

Problems of Farmers in Sheep Production in the Westernern Mediterranean Region

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Abstract

Turkey is among the leading countries in the world in sheep breeding because of its geographical and ecological characteristics. The number of sheep was realized as about 30 million heads in 2016 in Turkey. Turkey's total milk production was approximately 18.5 million tons in 2016, and 6.3% of it was sheep milk. Turkey's sheep number has decreased by 21.4% in the last 25 years. The sheep number in the Western Mediterranean Region constituted 3.04% of Turkey in 2016. There was a decrease of 27.1% in the presence of sheep in the Western Mediterranean Region between 2000 and 2009, with an increase in the last 5 years due to the support. However, it is important to meet the requirement of red meat consumption in the country and region, to contribute to the industrial sector from the supplied raw materials, and also to determine the situation and problems of the enterprises in sheep farming, considering the employment effect in terms of both rural and industrial sectors. In this study, it was aimed that to determine the situation of sheep breeding in the region and the problems of breeders. Sample size was calculated as 102 farms by the stratified sampling method. The data were obtained from sheep producers in Antalya, Isparta and Burdur with face-to-face interview technique. Grazing in the region and high input prices were among the most important problems. Therefore, it is suggested to improve the protection of existing pasture areas, to develop policies for reducing input prices, to provide support loans in feed and increase support.

Keywords: Sheep, Farm, Problem, Western Mediterranean Region, Turkey

INTRODUCTION

Livestock is an important in terms of meeting animal protein needs of increasing human population, providing raw material to the industry. It is also an important sector due to the fact that animals have an ability to transform herbal products that are not directly considered as human nutrition to beneficial nutrition. It is also important in terms of employment, and small ruminant breeding in this sector is especially important for the economy of small family farming [4].

According to TUIK data, 4.82% (approximately 2 million) of the Turkish small ruminant in Turkey, which was 41.5 million in 2014, is located in the Western Mediterranean Region. When the period between 1991-2014 is observed; The number of small ruminant in Turkey decreased by 19.01% and the number of small ruminant in the Western Mediterranean Region decreased by 4.85% [10].

When the sheep amount between 1991-2014 is evaluated in the provinces of Western Mediterranean Region, sheep amount of Antalya province increased by 41%, sheep amount of Isparta province decreased by 12% and sheep amount of Burdur province increased by 9% [10].

Support policies for livestock in Turkey up to the year 2000 were generally carried out together with breeding and foreign trade measures. Supports started to be given per unit animal in 2000s. The amount of animal, which declined to the lowest level in 2009, started to tend to increase. This situation is same for the Western Mediterranean Region as well.

Western Mediterranean Region is very convenient for small ruminant breeding with its natural resources, meadows and pastures. Turkey is among the leading countries in the world in terms of sheep and goat amount. Sheep and goat breeding has a significant share in domestic and foreign

trade as much as it is important for people to meet their meat and milk needs. However, there has been a rapid decline in the amount of small ruminants in recent years.

The decline in the number of animals in Turkey was due to the fact that the production costs were high and the farmers began to quit the small ruminant industry [11].

At this point, it is important that technical and economic measures should be activated quickly to increase socio-economic levels of sheep breeders. Within this scope, it was aimed to determine the problems of the sheep breeding enterprises in the Western Mediterranean Region that includes Antalya, Burdur, Isparta, and the points that is developed for the sector.

MATERIALS and METHODS

The primary data obtained by the survey method from the sheep breeding enterprises of the research material. The secondary data related to the small ruminant of the Western Mediterranean Region obtained from the production statistics of Turkish Statistical Institute (TUIK) and the primary data obtained by the survey method from the sheep breeding enterprises of the research material. The secondary data related to the small ruminant of the Western Mediterranean Region obtained from the production statistics of Turkish Statistical Institute (TUIK) and the Sheep and Goat Breeders' Association (DKKYB).

Addresses of producers, number of registered producers, sheep and goats, which situated in Antalya, Burdur and Isparta provinces, and affiliated districts and villages were determined from Antalya, Burdur and Isparta's DKKYB records. As a result of the research; in the study area, 18 districts for goat breeding and 14 districts for sheep breeding which constitute 70% of goats and sheep presence in the

provinces, constitute the main populations of sheep breeding. In this context, Manavgat, Korkuteli, Elmalı, Serik, Kaş in the province of Antalya; Bucak, Merkez, Yeşilova, Tefenni in the province of Burdur; Yalvaç, Şarkikaraağaç, Merkez, Eğirdir and Senirkent districts in the province of Isparta were selected for the region sheep breeding.

It is not possible that making survey with all the agricultural enterprises in these regions because of the time and financial possibilities. Thus, a number of examples were identified to represent the region. The intensity of the small ruminant breeding activity and the views of the DKKYB personnel in three provinces were considered for selection of the districts and villages. Afterwards, frequency distribution was made on the number of animals in the enterprises, the frequency polygon was drawn and the population were separated to sheets.

Sample size (number of producer to be interviewed) was calculated by the stratified sampling method and the following formula [12], [6].

$$n = \frac{N^2 * D^2 + \sum Nh * Sh^2}{\sum Nh * Sh}$$

In formula;

n = sample size,

N = total number of units in the main volume,

Nh= h. the number of units in the layer,

Sh= h. Standard deviation of layer,

Sh² = h. Show the variance of the layer .

D² = d² / z²

d²= The amount of error allowed by the average of the population (with an average deviation of 5%),

z² = The allowed security limit is the value in the distribution table (95% confidence limit foreseen in the study)

Distribution of sample enterprises according to strata was done with “Neyman Methodi”. The formula of the method [6] is given below:

$$nh = \frac{Nh * Sh}{\sum Nh * Sh} * n$$

The amount of allowable error from the average of the population (with a deviation of 5% from the average) is the value of the permissible security limit (the 95% confidence limit envisaged in the survey) in the distribution table (Table 1).

Table 1. Distribution of sheep breeding enterprises in the study area and number of sample enterprises

Group	Frequency (Nh)	Standard deviation (Sh)	Variance (Sh ²)	Average (number of sheep)	Nh*Sh	NhSh ²	Number of samples (n)
I	2658	18	312	43	46945	829134	33
II	1607	21	436	107	33573	701395	24
III	829	39	1531	201	32434	1268966	23
IV	260	120	14469	401	31275	3761937	22
Total	5354	94	8811	104	144227	6561431	102

Among the groups, I. Layer 1-75 heads, II. Layer 76-150 heads, III. Layer 151-300 heads, IV. Layer 301+ and more heads state the amount of sheep and goat.

The share of the provinces in the region was taken into account for the distribution of the samples size (Table 2).

Table 2. Distribution of sample enterprises numbers

	Antalya	Burdur	Isparta	Region sum
Sheep breeders				
N	46	26	30	102
%	45,10	25,49	29,41	100,00

RESULTS

The attitudes of the producers on the problems in the production of small ruminant breeding are given in Table 1. The importance level of the attitudes of the producers, who were interviewed in the research area, were evaluated according to Likert scale, and Likert 5 scale was used.

While the problem of “high prices of inputs” in the Western Mediterranean Region was very important at the level of

importance of 4.58, the problems of “Low product prices”, “Grazing” and “Struggling with diseases” were important problems with 4.30, 4.14 and 3.94 respectively (Table 3).

“The problem of high input prices” was very important problem in 1-75, 151-300 and 301+ heads enterprise groups. In the group of 76-150 heads enterprise, “Low product prices” was defined as an important problem (Table 3).

Table 3. Problems faced by farmers in the production of small ruminant

Problem areas	Sheep breeder enterprises width groups (head)				
	1-75	76-150	151-300	301+	GO
The problem of high input prices	4,73	4,24	4,70	4,64	4,58
Problem of low product prices	4,47	4,28	4,10	4,36	4,30
Problem with grazing	4,30	4,00	4,13	4,12	4,14
The problem of fighting with diseases	4,13	3,55	4,10	3,96	3,94
Problem with breeding	3,77	3,41	3,40	3,48	3,52
Problem with feed supply	3,47	2,00	3,00	3,12	2,89
The problem of collaboration between producers and agricultural organization	3,47	3,00	3,13	3,32	3,23
The problem of not finding sufficient market and buyer	3,37	3,14	3,30	3,28	3,27
Appropriate credit supply issue	3,17	2,76	2,90	2,84	2,92
The problem of supplying shepherds	2,50	1,66	2,10	2,60	2,20
Animal and product transport problem	2,47	1,76	2,57	2,72	2,37

In a research conducted in Ardahan province, it is stated that the enterprises are generally small scale family farms and the producers could not increase the fund of the enterprises because of the lack of market and product sales price guarantee [7].

The attitudes of the sheep enterprises about problems that they experienced were evaluated in detail. “ High in-

put prices affect production”, “ The government support for small ruminant breeding is inadequate” and “ Lack of organization in small ruminant breeding” were determined as most important views (Table 4).

“ High input prices affect production “ was the most supported view among all enterprises groups (Table 4).

Table 4. Attitudes of small ruminant producers to the problems about their enterprises

Expressions	Sheep breeder enterprises width groups (head)				
	1-75	76-150	151-300	301+	GO
High input prices affect my production	4,50	4,41	4,67	4,60	4,54
The government support for small ruminant breeding is inadequate	4,47	4,17	4,50	4,32	4,37
Lack of organization in small ruminant breeding	3,87	3,59	3,50	3,60	3,64
I do not know my cost	3,43	3,41	3,17	3,56	3,39
Diseases and animal losses affect milk production negatively.	3,63	3,00	3,07	2,72	3,12
I do not get credit in amount that I want	3,17	2,83	3,23	2,28	2,90
I have problems with bureaucratic procedures and mortgages on loans given to producers	3,17	2,76	2,83	2,72	2,88
I can not control my income and expenses	2,70	3,00	2,67	2,80	2,79
I am having problems with marketing the milk which I produce	3,03	2,55	2,57	3,00	2,78
I have problems in marketing the animals that I produced	2,57	2,86	2,83	2,80	2,76
I can not receive payments from milk sales on time	3,13	2,45	2,63	2,44	2,68
I am suffered from Turkish-Vet because of some troubles in the registry system	2,70	2,28	2,43	2,52	2,48
I have problems due to insufficient infrastructure	2,97	1,93	2,73	2,20	2,47
I am having problems with my sheep / goat marketing	2,43	2,45	2,23	2,44	2,39
I am having difficulties to supply small ruminant material (kid, lamb, ewe, etc.)	2,43	1,90	2,80	2,08	2,32
I am having difficulties to supply good quality feed.	2,60	1,66	2,23	2,56	2,25
I have inadequate technical knowledge	2,63	2,03	1,97	2,20	2,21
I can not use the credit for my needs	2,40	2,17	2,30	1,80	2,18
I can not benefit from small ruminant breeding supports	1,67	1,69	2,07	1,76	1,80

When sheep enterprises' attitudes to the problems in the region are examined; It was determined that producers fully shared the ideas that "Input prices are high", "Climate change affects small ruminant breeding", "Small ruminant breeding is an important source of livelihood in the region", "Organizing is important in marketing of small ruminant

products" and "Organizing is important in small ruminant breeding" (Table 5).

The highest shared ideas by the enterprise width groups are "Input prices are high" and "Climate change affects small ruminant breeding" (Table 5).

Table 5. Attitudes of producers to the problems about of small ruminant production in the region

Expressions	Sheep breeder enterprises width groups (head)				
	1-75	76-150	151-300	301-+	GO
Input prices are high	4,7	4,28	4,43	4,72	4,53
Climate change affects small ruminant breeding	4,13	4,31	4,07	4	4,13
Small ruminant breeding is an important source of living in the region	4,4	3,72	3,97	4,24	4,08
Organizing is important in marketing small ruminant products	4,17	4,1	3,63	3,96	3,96
Organizing is important in small ruminant breeding	4,1	3,76	3,77	4,2	3,95
Small ruminant breeding is a prestigious activity	4,03	3,69	3,57	3,84	3,78
The marketing situation of small ruminant products affects production	4,03	3,59	3,93	3,44	3,76
Small ruminant breeding is more advantageous than other crops breeding	3,63	3,62	3,37	3,68	3,57
Support for sheep farming is effective in the continuity of production	3,83	3,31	3,57	3,4	3,54
All producers benefit from support for sheep farming	3,3	3,83	3,43	3,56	3,53
Small ruminant breeding is a profitable activity	3,37	3,59	3,13	3,72	3,44
Support for sheep farming affects production decision	3,87	3	3,47	3,24	3,4
Knowledge of management (profit, loss, expense account, etc.) for small ruminant breeding is sufficient	3	3,41	3,47	3,76	3,39
Sheep breeding is also a hobby	3,17	3,52	3,2	3,44	3,32
Small ruminant enterprises infrastructure is sufficient in the region	3,13	3,41	3,13	3,2	3,22
Agricultural organization provides adequate information about small ruminant breeding	2,8	3,21	3,57	3,16	3,18
There is a problem with the supply of labour in small ruminant breeding	3,33	2,66	2,93	3,32	3,05
Agricultural organizations (association, cooperative) provide adequate information to small ruminant breeder	2,73	2,93	3,2	3,2	3,01
There is a lack of technical knowledge in small ruminant breeding	3,47	2,59	2,93	2,88	2,97
Marketing infrastructure of small ruminant products is sufficient in the region	2,8	2,93	2,9	3,08	2,92
There is no significant problem in small ruminant marketing	3	2,83	2,93	2,84	2,9
Small ruminant breeding can not be done without the government support	2,83	2,48	2,53	2,36	2,56
It is difficult that supplying ruminant in the region	2,63	2,17	2,9	2,32	2,52
Organizing is enough in small ruminant breeding	2,37	2,76	2,23	2,48	2,46
Support for agriculture is sufficient	1,87	2,17	1,77	2,04	1,96
Small ruminant breeding is easy activity	1,87	1,83	2,03	1,48	1,82
Support for sheep farming is sufficient	1,57	2	1,7	1,72	1,75

Ideas of the producers regarding the development of small ruminant breeding in the Western Mediterranean Region were given in Table 6. Sheep producers, who were interviewed in the research area, indicated that The Ministry of Food, Agriculture and Livestock should increase the support of sheep-goat (44,12%), the pastureland areas should be protected, developed and increased (32,35%), feed prices should be reduced, producers should be supported and feed prices should be controlled by the government (25,49%).

Opinions of the producers regarding the development of small ruminant breeding in Turkey were evaluated in Table 7. 48.04% of the enterprises stated that support for small ruminant breeders should be increased. Moreover, it was stated that input prices should be decreased (17.65%), small ruminant business should be more important and also the living conditions of shepherds should be improved (15.69%).

Table 6. Suggestion of the Producers for Development of Small Ruminant Breeding in Western Mediterranean Region

Suggestions	Number of Producer	Rate (%)
Ministry of Food, Agriculture and Livestock should increase support for livestock breeding	45	44,12
The preservation, improvement and improvement of the pastureland areas should be done	33	32,35
For sheep farms, the feed prices should be reduced and the producer must be supported and the feed prices must be under state control	26	25,49
The old planting areas of forests should be opened for grazing in the region and the problem of grazing should be solved in the forests	17	16,67
Wolves which harm small ruminants should not be released to the forests by the government	12	11,76
Meat, milk and dairy products must be able to market by municipalities	10	9,80
Pasture areas should be provided for grazing small ruminants	8	7,84
Awareness of small ruminant producers should be raised by training and publishing activities	6	5,88
The Ministry of Food, Agriculture and Livestock should increase support especially for feed supplements and other inputs	6	5,88
Water and electricity problems should be resolved in the pastureland of the plateaus	6	5,88
Young farmers must be encouraged for the continuity of small ruminant breeding	5	4,90
Enterprises with low numbers of small ruminants should also be supported	5	4,90
1% wastage should not be taken from meat weight in slaughterhouse	4	3,92
The Ministry of Food, Agriculture and Livestock should encourage farmers for the raising small ruminants	4	3,92
Farmer's Goods Protection should not be taken from sheep farms	4	3,92
Superintendence and controls in businesses should be increased to prevent the diseases of small ruminant animals	4	3,92
The Government should provide low interest rates and advantageous loans and facilitate credit conditions	4	3,92
Pasture funds should not be taken for small ruminants in the pastureland	3	2,94
The weight of all offal must not be reduced by meat measurement in the slaughterhouse	3	2,94
There should not be withholding tax from producers in the slaughterhouse	3	2,94
The rights of the small ruminant breeders should be protected by the Ministry	3	2,94
Cooperatives for livestock should be established in the villages to increase the organization	3	2,94
Slaughter and weighing should be done under observation of the producer	3	2,94
Marketing infrastructure should be improved in regions	3	2,94
Laboratories should be established to diagnose diseases in Antalya	2	1,96
Livestock activity should not be prohibited in central areas	2	1,96
Measures should be taken as soon as possible because the activities for developing small ruminant breeding is not sufficient and effective	2	1,96
DKKYB (Sheep and Goat Breeders' Association) should work more actively and provide a market space for producers and should ensure meat and dairy products are sold at a better price	2	1,96
Living conditions of shepherds in the village and on the plateau should be improved	2	1,96
The purchase price of lambs that weights 18 kg or more slaughtering time should not be lowered	2	1,96
There should be veterinary in the villages for small ruminant health	2	1,96
The amount of support should be given to the invoiced feed and input price of the producers	2	1,96
A certain age should not been seek from producers for given sheep goat support	2	1,96
Institutional purchasing- slaughtering system should be established for livestock raising in the region	2	1,96
The ministry should provide support for inadequacy infrastructure and construction of sheep fold in the region	2	1,96
Better breeds should be raised along with breeding studies in small ruminant breeding and free distribution to the producers should be provided	2	1,96
The government should insure the small ruminant enterprises	2	1,96
Input prices should be lowered so that sheep producers can profit	2	1,96
Regular updates should been made in animal records in the Directorate of District Food Agriculture and Livestock so that producers should not be suffered	1	0,98
The Ministry should meet the producers face to face to determine the problems of producers and solve them	1	0,98

Animal offal must be given to producers so that they can earn more	1	0,98
The government should provide interest-free loan to shepherds	1	0,98
Wage cut of association of sheep goat support should be removed from Producer Associations	1	0,98
Producers should be informed and raised awareness about pasture hire	1	0,98
The support should be increased on the projects that about small ruminant breeding by producers associations	1	0,98
Ministry should increase vaccination and sheep medicine support	1	0,98
The Ministry should provide support to small ruminant breeding enterprises through meat weight	1	0,98
The recording problems of Turkish-Vet must be corrected	1	0,98
The Ministry should make small ruminant support payments earlier	1	0,98
Producers must do alternately grazing	1	0,98
Producers Associations should provide feed prices cheaper	1	0,98
The government should also provide shepherd support for shepherds, who have agricultural insurance	1	0,98
The government should remove 250 ewe sheep conditions in order to provide herd manager support	1	0,98
The number of slaughterhouses should be increased in the region	1	0,98
Sale of small ruminants must be with the government guarantee	1	0,98

DISCUSSION

Among the most important problems encountered in the production of small ruminant breeding in the Western Mediterranean Region, high input (feed, medication, etc.) prices and low prices of meat and milk products were determined as the most important problems since they affected the profitability ratio. The feed, which is an important production cost in animal production, constitutes approximately 60-65% of the total cost [11]. In a survey on Karaman province lamb breeding establishments, it was observed that the input was in the first rank among all costs and the ratio was changed between 55.7-60.6% when three-year geometric means were taken into account [5]. This demonstrates the opinion of the producers who find input costs high and want a solution. Therefore, in order to reduce the feed costs in the region, it is necessary to encourage producers to plant feed crops by increasing the amount of support to the production. In this context, in order to solve the problem of grazing in the region within the Western Mediterranean Region, preservation and improvement of existing pasture areas can be suggested as a solution. In a study conducted in Içel, it was stated that awareness of producers should be raised, breeding and management techniques should be applied in the pasture areas, and pasture areas should be rested by rotation of crops [9].

In the study area, suggested solutions are to open up old plantation areas in forest areas, to control wolves released to forests. In the study area, suggested solutions are to open up old plantation areas in forest areas, to control wolves re-

leased to forests for damage sheep, and to increase market opportunities for meat, milk and products in the region by municipalities. damage sheep, and to increase market opportunities for meat, milk and products in the region by municipalities. More milk production methods should be developed and this should be introduced as an economic activity to the producers [2]. In a study in China, it was emphasized that local feed production and productivity of agricultural systems should be increased, and markets should be evaluated for specific local products in these areas [3].

It is thought that the increase of veterinary consultancy in the region for fighting with diseases, to prevent the diseases coming with the imported animals with a strong control and to raise awareness of the producers about making the vaccinations on time can be effective.

In addition, the government support and organizations related to the small ruminant breeding in the region are found inadequate by producers.. For this reason, it was considered that cooperatives that support marketing of sheep-goat and its products should be established. It was considered that the producers would be relieved by raising the awareness of consumers by various publishing organs about consumption the small ruminant animals and products and raising the sales opportunities. In a study for evaluating the current situation of sheep breeding enterprises in Bursa, it was suggested that the cash or in-kind resources support should be given to producers by the Ministry and Breeders' Associations in order to encourage breeders [8].

Table 7. Suggestions of the Producers for Development of Small Ruminant Breeding in Turkey

Suggestions	Number of Producer	Rate (%)
More support should be given for small ruminant breeding	49	48,04
Input prices should be decreased for small ruminant breeding	18	17,65
Small ruminant enterprises should be more important and living conditions of shepherds should be improved	16	15,69
Pasture areas for grazing should be protected and developed	14	13,73
Meat should not be imported and increase of animal production should be provided	14	13,73
High yield small ruminant breeds should be raised and distributed to the producers and they should be informed about breeding	8	7,84
The government should provide marketing milk and dairy products and sales guarantee	8	7,84
The wolf problem should be resolved in the region for small ruminant breeding	8	7,84
Young farmers should be support for encouraging to raise livestock	6	5,88
Livestock breeding techniques should be developed by livestock education	5	4,90
Low-interest loans should be provided to small ruminant breeder	5	4,90
Grazing problem should be solved in the forest and plateau	5	4,90
Small ruminant enterprises should be support for construction of sheep fold	5	4,90
Feed and input support should be paid to small ruminant enterprises for the invoiced amount	5	4,90
Pasture area should be provided to small ruminant enterprises for grazing their sheep and goats	4	3,92
Meat, cheese, milk, etc. sales prices should be increased	4	3,92
Withholding tax and meat wastage which have received from producers in the slaughterhouses and butcheries should be removed	4	3,92
Small ruminant enterprises should be more supported than other agricultural enterprises	4	3,92
The government should provide support for the increase of the shepherds and the marriage of the shepherds	4	3,92
Lambs under 25 kg should not cut in the slaughterhouse and butcher	3	2,94
Insurance premium prices should be decreased to insure animals	3	2,94
Conditions for low-interest loans should be facilitated for small ruminant enterprises	3	2,94
Young people whose profession is only shepherd, should be provided loan	2	1,96
Cooperatives and associations should be established to increase small ruminant breeding, to protect the rights of producers and livestock farming	2	1,96
Earrings and vaccination fee from producers should not be taken	2	1,96
Inspections should be increased at the country entrance to prevent diseases from imported sheep	2	1,96
Small ruminant breeding support also should be given for lambs	2	1,96
Herd manager support also should be given to producers that have an entity with less than 250 sheep	2	1,96
Good breed of small ruminant animals should be distributed to producer instead of goat-sheep support	1	0,98
Modern technology should be developed for small ruminant breeding	1	0,98
Pastureland funds should not be taken from small ruminant breeder	1	0,98
Supports should be given through meat weight of sheep in the slaughterhouse	1	0,98
Wage cut of association should be removed at small ruminant support	1	0,98
Support payments to small ruminant breeder should be paid at time of feed purchase	1	0,98
The government should insure small ruminant enterprises	1	0,98
Encouragement and support for the shepherd should be provided	1	0,98

In Turkey, Small ruminant breeding policies by the ministry were found positive at the rate of 33.33% by the producers. On the other hand, 11,76% of producers considered that policies should be developed and 10,78% of them considered successful (Table 8).

Table 8. Suggestions of the Producers Regarding Small Ruminant Breeding Policies

Suggestions	Number of Producer	Oran (%)
I find the policies which carried out by the government positive	34	33,33
I do not think the ministry's policies regarding the small ruminant breeding are serious, it should be improved	12	11,76
I find the government's ministry policy successful	11	10,78
Small ruminant breeding support should be increased by the Ministry	9	8,82
Import of sheep and feed should be stopped by increasing sheep production in the country	8	7,84
Small ruminant enterprises should be care more by the Ministry	7	6,86
The Ministry should provide low-interest credit to sheep and goat enterprises	6	5,88
The Ministry should improve the market structure for small ruminant breeding and raise the selling price of meat, milk and dairy products	6	5,88
Input prices should be decreased by the Ministry	6	5,88
The pig and wolf problem in the villages should be resolved by the Ministry	6	5,88
Sheep and goat cooperatives should be established and the rights of small ruminant enterprises should be protected	5	4,90
The Ministry should resolve the problem of grazing in forested areas of small ruminants	4	3,92
Farmer should be encouraged more for small ruminant breeding in ministry policy	3	2,94
The Ministry should not import sheep meat	3	2,94
Farms with low numbers of small ruminants should also be supported by the Ministry	3	2,94
Small ruminant breeding support should be given to producer for lambs also	3	2,94
Shepherds should be insured by the government	3	2,94
Politics is more important in ministry politics instead of livestock	2	1,96
Good breeds should be raised by the Ministry and distributed to the shepherds and informed about their breeding	2	1,96
The Ministry should carry out studies related to raising the pasture area for grazing	2	1,96
Small ruminant breeding support should be deposited directly to the producer's account, not through the association	2	1,96
The ministry should give support to the shepherds about marriage	2	1,96
The studies and the applications of Ministry should be accessible for enterprises	1	0,98
Inspection of small ruminant breeding enterprises should be increased by the Ministry	1	0,98
The lamb should be prevented from cutting live weight below 50 kg (meat weight 25 kg) by the Ministry	1	0,98
Government implement should be reduced in meat and milk sales as part of the government's ministry policy	1	0,98
Herd manager support also should be given to producers that have an entity with less than 250 sheep	1	0,98
Long-term ram, sheep loan should be given to the shepherds by the Ministry	1	0,98
By the Ministry, the recording problems of Turkish-Vet should be resolved	1	0,98
The Ministry should provide support to improve migration and accommodation conditions for shepherds	1	0,98

In the interviews, approximately one third of the producers had positive opinions about small ruminant breeding and farming policies by Food, Agriculture and Livestock Ministry. 10% of producers stated that policies had to be developed and that solutions of the problems of small ruminant breeding had to be found.

In a study conducted in Eastern Anatolia, producers in the region stated that quality breeding problems had to be solved by using reducing production costs and increasing production quality with more efficient breeds for competing with European Union standards [1], [9]. In the Western Mediterranean region, breeding experiments should be conducted to increase the yield and quality of animal production in the region.

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