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ORIGINAL PAPER

SOCIODEMOGRAPHIC CHARACTERISTICS OF SMALL RUMINANT FARMERS: ŞIRNAK PROVINCE SAMPLE

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Abstract

In this study, we aimed to determine the socio-demographic characteristics of small ruminant farmers in Şırnak Province. For this purpose, a survey was conducted in 128 small ruminant farms in Şırnak Province, the districts of Guclukonak, Idil and Cizre where small ruminant breeding was concentrated. The data belongs to the period of March 2016 - February 2017. The average age of the farmers was 49.98, 75.78% of whom were literate, 23.44% completed primary school, and 0.78% were high school graduates. Average experience in goat breeding was 13.32 years, and sheep breeding was 13.37 years. Household size in the farms average was 9.33 persons, which was higher than the national average. Of the individuals living in each household, 46.21% were literate, and 28.95% were middle school graduates. 5.47% of the farmers had agricultural income from outside the farms, and 2.34% had non-agricultural income. It was noteworthy that 16.41% of the interviewed farmers did not have any social security. It was found that farmers had a low level of computer usage and frequency of various mass media. While all of the farmers had mobile phones, 31.25% of them used computers and 21.88% used internet accesses. While 82.31% of the farmers obtained a co-operative membership, 68.75% belong to the producer association. 50.78% of the farmers have borrowed money, 31.25% have used loans in the last five years.

Key words: Small ruminant, Farmer, Socio-Demographic, Şırnak, Turkey

INTRODUCTION

In the last thirty years, the number of small ruminants in Turkey has shown a significant decline. However, in recent years there has been an increase in governmental support for small ruminant breeding. This support has not reached the required level, unfortunately.

Achieving sufficient levels regarding increased production and demand is not a solution. At the same time, efficiency needs to increase. At the point of increasing efficiency, many socio-demographic variables such as the educational status, experience, age of the operator and his family can affect production.

In 2013, the employment rate in Şırnak was 30.00%, which was well below the national average of 45.90% employment. Şırnak ranked 78 out of 81 cities in Turkey. This province had the fourth highest unemployment rate in Turkey (TUİK, 2018).

The population of Şırnak province was 503236 persons according to data from the 2017 Address Based Population Registration System. This constituted 0.62% of the entire population of Turkey. According to the data from 2017, Şırnak had a population density of 66 people / km^2, compared with Turkey's average of 100 people / km^2. Şırnak's population growth rate, 17.60%, was above the national average in Turkey, which was 13.70% (TUİK, 2018).

According to the Address-Based Population Registration System of 2017, 38.02% of the population living in Şırnak province lived in the village, and 61.98% lived in the city. 52.43% of the population living in Şırnak province was male, and 47.57% was female (TUİK, 2018).

Although there are many studies about small ruminant enterprises, there were no studies in Şırnak province. Some of the national studies on the subject can be summarised as follows.

Şahin (2001) conducted an economic analysis of the agricultural enterprises in the Van province. The material of the study was collected from 63 farms selected by stratified random sampling method in 12 villages which were heavily engaged in sheep farming activities in the Van Center district. According to the results of the survey, the average population of the surveyed enterprises was 9.98 persons, of which 54.37% were male and 45.63% female. On average, businesses had 1717.3 potential work days as determined by the Man Work Unit (MWU), but 75.4% of this potential was idle. 63.9% of the workforce employed in operation was involved in sheep production. 86.6% of the total workforce used in the business consisted of the family labour force, and 13.4% consisted of employee labour force.

Bilginturan (2008) conducted a questionnaire survey on 194 sheep farms and 40 goat farming operations in Burdur province to determine the technical and structural characteristics of the registered sheep and goat breeders' associations. The average age of sheep breeders was 46.74, and the average age of goat breeders was 50.30. It was determined that 90.3% of the sheep breeders attend elementary school, 7.7% high school, 0.5% college and 1.5% were not literate. It was reported that 97.5% of goat breeders attended elementary school and 2.5% were high school graduates.

Karadaş (2017) surveyed 127 sheep farms in Şanlıurfa, Siverek Province. At the end of the evaluation of the data obtained from the questionnaires, the average age of the farmers was 48, and the animal husbandry experience was 29 years. It was found that the household size was 7.93 persons and that 15.7% of the farmers were not literate and 74.8% had education at the elementary level. 36.2% of the farmers had non-agricultural business income. On the average, each business had 39.6 decares; wheat, barley and lentils were produced in addition to sheep farming.

Karadas (2018) surveyed 113 farms in order to determine the demographic characteristics of the Hakkâri sheep farming enterprises, problems related to sheep farming activities and suggestions for solutions. The study determined that the average age of the producers was 49 and the sheep experience was 27 years. The average household size per business was 10.21, and the population by Man Work Unit (MWU) was 6.51. It was found that 9.7% of the producers were not literate, 64.7% were elementary school graduates and the average area of 14 decares per farm with wheat, clover and garden production in addition to sheep. It was stated that the producers are not members of any cooperative or producer association and 15.9% of them are borrowers with an average amount of 8.819 Turkish Liras and the debt source was relatives and other persons.

The purpose of this study was to examine the socio-demographic characteristics of small ruminant breeding enterprises operating in Şırnak province.

MATERIALS AND METHODS

The primary material of this research was obtained by the survey method from Central, İdil, Silopi and Cizre where sheep and goat breeding was concentrated in Şırnak Province. The data used in the research belongs to the production period of March 2016 - February 2017.

The main body of the enterprises used in the research was selected by the sampling method of the enterprises to be surveyed. The survey of all enterprises in the region is not feasible in time or economically.

In the selection of the surveyed enterprises, five important towns were taken into consideration in respect of the presence of small ruminants. The Central, Idil, Cizre and Silopi account for 76.7% of the total small ruminant production in the province of Şırnak. In the collection of this data, it can be said that these cities are representative of small-scale breeding enterprises in Şırnak. Distribution of sample enterprises according to strata was done with "Neyman Method". In line with the calculated sample size, populations were randomly selected. One of the main reasons for applying the layered random sampling method is to make the farm's groups had a more homogeneous structure and thus to make a more healthy assessment of the findings obtained from the farm groups.

The sample volume was determined as 128 enterprises with a margin of error of 5% and a confidence interval of 95%. These enterprises were proportionally distributed in the four groups determined by considering the frequency distribution of the small ruminants they had. According to this, those who had 250 or fewer head small ruminants comprised the first group of small businesses (43 farms), those with 251-500 head small ruminants, the second group (22 enterprises), those with 501-999 head small ruminants, the third group (21 farms) and enterprises with over 1,000 head small ruminants were the fourth group (52 farms).

The family labour force potential was converted to Man Work Unit (MWU) using the coefficients in Table 1. The age and ability to work were multiplied by the number of days that can be worked in the region and were determined to be the family workforce potential full-time equivalent (Aras and Çakır, 1975, Açıl and Demirci, 1984, Rehber and Çetin, 1998).

Table 1. Coefficients used to convert to Man Work Unit (MWU)

Age	Male coefficient	Female coefficient
0-6	-	-
7-14	0.50	0.50
15-49	1.00	0.75
50-+	0.75	0.50

The data was presented in cross-tabular form considering the animal groups and the results were interpreted.

RESULTS AND DISCUSSION

The distance between the farm and the city centre and market was determined as 14.03 km on average for the enterprises. Within the farm groups, it varies from 13.00 km to 14.67 km.

Population structure and educational status

The average age of the small breeders interviewed was 49.98 years. The educational status of the interviewed farmers was given in Table 2. According to this, 75.78% of the administrators were literate but had no schooling, 23.44% completed elementary school, and 0.78% completed middle school. There were no high school or higher education graduates in the interviewed enterprises (Table 2).

Table 2. Educational status of farmers

Groups	Literate, No Schooling		Elementary		Middle School		Total	
	(N)	(%)	(N)	(%)	(N)	(%)	(N)	(%)
I	33	76.74	9	20.93	1	2.33	43	100.00
II	14	63.64	8	36.36	0	0.00	22	100.00
III	20	95.24	1	4.76	0	0.00	21	100.00
IV	30	71.43	12	28.57	0	0.00	42	100.00
Total / Average	97	75.78	30	23.44	1	0.78	128	100.00

The family structure of the respondents in the study was given in Table 3. According to this, average household size was determined as 9.33. Şırnak has the highest average household size in Turkey. The household size of Şırnak province in 2017 was 6.4 (TUİK, 2018). The household size in the study area was higher than the province average.

The largest age group in the enterprises had 4.21 persons (45.14% of the family) between the ages of 15-49. Next was individuals aged 7-14 years, comprising 32.16% of the family, and individuals aged 50 and over comprised 14.41%. In the enterprises, 50.92% of the households were women while 49.08% were men.

Table 3. Population structure of enterprises

Groups	0-6	7-14	15-49	50+	Female	Male	Total
	Number (person)						
I	0.60	3.33	3.63	0.88	4.26	4.19	8.44
II	1.23	3.00	4.91	1.09	5.73	4.50	10.23
III	1.05	2.24	5.10	1.33	4.76	4.95	9.71
IV	0.57	3.05	4.00	1.95	4.74	4.83	9.57
BA	0.77	3.00	4.21	1.34	4.75	4.58	9.33
RA	0.81	3.10	4.15	1.03	4.71	4.39	9.10
	Percent (%)						
I	7.16	39.39	42.98	10.47	50.41	49.59	100.00
II	12.00	29.33	48.00	10.67	56.00	44.00	100.00

III	10.78	23.04	52.45	13.73	49.02	50.98	100.00
IV	5.97	31.84	41.79	20.40	49.50	50.50	100.00
BA	8.29	32.16	45.14	14.41	50.92	49.08	100.00
RA	8.90	34.07	45.60	11.32	51.76	48.24	100.00

BA: Farm groups, average

RA: Regional weighted average

The educational status of the households in the interviewed enterprises was given in Table 4. In the enterprises, 46.21% of the household was literate but had no schooling. This was followed by 28.95% having an elementary school education. In the enterprises, the high school and above educated individual constitutes 0.09% of the household, whereas the non-illiterate individual was 0.18% of the household.

Table 4. Education structure of the households in the interviewed enterprises

Groups	Not literate	Literate	Elementary	Middle School	High School	University	Total*
	Number (person)						
I	0.05	2.21	3.56	1.05	0.98	0.00	7.84
II	0.00	3.50	3.23	1.05	1.18	0.05	9.00
III	0.00	5.62	2.05	0.38	0.62	0.00	8.67
IV	0.00	5.14	1.19	2.17	0.50	0.00	9.00
BA	0.02	3.95	2.48	1.30	0.80	0.01	8.55
RA	0.03	3.08	3.19	1.02	0.97	0.01	8.28
	Percent (%)						
I	0.59	28.19	45.40	13.35	12.46	0.00	100.00
II	0.00	38.89	35.86	11.62	13.13	0.51	100.00
III	0.00	64.84	23.63	4.40	7.14	0.00	100.00
IV	0.00	57.14	13.23	24.07	5.56	0.00	100.00
BA	0.18	46.21	28.95	15.25	9.32	0.09	100.00
RA	0.36	37.20	38.53	12.32	11.71	0.12	100.00

*0-6 age range collection was not included.

Labour force and labour force utilisation

Potential, idle and family labour were calculated for the households in the enterprises. The calculation was made assuming that the full-time equivalent potential work days was 300 days during the year. There were 529.69 working days in the enterprises while there were 1692.19 potential work days as determined by the man work unit (MWU). Therefore, 68.70% or 1162.50 days were left idle in the enterprises (Table 5).

According to the regional weighted average, there was a workforce with a potential MWU of 1577.31 days. This potential was used for 507.10 days. 67.85% or 1071.21 of them were left idle (Table 5).

The workforce used in units of MWU in Paksoy (2007) study was 512.70 days, Çıtak (2011) was 532.50 days and the Koca (2014) 442.72 days, was calculated as 730 days in the study of Dagistan (2002) in the Central-South Anatolian region. It was found as 1025.58 days in Hakkâri province (Deniz, 2009).

Table 5. Potential, used and idle family labour force in enterprises

Groups	Used labour force		Labour force idle		Potential labour force	
	Quantity	Rate	Quantity	Rate	Quantity	Rate
	Days (MWU)	(%)	Days (MWU)	(%)	Days (MWU)	(%)
I	507.56	33.49	1008.14	66.51	1515.70	100.00
II	521.59	31.35	1142.05	68.65	1663.64	100.00
III	439.29	28.28	1114.29	71.72	1553.57	100.00
IV	601.79	30.75	1355.36	69.25	1957.14	100.00
BA	529.69	31.30	1162.50	68.70	1692.19	100.00
RA	507.10	32.15	1070.21	67.85	1577.31	100.00

Non-operational agricultural income and non-agricultural income status

In the study area, the farmer was asked about the status of having an agricultural income from the outside of their farm. By the information given, 5.47% of the enterprises were found to have this agricultural income. It was noteworthy that there was no agricultural income of outside of their farm of groups III or IV enterprises (Table 6).

Table 6. Agricultural income status of farmers from other farms

Groups	Agricultural income from outside	No agricultural income from outside	Total
	(%)	(%)	(%)
I	9.30	90.70	100.00
II	13.64	86.36	100.00
III	0.00	100.00	100.00
IV	0.00	100.00	100.00
Total/Average	5.47	94.53	100.00

The non-agricultural employment status of enterprises interviewed was given in Table 7. According to this, 2.34% of the enterprises had non-agricultural work. It was determined that 97.66% of the enterprises have no income other than agriculture.

Table 7. Non-agricultural income status of enterprises

Group	Non-agricultural income	No income other than agriculture	Total
	(%)	(%)	(%)
I	2.33	97.67	100.00
II	4.55	95.45	100.00
III	0.00	100.00	100.00
IV	2.38	97.62	100.00
Total/Average	2.34	97.66	100.00

Social security ownership situation

The state of social security ownership in the study area was given in Table 8. Farmers with social security were determined as 83.59% on average. This ratio varies between 76.19% and 97.62% within the farm groups.

Table 8. Social security ownership status of enterprises

Group	No social security	There was social security	Total
	(%)	(%)	(%)
I	23.26	76.74	100.00
II	22.73	77.27	100.00
III	23.81	76.19	100.00
IV	2.38	97.62	100.00
Total/Average	16.41	83.59	100.00

Farmers' use of various technologies

The information and frequency of use of the various mass tools of the farmers interviewed in the study area were discussed in Table 9. It was determined that 87.50% of the farmers do not know anything about computers and 85.94% did not have any knowledge of the internet. On the other hand, 9.38% of the farmers reported that they had a high level of computer knowledge and 10.94% stated that they had a high level of internet knowledge. It was seen that there was a higher proportion of group IV enterprises that declare their knowledge of computer and internet at a high level (Table 9).

It was determined that the frequency of utilisation of various technologies by the interviewed farmers in the study area be low. The study revealed that 93.75% of them did not use any computer and 96.88% of them did not use any internet at all (Table 10).

Table 9. Farmers' utilisation of the frequency of use of various technologies

Technology Knowledge	Status	Group				
		I	II	III	IV	İO
		Percent (%)				
Computer knowledge (%)	1	97.67	86.36	100.00	71.43	87.50
	2	2.33	0.00	0.00	2.38	1.56
	3	0.00	4.55	0.00	0.00	0.78
	4	0.00	4.55	0.00	0.00	0.78
	5	0.00	4.55	0.00	26.19	9.38
Internet knowledge (%)	1	93.02	86.36	100.00	71.43	85.94
	2	2.33	0.00	0.00	2.38	1.56
	3	0.00	4.55	0.00	0.00	0.78
	4	0.00	4.55	0.00	0.00	0.78
	5	4.65	4.55	0.00	26.19	10.94

1. Not at all; 2. Below Average; 3. Average; 4. Above Average; 5. Expert

Table 10. Farmers' frequency of use of various mass media

Mass media	Status	Group				
		I	II	III	IV	BA
		Percent (%)				
Newspaper reading frequency (%)	1	0.00	4.55	0.00	0.00	0.78
	5	0.00	4.55	28.57	0.00	5.47
	6	100.00	90.91	71.43	100.00	93.75
TV viewing frequency (%)	1	0.00	9.09	0.00	0.00	1.56
	4	0.00	0.00	0.00	2.38	0.78

	5	0.00	0.00	4.76	0.00	0.78
	6	100.00	90.91	95.24	97.62	96.88
Frequency of reading publications such as magazines, brochures (%)	5	6.98	9.09	0.00	0.00	3.91
	6	93.02	90.91	100.00	100.00	96.09
Computer usage frequency (%)	1	0.00	4.55	0.00	0.00	0.78
	4	0.00	0.00	0.00	2.38	0.78
	5	4.65	9.09	0.00	4.76	4.69
	6	95.35	86.36	100.00	92.86	93.75
Internet usage frequency (%)	1	0.00	9.09	0.00	0.00	1.56
	4	0.00	0.00	0.00	2.38	0.78
	5	0.00	0.00	4.76	0.00	0.78
	6	100.00	90.91	95.24	97.62	96.88

1. Everyday use/reading; 2. two or three times a week/session; 3. One weekly use/reading; 4. Use/readings every fifteen days; 5. Usage per month; 6. Never use/read

Ownership status of some technologies

Ownership status of various technologies was given in Table 11. The study revealed that 31.25% of the enterprises have computers, but only 21.88% have internet access, all have mobile phones, 37.50% own cars and 1.56% credit cards.

Table 11. Ownership status of some entities (%)

Assets	Group				Total
	I	II	III	IV	
Computer	11.63	27.27	14.29	61.90	31.25
Internet	6.98	22.73	14.29	40.48	21.88
Mobile phone	100.00	100.00	100.00	100.00	100.00
Car	16.28	31.82	76.19	42.86	37.50
Credit card	0.00	4.55	4.76	0.00	1.56

Ownership of computer and internet access was higher in group IV businesses. Ownership of cars was found to be higher in group III enterprises.

The frequency of visits to various institutions or organisations by the farmers interviewed in the study area was given in Table 12.

The survey showed that 99.22% of the farmers stated that they visited the Şırnak Directorate of Food, Agriculture and Livestock once a year and 0.78% stated that they had more than three visits per year. On the other hand, 50.78% of the farmers stated that they had never visited their local Directorate of Food, Agriculture and Livestock in the province and 24.22% had more than three visits per year.

The data shows that 92.19% of the interviewed farmers stated that they never visited any research institute and 5.47% stated that they had more than three visits per year. Whereas, 72.66% of the farmers stated that they did not visit universities at all and 27.34% stated that they visited them once a year (Table 12).

The 70.31% of the farmers interviewed in the study area stated that they had visited Ziraat Bank once a year and 27.34% have more than three visits per year (Table 12).

The 72.66% of the farmers in the region stated that they never visited any cooperative and 21.09% stated that they had more than three visits per year. 64.84% of the farmers stated that they had never visited any producer association and 28.91% of them had visited more than three visits per year (Table 12).

About 53.91% of the farmers stated that they had never visited any agriculture fair and 27.34% visited them once a year (Table 12).

Table 12. The frequency of visits by farmers to various agricultural institutions or organisations

Institution or Organization	Status	Group				
		I	II	III	IV	Total
		Percent (%)				
Şırnak Directorate of Food, Agriculture and Livestock (%)	Once a year	97.67	100.00	100.00	100.00	99.22
	More than three per year	2.33	0.00	0.00	0.00	0.78
Local Directorate of Food, Agriculture and Livestock (%)	Never	41.86	50.00	57.14	57.14	50.78
	Once a year	9.30	0.00	4.76	21.43	10.94
	Twice a year	6.98	18.18	0.00	7.14	7.81
	Three times a year	6.98	9.09	14.29	0.00	6.25
	More than three per year	34.88	22.73	23.81	14.29	24.22
Research Institute	Never	97.67	100.00	85.71	85.71	92.19
	Once a year	2.33	0.00	9.52	0.00	2.34
	More than three per year	0.00	0.00	4.76	14.29	5.47
University	Never	83.72	72.73	76.19	59.52	72.66
	Once a year	16.28	27.27	23.81	40.48	27.34
Ziraat bank	Once a year	65.12	63.64	61.90	83.33	70.31
	Twice a year	4.65	4.55	0.00	0.00	2.34
	More than three per year	30.23	31.82	38.10	16.67	27.34
Cooperative	Never	76.74	77.27	47.62	78.57	72.66
	Once a year	0.00	0.00	14.29	0.00	2.34
	Three times a year	4.65	4.55	9.52	0.00	3.91
	More than three per year	18.60	18.18	28.57	21.43	21.09
Producer Association	Never	83.72	54.55	57.14	54.76	64.84
	Once a year	4.65	9.09	4.76	0.00	3.91

	Twice a year	0.00	0.00	9.52	0.00	1.56
	Three times a year	2.33	0.00	0.00	0.00	0.78
	More than three per year	9.30	36.36	28.57	45.24	28.91
Agricultural Fair	Never	46.51	63.64	47.62	59.52	53.91
	Once a year	37.21	31.82	33.33	11.90	27.34
	Twice a year	4.65	0.00	0.00	4.76	3.13
	Three times a year	0.00	4.55	0.00	0.00	0.78
	More than three per year	11.63	0.00	19.05	23.81	14.84

Table 13 showed the frequency of use of consultants, both government and private, in regards to small ruminant breeding. According to this, 64.06% of the farmers interviewed stated that they were utilising consultant staff. In Groups, interviews with consultants were found to be between 39.53% and 83.33%, and small-scale businesses was lower than larger businesses.

Table 13. The situation of the farmers utilising consultant staff in small ruminant breeding

Group	Yes	No	Total
	%		
I	39.53	60.47	100.00
II	63.64	36.36	100.00
III	76.19	23.81	100.00
IV	83.33	16.67	100.00
Total	64.06	35.94	100.00

The frequency of use of various information sources by farmers regarding small ruminant breeding and marketing in the mentioned region, measured using a Likert Scale, were shown in Table 14. Private veterinarians received the highest score, an average of 4.57, among the sources of information that the farmers mentioned in interviews about small ruminant breeding and marketing. This was higher than the average score of 4.47 for veterinarians working in the country (e.g., Food, Agriculture and Livestock provinces, or district directorates), followed by an average score of 3.74 for other breeders. Universities were the least often used sources of information on small ruminant breeding and marketing, obtaining an average score of only 1.41.

Table 14. Significant status of information sources that farmers use in livestock breeding

Sources of Information	Group				**BA**	**RA**
	I	**II**	**III**	**IV**		
Veterinary (private)	4.37	4.50	4.29	4.95	4.57	4.42
Agricultural veterinarians in the county	4.40	4.14	4.00	4.95	4.47	4.31
Other breeders	3.51	3.59	3.86	4.00	3.74	3.59
I am investigating myself	3.86	3.82	3.76	3.24	3.63	3.81
Agricultural Fair	2.81	2.55	2.62	3.19	2.86	2.74
Agricultural organization	2.60	2.68	2.57	2.62	2.62	2.62
Television	2.40	3.05	3.00	1.95	2.46	2.62

From the product vendors	2.40	2.68	2.90	2.02	2.41	2.51
Headman or village leaders	2.23	2.59	2.38	1.88	2.20	2.32
Internet	2.23	2.05	1.67	2.21	2.10	2.12
Cooperative	1.81	1.77	1.67	1.81	1.78	1.78
Radio	1.42	1.73	2.14	1.05	1.47	1.57
University	1.58	1.36	1.24	1.36	1.41	1.47

1=Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always

The regional average similarly scored private veterinarians highest among the sources of information that farmers used in small ruminant breeding and marketing, followed by veterinarians working in the country.

Occupations of Enterprises Benefiting from Agricultural Supports

The findings of the state subsidies of the enterprises interviewed in the studied area were given in Table 15. It was determined that the operator's interview in the region benefit from various state subsidies. 47.66% of the businesses received aide based on how many acres of cropland, 60.16% of businesses benefited from subsidies related to how much feed they produced. These ratios, which businesses use from animal husbandry support, 60.94% were union support, 60.16% were herd management support, 59.38% were consulting support, and 16.41% were benefited from milk premium support.

Table 15. Benefits of state support of enterprises

Support for	Group				Total
	I	II	III	IV	
	%				
Cropland acreage	51.16	54.55	57.14	35.71	47.66
Feed plant acreage	60.47	68.18	71.43	50.00	60.16
Consulting support	72.09	68.18	23.81	59.52	59.38
Milk premium support	11.63	0.00	19.05	28.57	16.41
Union support	32.56	59.09	90.48	76.19	60.94
Herd manager support	0.00	63.64	100.00	100.00	60.16

Table 16. Farmers' view of government support

Group	Insufficient		Normal		Sufficient	
	N	(%)	N	(%)	N	(%)
I	20.00	46.51	12.00	27.91	11.00	25.58
II	4.00	18.18	12.00	54.55	6.00	27.27
III	0.00	0.00	12.00	57.14	9.00	42.86
IV	12.00	28.57	24.00	57.14	6.00	14.29
Total	36.00	28.13	60.00	46.88	32.00	25.00

Opinions were also gathered on the general view of the amounts of these supports. About 46.88% of the farmers stated that the amounts of these supports were found to be normal, 36.00% that the amounts were insufficient and 25.00% that the amounts were sufficient (Table 16).

Farmers' overview of small ruminant breeding

Scores of the 5th Likert Scale were given in Table 17. According to this, farmers' satisfaction with agricultural activities was 3.53 points on average. This value was 3.39 points in the Southeast Turkey region-weighted average, lower than that for the farmers in Şırnak Province. The level of interest in small ruminant farming was 3.56 points on average for the businesses and the region. Therefore, it was determined that the farmers in the region were interested in

the cultivation of small ruminants. Farmers' average satisfaction with the raising of small ruminants was 3.50, while it was 3.49 in the region average. Moving from this, it was estimated that the level of satisfaction of small breeding was higher for those in Şırnak Province than for the region as a whole. The knowledge level of producers on the level of knowledge of small ruminant breeding was 3.08 points in the average of the farmers, 3.27 points in the region weighted average. In the marketing of sheep and goats products, the average level of knowledge was 2.93 points, while the region had 2.94 points in the weighted average. Therefore, it was determined that the level of knowledge of the farmers in the region was a medium level marketing of small ruminant products. The desire of the farmers to continue raising livestock was 3.73 points in the average of the enterprises and 3.54 points in the region. Moving from this, it was estimated that farmers in the region prefer to keep small ruminants.

Table 17. Farmers' level of interest in the issue of small ruminant farming

Production branches	**Groups**				**BA**	**RA**
	I	**II**	**III**	**IV**		
Satisfaction with agricultural activities	3.44	3.18	3.43	3.86	3.53	3.39
Level of interest in small ruminant farming	3.56	3.45	3.86	3.48	3.56	3.56
Satisfaction status of small ruminant breeding	3.51	3.41	3.52	3.52	3.50	3.49
Level of knowledge on small ruminant farming	3.21	3.45	3.43	2.57	3.08	3.27
Level of knowledge in the marketing of small ruminant products	2.86	2.86	3.62	2.69	2.93	2.94
Desire to continue small ruminant breeding	3.35	3.82	3.71	4.07	3.73	3.54

1== Very low 2 = Low 3 = Medium 4 = High 5 = Very high

CONCLUSION AND RECOMMENDATIONS

The average age of the farmers was 49.98 years. The level of education of the farmers was literate, and the household sizes were quite high (9.33 people). The education levels of household members were also low. In general, there were literate and primary school graduates.

There were 1692.19 potential working days on average as determined by the full-time equivalent. However, more than half of this potential was idle. The non-agricultural income sources of the enterprises were also insufficient. Ownership of health insurance was high in the region.

The levels of use of mass communication channels were deficient. The most important sources of information that were beneficial for sheep breeding and marketing were private veterinarians, veterinarians consultants and other breeders in the provinces of the Food, Agriculture and Livestock.

Şırnak benefits from field-based supplements in crop production near half of the enterprises, with support for more than half of the feed crops. More than half of the enterprises benefit from the support given to animal breeders as well as the herd manager support and consultancy support. Additionally, utilisation levels of milk premium support were low.

The most critical problems seen in the region's enterprises were the inability to market their products at value prices, the inadequacy of grazing, the high feed prices, the inadequacy of capital, the provision of credit, the lack of quantity and the shortcomings in the organisation of farmers.

It was observed that the health conditions were inadequate, the shelters were primitive, and the breeder's knowledge level was insufficient.

Higher pasture rents in the study area affect production negatively, prohibition of pastureland due to security in the region negatively affects the businesses and increases the cost of animal care. It was observed that producers have difficulties in finding shepherds, imported animals and meats have had adverse effects on prices and production in the region. It was also observed that it was not easy to reach the city centre in an emergency situation, and it was also expressed as another critical problem that the children of the family cannot benefit from the educational opportunities and that their children were not educated because of the long-term grazing of the animals.

Some farmers stated that support for feed plants should be increased and that current levels were insufficient. A significant number of farmers have suggested that support for small ruminant breeding should be increased, discounts for producers for business supplies must be applied, and constant change of policies for animal husbandry negatively affect production, i.e., policies should not regularly be changed.

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