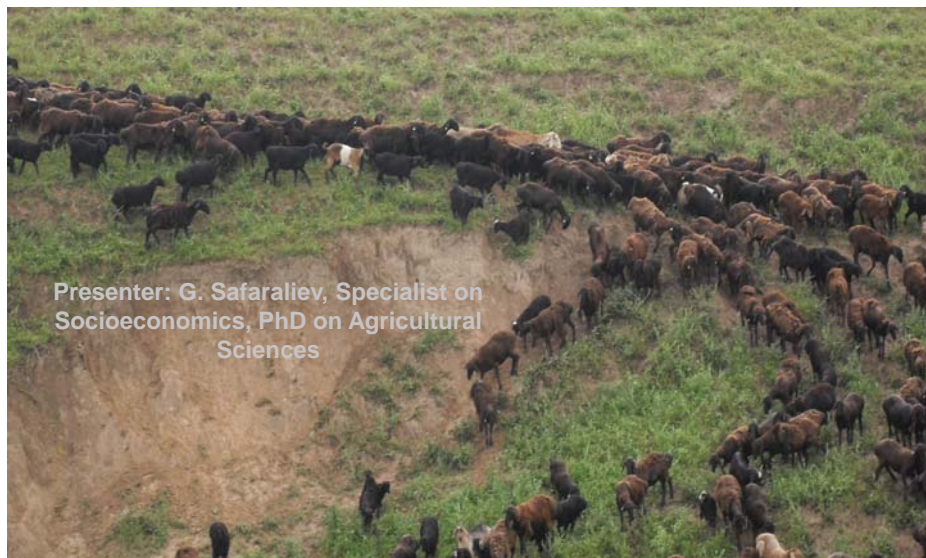


Access to natural resources by lamb producing smallholders



Presenter: G. Safaraliev, Specialist on Socioeconomics, PhD on Agricultural Sciences

- For districts under republican administration of Tajikistan big diversity of natural and climatic, economic and ethnic factors specifically affecting to development of the meat oriented sheep production.
- Necessity of more complete and rational utilization of available forage, human, and natural resources for production of cheap products: (lamb meat, fat-tail, milk, wool and pelts) remains a priority during a transition to the market economy and extensive system of the sector development in the region.

- Specialization of sheep production on production of lamb meat also requires availability of breeds with a high meat productivity. Gissar sheep breed completely correspond to this requirement. One of the biological characteristics of this breed is its early maturity, intensive growth and development, economical transformation of feed into a product, possibility of utilization of animals for economic purposes at their early age.

- During project implementation (ICARDA) we have conducted a research on sheep production systems (200 small farms) at the level of households and farmers.
- Technologically lamb production (feeding, rearing, and reproduction) can be divided into three conditional groups:
 - I – stall-fed (with utilization of the pastures nearby villages);
 - II – stall-fed mixed with grazing (with utilization of the pastures nearby villages during the spring – fall period, and summer pastures in summer);
 - III – year-round remote grazing on rangelands.

Feed / forage resources by pilot districts and communities
(conventional heads per ha)*

| # | | Vakhdat district | | Varzob district | |
|----|------------------------|------------------|------------|-----------------|-------------|
| | | district | Dusti com. | district | Luchob com. |
| 1 | Pastures | 0.203 | 0.003 | 0.412 | 0.283 |
| 2 | Hayfields | 0 | 0 | 0.001 | 0.001 |
| 3 | Reserves | 0,001 | 0,02 | 0 | 0 |
| 4 | Perennial plantings | 0,036 | 0,019 | 0,006 | 0,002 |
| 5 | Presidential lands | 0,002 | 0,003 | 0,005 | 0,008 |
| 6 | Homestead cropland | 0,005 | 0,002 | 0,007 | 0,008 |
| 7 | Cropland under cereals | 0,018 | 0,07 | 0,027 | 0,132 |
| 8 | Forage cropland | 0,006 | 0,002 | 0,003 | 0,001 |
| 9 | Forests and shrubs | 0,08 | 0,00 | 0,064 | 0,008 |
| 10 | # 1 + 2 + 8 = | 0,21 | 0,032 | 0,42 | 0,30 |
| 11 | The others | 0,15 | 0,12 | 0,10 | 0,16 |

Harvesting of forages for winter on a presidential plot



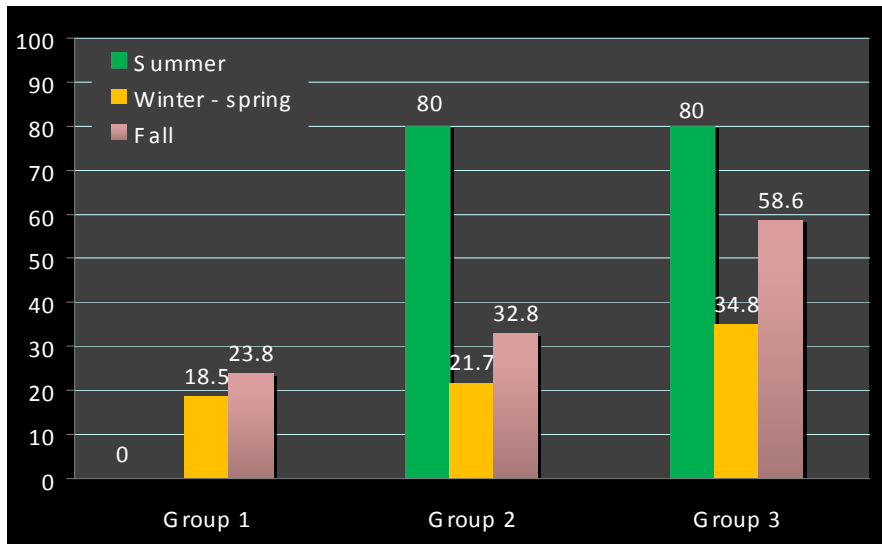
Fall pastures nearby villages (10 -15 km)



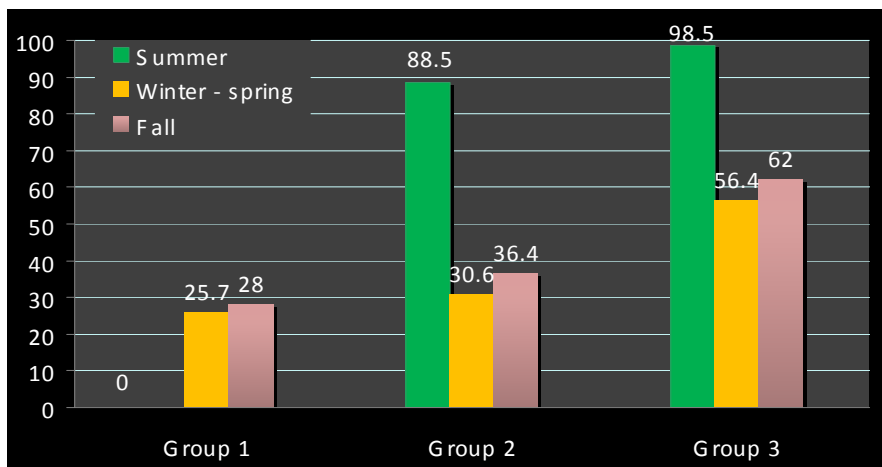
67 day old Gissar lamb (live weight 28 kg)



Sufficiency rate of forage for livestock on rangelands in the Dusti community (in % of the requirement)



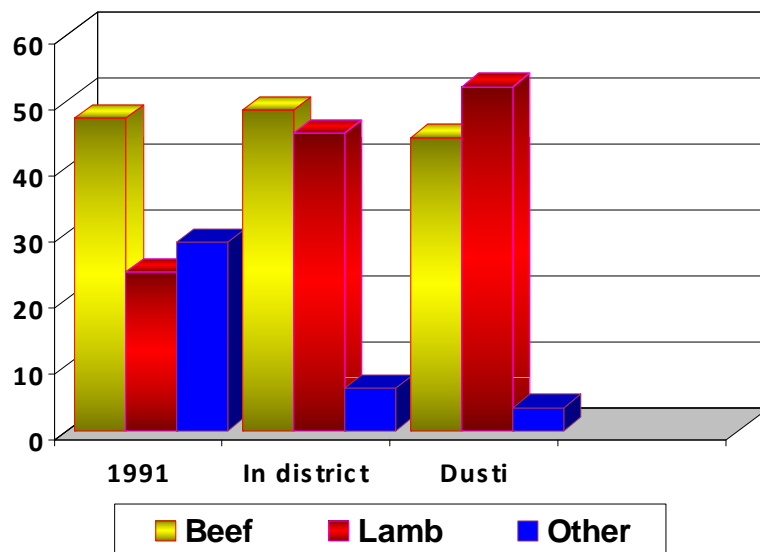
Sufficiency rate of forage for livestock on rangelands in the Luchob community (in % of the requirement)



3. Density of small ruminants on different rangelands (heads per ha)

| | Production systems | | |
|--------------------------|--------------------|-----|-----|
| Indicators | I | II | III |
| Winter - spring | | | |
| Actual | 16 | 14 | 7 |
| Optimal | 3,5 | 3,5 | 4,5 |
| Summer rangelands | | | |
| Actual | n/a | 8 | 6 |
| Optimal | 0 | 6 | 5 |

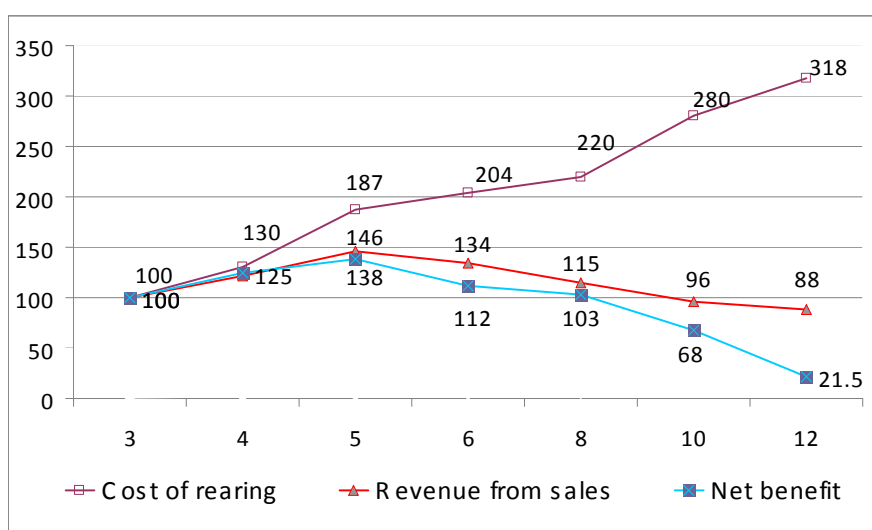
Average share of meat production for 2006-2009 (%).



Meat price dynamics (Tajik Somoni)

| | 2006 | 2008 | 2009 |
|--------------|------|------|------|
| Lamb (meat) | 100 | 100 | 100 |
| Beef | 100 | 114 | 118 |
| Horse meat | 130 | 143 | 154 |
| Poultry meat | 200 | 211 | 160 |

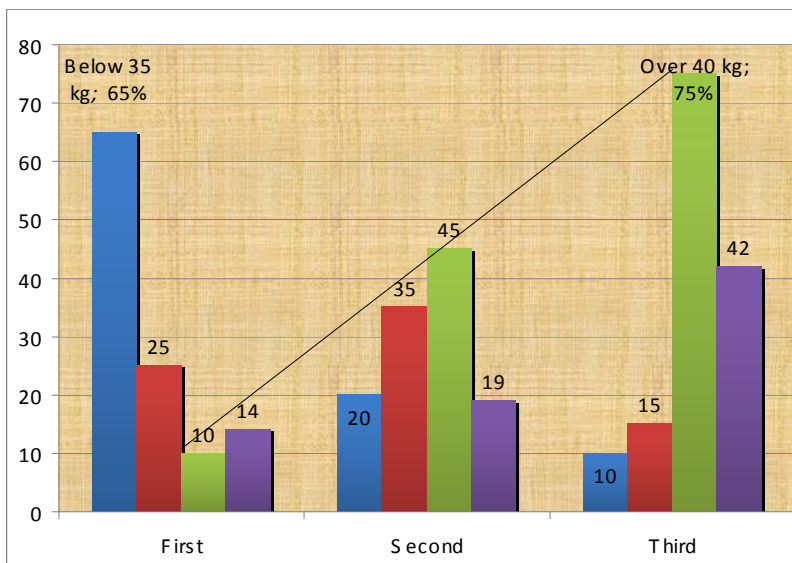
Dynamics of economic indicators during marketing of lambs at different ages



Gissar lamb: 65 day old; live weight 26.5 kg



Access to rams and lamb quality



Regardless the extreme feeding and rearing conditions of Gissar sheep, within one year farms produced the following amounts of lamb per sheep: I group -19.0 kg; II -19.3 kg; III -20.8 kg, and per ewe this indicator formed 29.7, 33.8, and 40 kg. It is possible to produce more than 42 kg lamb (live weight) per ewe with the 72-75% share of ewes in a flock and productivity equaling 92 lambs at weaning, and if the III-rd lamb production technology is used,.

Sheep production in household: at the household level (homestead plot), family farm or dekhkan and registered farm it is a useful and interesting activity. Using knowledgeable approach, intensive daily labor, regular care about animals, this activity will not only provide the farmer and his family by food, but also it will give an opportunity to get a significant income from marketing of products.

Finally, regular communication with animals gives much joy to a person. Gissar sheep are especially wayward, and communication with them requires from a farmer and his family members patience and knowledge of their behavior.

