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EVALUATION OF LIVESTOCK ENTERPRISES IN TERMS OF FARMER SATISFACTION AND CURRENT SITUATION

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Abstract: In addition to meeting the basic needs and nutritional needs of people, the agricultural sector is of vital importance for countries due to many factors such as its place in employment, the supply of raw materials to the industrial sector and the use of the products produced as inputs, and its share in national income. The continuity of the agricultural sector depends on the satisfaction of agricultural enterprises and the strong structure between them and their current situation. Many factors such as demographic characteristics of agricultural enterprises, labor force utilization, presence of young population, capital structure and profitability, production planning and use of technology, agricultural policies and supports are included in this situation. In this study, the current situation and satisfaction of livestock enterprises were evaluated. Within the scope of the study, there are data on the socio-economic status of the enterprises, their opinions and expectations regarding agricultural supports and agricultural policies, their organizational status and credit use savings, the current status of the enterprises and their breeding preferences, the opinions and demands of the owners. In this study, the current situation and satisfaction of livestock enterprises are evaluated. The research was carried out in agricultural enterprises engaged in cattle and sheep breeding in Seben district of Bolu province. Face-to-face questionnaire application was used to collect the data, and SPSS package program was used to analyze the data obtained. As a result of the study, it was concluded that 74.4% of the enterprises were not satisfied with the situation and future of their agricultural enterprises, and producers wanted their children to turn to different sectors and not to continue in the agricultural sector. In addition, producers stated that agricultural supports are important for the continuity of production and sustainability of enterprises (62.8%), and that they take agricultural supports into consideration in their production planning. In addition, the high technology and expenditure costs required for production activities, aging of enterprises and increasing labor shortage, problems in land planning and future planning of enterprises, and insufficient credit and agricultural supports also come to the fore in the research.

Keywords: Sustainability in agricultural enterprises, Satisfaction in agricultural enterprises, Livestock enterprises, Agricultural economics

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1. Introduction

In addition to the basic characteristics of the agricultural sector, the increase in input costs, the aging of the labor force, the negativities and fluctuations in the markets, as well as many negativities such as the pandemic process caused by the Covid-19 outbreak and global climate crises pose problems in terms of the satisfaction, planning and continuity of agricultural enterprises. The protection and support of the agricultural sector within the agricultural law includes the development of agricultural production activities in accordance with the demands, ensuring and improving the continuity of biological and natural resources, increasing yield and quality, strengthening food safety and security in a sustainable manner, and developing agricultural organizations. In addition, the law includes agricultural policy objectives that aim to increase the welfare level of the agricultural sector by ensuring rural development, eliminating problems in agricultural markets and strengthening markets (Anonymous, 2006). In this way, the future of the enterprises and their satisfaction with their current situation are tried to be guaranteed.

Regardless of the level of development of countries, the agricultural sector is of vital importance. Therefore, ensuring the continuity of the agricultural sector varies in direct proportion to the current situation of agricultural enterprises and the satisfaction of the enterprises. In terms of enterprises, many factors such as demographic characteristics, labor force and population status, agricultural policies, production activity models and planning, technology used, land availability significantly affect the current structure of the enterprises and the satisfaction of the owners with their enterprises and thus their future thoughts.

In terms of agricultural enterprises, it is possible for them to maintain, increase and improve their earnings

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over the long term with the effective and efficient use of their assets. Although the existing goals of enterprises are to achieve maximum profit, all components of sustainability should be taken into account in planning the future and continuity of enterprises. Although the good financial and economic performance of enterprises is an indicator of the continuity of their activities in the short term, it does not guarantee the existence and sustainability of enterprises in the long term. Therefore, the degree of satisfaction with the situation of businesses, their expectations and their current situation are becoming more important (Doane and MacGillivray, 2001; Ertan, 2018).

In our country, the livestock sector has an important place in terms of high potential and economic values. Factors such as the use and evaluation of some plant products in production activities, increasing labor productivity and business efficiency, ensuring high profitability, using natural and economic resources and reducing risk factors etc. provide positive effects for enterprises. In addition, when the ecological and natural resources and ecological conditions of our country are evaluated, it has very favorable conditions for ovine and bovine breeding. This situation contributes to the success criteria of the enterprises. It will help to increase the benefit to be obtained from the existing conditions with planned production models suitable for the conditions of the region, to improve the current situation of the enterprises and to meet their expectations (Vural and Fidan, 2007; Turan et al., 2017).

In addition to production and consumption, the policies implemented in our country have become one of the important factors affecting businesses and markets. When we look at it, the fact that red meat production and consumption have a large area is valuable for the national economy. However, in recent years, meat imports have been resorted to due to the inability of red meat production to meet meat consumption. This issue negatively affects the degree of satisfaction of agricultural enterprises, their current situation and the future of the sector. In its solution, the importance of the protection of enterprises and the necessity of structural agricultural policies come to the fore (Saygın and Demirbaş, 2017).

One of the indicators that reveal the level of development of countries is the parameter of healthy and adequate nutrition. In order to have adequate and balanced nutrition, 60% of the daily protein consumption should be plant-based and 40% should be animal-based. Contrary to the fact that developed countries meet the criteria for balanced nutrition, the desired levels of animal-derived protein consumption have not been reached in our country and developing countries (Terin et al., 2017). Animal protein intake has become a priority issue in balanced and adequate nutrition in developed and developing countries. Food and nutrition problems are increasing due to the unbalanced growth of the world population and many problems. In addition to feeding people, the red meat sector also helps to reveal the development levels of countries with socio-economic variables. Therefore, the elimination of nutritional problems and the continuation of production activities are possible by improving and developing the current situation of the enterprises and ensuring the satisfaction of the enterprises in terms of the sector. Otherwise, the continuity of agricultural enterprises that form the basis of the food chain will be negatively affected.

The aim of this research is to reveal the current situation of livestock enterprises and their degree of satisfaction with their own enterprises. In this context, issues such as socioeconomic status and labor force, production methods, existing assets, agricultural supports and opinions of the enterprises are included.

2. Materials and Methods

2.1. Materials

Seben district was chosen as the research area because it has a voice in the region in terms of animal husbandry activities, it is the main sector preferred by enterprises and access to reliable information is convenient. The main material of the study consists of data obtained from face-to-face interviews with animal breeding enterprises in Seben district of Bolu province. In addition, secondary data obtained from theses prepared on this subject, Turkish and foreign publications, books and internet resources were also utilized.

2.2. Methods

In the research, a face-to-face survey was conducted with the producers to obtain the data. In determining the enterprises (121 enterprises with 5 or more cattle breeding and small ruminant breeding), complete census method was used. Within the scope of the questionnaire studies, in addition to the socio-economic and demographic characteristics of the producers, their current assets (animals, tools, machinery, land), production activities and their thoughts on their satisfaction status are included. In this study, it was interpreted by tabulating it with frequency and percentage distribution. The current labor force utilization in the enterprise was evaluated through the Male Work Unit (MWU) (Erkuş and Demirci, 1996). In addition, in order to determine the number of animals in the enterprises and to make comparisons, the common unit of large animal unit (LAU) was used (Erkuş et al., 1995).

2.3. Statistical Analysis

SPSS package program was used in the analysis and evaluation of the data obtained through the questionnaire form regarding the social structure and economic activities of the enterprises examined.

3. Results and Discussion

3.1. Socioeconomic and Demographic Characteristics of Enterprises

When the age distribution of household members in the

study was evaluated, 1.2% (4 people) was found among the 0-6 age group; 5.4% (18 people) among the 7-14 age group; and 79.8% among the 15-64 age group (226 people). In addition, individuals in the 65 and over age group constitute 14.3% (48 people) (Table 1).

Table 1. Age group distribution of enterprises

Age Group	Person	%
0-6	4	1.2
7-14	18	5.4
15-64	226	79.8
65-+	48	14.3
Total	296	100

When the distribution of the population by age and gender in the investigated enterprises is examined; it is seen that the ratio of boys and girls between the ages of 0-6 is equal to each other. Among the individuals between the ages of 7-14, males account for 22.2% and females account for the remaining 77.8%. It was concluded that 57.9% of the individuals between the ages of 15-64 were male and 42.1% were female. In individuals over 65 years of age, 45.8% are male and 54.2% are female.

Table 2. Age group distribution of enterprises

Education Status	Person
Primary School	178
Middle School	32
High School	80
License	32
Associate Degree	14
Total	336
Agricultural Education	72

When the educational status of the household members participating in the study is analyzed (Table 2), it is seen that primary school graduates have the largest share (178 people). This is followed by individuals with high school (24-80%), undergraduate (10-32%), secondary school (9%) and associate degree (4-14%). 59.5% of the owner farmers also participated in one or more of the agricultural trainings organized in the region (72 people). The training includes trainings on different production activities such as herd management, young farmer, agricultural insurance, pruning and vaccination, dairy processing and development, animal nutrition and ration preparation, beekeeping, etc. In addition, the number of household members in the enterprise should be at least 2 and at most 8 individuals. While the average household size of the enterprises is 2.8, the average age is 45.33. The average age of the business owners is 59.5. According to similar studies, the average age is above the results (Aksoy and Yavuz, 2012; Kara and Kızıloğlu, 2012; Demir et al., 2015; Özsayın and Everest, 2019; Lianou and Fthenakis, 2021). It was concluded that there were eighteen male individuals in the 22-30 age group who had completed their basic education and were engaged in production activities with their families and that these individuals participated in one or more of the agricultural trainings.

Table 3. Distribution of enterprises by occupational status (%)

Profession Group	%
Farmer	36
Housewife	26.8
Student	17.3
Worker	4.8
Retired	6.8
Tradesmen	1.5
Other	6.8
Total	100

When the occupational status of the households within the scope of the survey is analyzed (Table 3), it is concluded that farmers (36%) have the largest share. It was determined that 26.8% of the family members were housewives, 17.3% were students, 4.8% were workers in public-private institutions or individual fields, 6.8% were retired, 1.5% were tradesmen, and the remaining 6.8% were included in other occupational groups. In addition, considering the marital status of the individuals in the enterprises, it was revealed that 36.3% were married and 76.7% were single. It was also concluded that 25.6% of the business owners are retired and continue production.

3.2. Characteristics of Enterprises

The total land area of the analyzed enterprises was 7960.6 da. The average land width per enterprise was found to be 62.1 da. When evaluated in terms of enterprises, it was determined that the smallest enterprise had 14.3 da and the largest enterprise had 281.2 da of land. In addition, the average number of pieces of land is 6.2. Considering the number of parcels owned by the enterprises, it was seen that the number of parcels consisted of at least one and at most seventeen parcels. When their land ownership status is evaluated, there are three enterprises that are engaged in animal production activities but not in crop production. When the land saving status of the enterprises was analyzed, it was determined that 64.9% of them owned land and 35.1% of them rented or rented land to a partner (Table 4).

When the land assets of the enterprises are evaluated according to their qualities, 801.1 decares of the land is irrigated and 7159.5 decares is dry land. Considering the production pattern of the enterprises, it was concluded that the majority of the producers (75%) produce wheat. Oat, alfalfa, barley, vetch, fruit (apple, cherry, walnut, peach etc.), vineyard and vegetable production are among the production preferences of the enterprises respectively. In addition, 25.7% of the producers prefer to utilize at least a part of their land as fallow. On average; 35.9 da of barley-wheat land, 2.4 da of alfalfa

land, 8.3 da of oat land, 2.8 da of fresh vegetable-fruit and vineyard land are used for different productions. In addition, 5.4 da of fallow land, 4.3 da of silage corn-sunflower land and 3 da of other crops.

In total, 2203 bovine animals, 18655 ovine animals, 1425 poultry and 3 passenger animals were found in the total number of the enterprises examined. When the average animal assets of the holdings are examined, it is seen that there are 63.6 sheep, 33.06 goats/sheep, 29.23 lambs, 8.78 goats, 8.02 kids in ovine breeding. In cattle breeding, there are on average 6.8 cows, 2.53 heifers, 2.41 calves, 4.13 calves and 1.33 heifers per enterprise. The average of the holdings in terms of large animal units was calculated as 30 units (LAU) (Table 5). This result is above similar studies on average LAU (Aktürk et al., 2005; Özalp and Sayın, 2018; Karadaş, 2018). The average animal capital of the holdings was 435,245 TL. Large animal unit varies between a minimum of 9.08 < and an average of 30 < and a maximum of 108.31.

Table 4. Land asset and saving status of enterprises

Total Land Area (da)		7960,6	
Enterprises size (da)	The Smallest	Average	The biggest
	14.3	62.1	281.2
Enterprises Land Width (da)	The Smallest	Average	The biggest
	1	6.2	17
Savings Status (da)	Property Land		Rent - Sharecropper
	5166.8		2793.8

Table 5. Animal assets of enterprises

Animal type	Mean/ Number	LAU
Cow	6.8	6.8
Calf	2.41	1.20
Cowling	4.13	0.83
Bullock	1.33	0.93
Heifer	2.53	1.77
Goat	33.06	3.3
Sheep	63.6	12.72
Yearling lamb	8.78	0.06
Lamb	29.23	1.46
Kid	8.02	0.4
Heder	2.84	0.34
Billy- goat	1.04	0.12
Layer chicken	8.53	0.03
Turkey	2.13	0.008
Goose	0.48	0.002
Donkey	0.02	0.027
Beehive	1.95	-
Total		30

The building assets of the enterprises were found to be 490,750 TL. Of the building assets, 39.7% were housing assets, 22.4% were barns, 16.3% were corrals and 21.6% were other assets. In production activities, tractors and equipment are widely preferred in the region. It has been observed that the equipment of some enterprises have completed their economic life, but they continue to be used and take part in production activities. When the agricultural tools and machinery owned by the enterprises are examined, the average number of tractors is 1.09; the average number of tractor- trailer is 1.13; the average number of plows is 0.92; the average number of seeder is 0.47; the average number of sweep is 0.63; the average number of motopumps is 0.14; the average number of disc harrows is 0.33; the average number of harrows is 0.66; the average number of rollers is 0.31; the average number of cobra machines is 0.16; the average number of irrigation equipment is 0.94; the average number of hoeing machines is 0.12; the average number of meadow mowers is 0.65; the average number of balers is 0.14; the average number of combine harvesters is 0.04; the average number of feed mixer is 0.14; the average number of milking machines is 1.02. The average equipment asset value was calculated as 350,670 TL (Table 6).

Table 6. The tools and machinery (equipment) owned by the enterprises

Agricultural Equipment Type	Average per Enterprise (piece)	Equipment Value (TL)
Tractor	1.09	169 250
Tractor- Trailer	1.13	25 340
Plow	0.92	19 800
Seeder	0.47	16 340
Sweep	0.63	12 550
Motopomp	0.14	2 120
Disc harrow	0.33	7 610
Harrow	0.66	12 900
Roller	0.31	4 410
Cobra machine	0.16	2 400
İrrigation equipment	0.94	13 920
Hoeing machine	0.12	5 160
Meadow mower	0.65	11 750
Baler	0.14	21 000
Combine harvester	0.04	14 000
Feed mixer	0.14	3 960
Milking machine	1.02	8 160
Total		350 670

3.3. Views of enterprises on animal production

In the study, the opinions of the producers on why they do animal husbandry activities and their preferences were included (Table 7). When these opinions are evaluated, the main reasons for preferring animal husbandry activities are that it is widespread in the region and there is currently no other employment area. Of the enterprises participating in the study, 15.7% stated that the sector was profitable, 9.9% stated that they preferred it because it was their ancestors' and fathers' profession, 0.8% stated other reasons for preference, and 1.7% stated that they thought of leaving animal husbandry activities for different reasons. 46.3% of the people surveyed stated that they would like to work in different fields other than the agricultural sector. On the other hand, 53.7% of the enterprises stated that they did not have the idea of working in a field other than the agricultural sector due to factors such as health, age, education, etc.

Table 7. Opinions of the enterprises about aquaculture

Preference of Livestock Activities	n	%
I find it profitable	19	15.7
Widespread in the region	49	40.5
Lack of diverse employment opportunities.	38	31.4
Ancestor, father's profession	12	9.9
Thinking of quitting	2	1.7
Other	1	0.8
Total	121	100

Considering the evaluation of the enterprises in the study according to the care type of their animals, 66.1% of the enterprises stated that the care of their cattle was carried out in the barn during the whole period, while 33.9% stated that they utilized pastures in different periods and processes. Pasture and grassland utilization are among the parameters taken into consideration in the planning of enterprises. In meeting the pasture and pasture needs for small ruminant breeding activities, 47.1% stated that 47.1% of the enterprises are used by the owner himself/herself, family members or shepherd/caregiver, 5.8% use the common herd manager method, 43% use the slaughter/impulse method and 4.1% use different options. The first reason for the preference of goat breeding enterprises is the low feed costs. In addition, easy maintenance (13.6%), being preferred in the region (13.6%) and convenient use and marketing of dairy products (9.1%) (Table 8).

Expenditure costs (feed costs, labor requirements and veterinary services) have an important place in the economic sustainability of livestock activities. Reducing feed costs is directly proportional to the planning and utilization of pasture and grazing lands of the enterprises. Participants stated that the highest expenditure among the operating expenses in animal husbandry activities is feed expenses. It is seen that the obtained data (87.6%) is above the results found in similar studies (Kara and Kızıloğlu, 2012; Özalp and Sayın, 2018; Unal and Dellal, 2023). In addition, 6.6% of caregiver services, 3.3% of veterinary services and 2.5% of other expenses (Table 9). It was concluded that 47.75% of the roughage need, which constitutes the important expense items of animal husbandry activities, was met by the enterprises. It was concluded that the rate of the enterprises that meet all of the roughage needs is 18.2%, the rate of the enterprises that meet some of it is 80.2%, and the rate of the enterprises that provide all of it by purchasing from outside is 1.6%. It was found out that 66.96% of the roughage amount that the producers had during the production period was used in cattle breeding and 63.25% of the concentrate feed assets were used in cattle breeding.

Table 8. Farming preferences and opinions of the enterprises

Taking Cattle to Pasture	n	%
Yes	41	33.9
No	80	66.1
Total	121	100
Reason to Prefer Goat Breeding		
Feed costs are low	14	63.7
Easy to maintain	3	13.6
More preferred in the region	3	13.6
Other	2	9.1
Total	22	100
Care Preference of Ovine Animals		
The Person Himself	57	47.1
Joint Herd Manager	7	5.8
Partner Herder	52	43
Other	5	4.1
Total	121	100

Table 9. Livestock expenses of enterprises

Expenditures on Livestock Activities	n	%
Feed	106	87.6
Veterinary Services and Medicine	4	3.3
Herder	8	6.6
Other Expenses	3	2.5
Total	121	100

3.4. Organization and Credit Utilization in Enterprises

Farmers stated that 74.4% of the producers are registered to one or more producer associations. Farmers stated that 9.9% of the enterprises were not registered because the dues and deductions were too high, not useful or not necessary. In the study, 71.1% of the producers stated that they were members of cooperatives and that they utilized their membership in terms of input supply such as feed, fuel, fertilizer, etc., while 4.7% of them utilized their membership in other ways.

In the study, 66.9% of the credit utilization of the enterprises in the study was from Ziraat Bank and Agricultural Credit Cooperatives and 4.1% from private

banks. Of the loans used by the producers, 15.2% of them said that they used for the purchase of real estate, 23.3% for the payment of bank or private debt, 2.3% for the education, health, etc. expenses of family members, 17.4% for increasing the livestock of the enterprise, 22.1% for the purchase of equipment, and 8.1% for meeting other needs. In addition, 11.6% of the producers left this question unanswered (Table 10).

Table 10. Area of use of the loan

	n	%
Housing/Land/Fields etc.	13	15.2
Bank or private debt	20	23.3
My family's education/health etc. needs	2	2.3
Animal procurement	15	17.4
Equipment procurement	19	22.1
Other	7	8.1
Unanswered	10	11.6
Total	86	100

3.5. Utilization and Satisfaction of Enterprises with Subsidies

It was emphasized that the type and amount of agricultural support have an important place in the planning of enterprises, diversification or distribution of production and economic sustainability for producers. Although the rate of benefiting from diesel oil and fertilizer support is high (92.56%), it is seen that raw milk support stands out in terms of earnings. When the utilization of agricultural subsidies by the enterprises was evaluated, it was concluded that the distribution of raw milk support, calf support, and additional input support was at the same rate, and 54.54% of sheep and goat support. It was revealed that fodder crops support, diesel oil and fertilizer support, calf support, mother sheep and goat support, and additional input support have an important place in terms of income return among agricultural supports. Agricultural subsidies have an impact on the producers' orientation and planning of their production, continuity of production and increasing agricultural income. The opinions of the enterprises on agricultural subsidies are presented in Table 9. Accordingly, 19.8% of the producers think that agricultural subsidies are very important, 43% think that they are important, 16.5% think that they are unimportant, and 5% think that they do not have information about their importance. When the distribution of the enterprises' satisfaction with agricultural subsidies is analyzed, the presence of producers who think that the amount and type of agricultural subsidies are not sufficient ranks first with a rate of 44.6%. The number of enterprises that think that the enterprises are satisfied with agricultural subsidies and the number of enterprises that think that they cannot receive them on time have the same share (18.4%). The rates of producers who think that support policies are wrong and agricultural. It is concluded that the rate of farmers who are not interested in the type and amount of subsidies is equivalent to the same percentage. 52.2% of the farmers think that the types and amounts of agricultural subsidies will have a positive effect on changing the current production activities, while 33.1% of the enterprises think that they will not have a positive effect (Table 11). As a result of the research, it was also determined that the average duration of the enterprises benefiting from agricultural activities during their activity processes was 13.76.

Table 11. Opinions of enterprises on agricultural subsidies

	n	%
Importance of Agricultural Supports for Production Continuity		
Very Important	24	19.8
Important	52	43
Unimportant	20	16.5
I don't know	6	5
Unanswered	19	15.7
Total	121	100
Satisfaction of Enterprises with Agricultural Supports		
Yes, satisfied.	22	18.4
I can't get it on time.	22	18.4
It is not enough.	54	44.6
Support policies are wrong.	2	1.6
I am not interested in agricultural subsidies.	2	1.6
Unanswered	19	15.7
Total	121	100

In terms of the continuity of the activities of the enterprises, that is, in terms of the sustainability of the sector, it is important that the young members of the family continue production. In addition to this, the increase in the education level of the enterprise individuals and their participation in trainings related to the sector are effective in the development of the enterprises. 74.4% of the enterprises examined stated that they did not want their children to continue in the agricultural sector for different reasons. This result shows that the enterprises are not satisfied with their situation and pose a danger for the future of production activities.

4. Conclusion

Increasing labor problems in the agricultural sector and the perspective of the young population on the sector are among the most important factors affecting the satisfaction and sustainability of the enterprises. The high age of the enterprise individuals in the research (the age of the family members is mostly 45 years and above, the average age of the enterprise owners is 59.5 years / the average working period of the enterprises in the agricultural sector is 29 years) poses a risk for the future and current situation of the enterprises. The fact that the young population is not satisfied with the situation of the enterprises or that they turn to different sectors due to

socio-economic reasons also poses a problem in terms of meeting the labor force required for the continuity of the activities. In addition, it was concluded that the fact that the educational level of the enterprises is mostly at the primary school level and that they do not have sufficient agricultural education negatively affects the transition of producers from traditional agricultural practices to modern agricultural practices, planned production and adoption of technology-based systems. This situation significantly affects the satisfaction dimension of the enterprises and the adaptation of the producers. In order to eliminate this problem, it is seen that it is necessary to guide the children of producers with projects and support tools in their educational life and later choices and to plan their future in terms of the sustainability of agricultural production and the satisfaction of enterprises. In the study, some of the problems encountered by the enterprises in their activities are seen as priority problems. The main problems are high production costs and agricultural inflation, fluctuations in agricultural markets and marketing problems. In addition, inadequate agricultural subsidies, climate change and the increase in its effects, inadequate rural infrastructure, ineffective and ineffective use of agricultural cooperatives or unions, and the negative effects of pasture problems have been observed to negatively affect the continuation of production and the current situation of the enterprises.

Land insufficiency, problems in the planning of land use and management are among the important problems affecting the situation of the enterprises. The continued transformation of agricultural lands into small and fragmented through inheritance also causes a decrease in production in terms of efficiency and quality. The fact that the average enterprise has 62.1 da and 6.2 pieces of land and 35.1% of them are rented and sharecropped explains the mentioned situation. In addition, the fluctuations in the livestock assets of the enterprises due to fluctuations in the markets, labor-related factors and regional basic problems reveal other reservations about the future of production. With the irrigation project of agricultural lands under construction and planning in the region, the desired yield and quality increase in the lands will be achieved. On the other hand, the protection of lands from climate change and drought problems that pose a risk in the future production periods, together with the new production pattern, will provide production opportunities that will have a high return and will have an impact on meeting the feed needs to a large extent. In this way, it is thought that the increase in agricultural income of the enterprises, planning in agricultural lands, alternative products and production continuity will have a positive impact on the sustainability of the enterprises and the satisfaction of the producers with their enterprises.

The majority of the enterprises stated that animal husbandry is the profession they can do due to the special conditions (education, health, age, etc.) and that they continue their activities because it is common in the region (72.9% - 92 enterprises). Participants stated that they prefer small cattle breeding in order to reduce feed costs, while those who focus on cattle breeding prefer it because it is easier to maintain and more profitable. Transhumance activities, pastures and grasslands are of great importance for cattle and sheep breeding in the region. The protection, planning and improvement of these areas have an important place in terms of continuity of production as they directly affect economic production and will contribute positively to the current situation of the enterprises.

Within the scope of the study, it was revealed that producers engaged in small ruminant breeding thought of terminating their activities or turning to different production branches as a result of the labor shortage (caretaker / shepherd / herd manager) they encountered. It is seen that migrant labor is employed in enterprises due to the higher need for permanent labor compared to other fields of activity. This situation leads to an increase in the use of unregistered labor, the formation of an uncontrollable wage market and different social and economic problems of enterprises. 76.6% of the enterprises that need and use unregistered/illegal labor force, which is defined as migrant shepherds, stated that they would quit small ruminant breeding when they reach suitable marketing conditions and would turn to different production areas (86 enterprises). This situation poses a great risk especially for the sustainability of small ruminant breeding in the region and the satisfaction of producers with their enterprises. It is thought that this risk will be eliminated or reduced by the agricultural support for herd management, the arrangements to be made in agricultural policies and the increase in support. As a result, it will enable the registration and control of the illegal and unregistered labor force, the regulation of the labor market and a direct increase in the agricultural income of the enterprises.

In the research, 74.4% of the enterprises stated that they were not satisfied with the situation and future of their agricultural enterprises (90 enterprises). Business owners want their children to turn to different sectors and not to continue in the agricultural sector. This situation poses a danger for the future of the enterprises. Producers stated that they consider agricultural supports important in terms of production and continuity (62.8%) and that they take into account the supports in their production planning. Producers who are satisfied with agricultural supports (18.4%) also stated that they are worried about the future of the enterprises and therefore want their children to work in different sectors with higher welfare and social life. In addition, it was concluded that most of the participants (64.6%) thought that they did not receive the supports on time, found them insufficient, and found the agricultural support policies wrong. It was concluded that agricultural supports are important for the sustainability of production activities, the adoption of the individuals in the enterprise and increasing their satisfaction. Re-

evaluation of the support policies implemented, increasing the amount and credits will help to meet the expectations of the producers. In addition, it is necessary to increase the existing livestock assets of the enterprises and to put forward support tools that will facilitate the transition to technological production models with practices for planning and bringing the assets of tools and agricultural equipment to the desired level. In addition, it is thought that regulating the social-economic conditions of rural areas, developing cooperatives that are important for the region, supporting and developing them by different sectors will benefit the satisfaction and future of the enterprises.

Studies in areas such as labor needs of enterprises and migrant workers, climate change and its impact on the sustainability of production activities, irrigation projects and planning, different production methods and technological use are recommended as they will help guide the future and practices of enterprises in the region.

Author Contributions

The percentage of the author(s) contributions is presented below. All authors reviewed and approved the final version of the manuscript.

	F.Ç.	E.O.
C	70	30
D	80	20
S	20	80
DCP	80	20
DAI	70	30
L	80	20
W	80	20
CR	70	30
SR	80	20
PM	70	30
FA	80	20

C=Concept, D= design, S= supervision, DCP= data collection and/or processing, DAI= data analysis and/or interpretation, L= literature search, W= writing, CR= critical review, SR= submission and revision, PM= project management, FA= funding acquisition.

Conflict of Interest

The authors declared that there is no conflict of interest.

Ethical Consideration

The authors confirm that the ethical policies of the journal, as noted on the journal's author guidelines page, have been adhered to. Permission to conduct the study was obtained with the decision of the Ankara University Research Ethics Committee (approval date: 20 November, 2021, protocol code: 17/189).

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