

Problems of Agricultural Farming that involves also Sheep Farming Activities in the Konya Province

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Abstract

In this study, problems of agricultural farming that involves also sheep farming in the Konya province was searched. Research within the scope of enterprises are selected by Stratified Random Sampling Method. According to the selected sampling, 104 of agricultural farms have been studied and data were collected through a questionnaire.

Problems of enterprises are declared like this 24.60% rise in drug prices, 16.79% veterinary fees, 15.58% increase in feed prices, 12.29% lack of shelter, 11.48% reduction of pastureland, 10.44% shepherd's wages, 5.86% the lack of people who do this job, and 2.97% the state declared in the form of livestock policy. State's livestock policy, while the lowest share of the state, has the highest share prices of medications.

Key Words: Sheep farming, agriculture, Konya province.

*This study is summarized by a part of doctorate thesis with supervisor Prof. Dr. Ahmet ÖZÇELİK

INTRODUCTION

Province of Konya and its surroundings because of its climate and vegetation is an important province in terms of sheep farming takes place in the geography of Turkey. Arid climatic conditions, availability of a wide plateau and sheep pastures may create a favorable environment for the activity done. And livestock sector in the province of Konya in Turkey for the solution of problems, all of institutionalization and specialization of agricultural enterprises should be extended, the partial dependence on imports by increasing production efficiency and quality should be abolished. Also, for the performance of livestock to a level that can compete with EU countries, manufacturers protect their economic and professional interests, particularly organizations such as cooperatives and producer associations, including evaluation of the available feed resources, production of fodder crops to the marketing organization that encompasses all areas of agriculture as the implementation of a national emergency program is essential.

According to the Turkish Statistical Institute (TURKSTAT) data in the Konya province has 31 counties, 15 counties trained indigenous breed of sheep, 16 districts of the indigenous sheep breeds and varieties and breeds of merino sheep are bred. In the province, where the most intensive agricultural enterprises of sheep farming, agricultural technique, in terms of geographic and economic situation in the province of Konya, representing as an area of Cihanbeyli, Karatay and Karapınar districts have been identified. In these counties, the number of sheeps under this coach respectively, 43.470 Cihanbeyli, Karapınar 64.500 and 77.005 Karatay districts (Anonymous 2009).

Activity to determine the current status of the province of Konya sheep, sheep breeders, presenting solutions to the problems faced by determining the activity of sheep farming development opportunities in the province of Konya and finally determine the objectives of this study can be counted.

MATERIALS AND METHODS

Materials

An important part of the material used in the study, the area of agricultural holdings engaged in sheep breeding data from the survey is done. Sample selected enterprises by going face to face questionnaires were filled by making a personal interview. Agricultural enterprises from October to November 2009 period, with the survey collected information. In addition to the primary data obtained, which is related to the subject of previous research findings, published records and secondary data were used by various organizations.

Method is applied to the selection of the sample

Research under the preliminary study, the characteristics that could represent the province at-purpose districts, respectively. There are three towns within the scope of research, these districts in 2009, the total number of 334.795 head of sheep and 28.58% of the Konya province. Selection of sample districts and villages, natural factors, in terms of farming and sheep farming area of research has been careful to represent.

This is the main material for the study of Konya, Cihanbeyli, Karatay and Karapınar agricultural enterprises engaged in raising sheep to be obtained from the districts of constituted the primary data. Each district has the highest

concentration of sheep farming village, taking a total of 9 villages were selected. This is going to the villages, six ewes and rams for at least 25 enterprises with more ram, and the population recorded by the number of these enterprises created in six sheep. This criterion, based on the number of sheep population of six rams, sample volumes were determined using random sampling method.

The main frame of the study Cihanbeyli Karapınar and Karatay counties in Konya province, villages in the districts of and agricultural enterprises in villages are engaged in raising sheep. According to the number of enterprise districts make up the population is divided as follows: Karatay 323, Cihanbeyli 553, Karapınar 514. Accordingly, this three-county population of 9 villages of the total number of enterprises which has been identified as a 392.

According to Stratified Random Sampling (SRS) method, the sample drawn process from population was done. Neyman and proportional share methods during the sample extraction methods have been tried. It was decided to use the structure in accordance with the proportional method.

While n value at proportional method is founded by

$$n = \frac{N \sum N_h S_h^2}{N^2 D^2 + \sum N_h S_h^2} \text{ this formula. } N \text{ values belong}$$

to stratified are used by $n_h = \left(\frac{N_h}{N}\right) x n$ (Yamane 1967).

Enterprises dealing with sheep divided into 3 groups: 100 with the head and below in the first group enterprises, enterprises with 101-200 head in the second group, enterprises with 201 and the third group took place. As a result of the withdrawal of the sample population SRS method was found to be the number of samples $n = 104$. As a result of the sample according to the method of proportionate distribution of the first layer of the layers $n_1 = 73$, the second layer $n_2 = 20$ and the third layer is calculated as operating $n_3 = 11$. In addition, reserves up to 25% of the sample volume of enterprises have been identified and villages to do the survey sample survey were conducted by the enterprises in the absence of reserves.

Method is applied to the analysis of data

Determine issues relating to the activity of agricultural enterprises within the scope of research for the purpose of sheep farming enterprises, "Problems of the Agricultural Holdings of Sheep Farming Survey Form" questions were asked.

Research within the scope controls on the survey forms were filled in the sample enterprises. Calculations are completed and carried out all the castings, the information obtained was transformed into summary tables to be used.

Table 1. Causes an increase or decreases in the number of sheep

Enterprise groups	State Livestock Policy	Reduction in the fields of pasture	shepherd's Fee	Veterinary Fees	Lack of shelter	This was not the person to do the job	Increase in feed prices	Increase in Drug Prices	Total	
1	%	4.11	12.79	12.79	20.09	13.70	7.31	16.89	12.33	100.00
2	%	0.43	3.03	2.60	5.63	3.90	2.16	4.33	77.92	100.00
3	%	0.00	18.18	9.09	15.15	18.18	3.03	27.27	9.09	100.00
Average of Enterprises	%	2.97	11.48	10.44	16.79	12.29	5.86	15.58	24.60	100.00

Data structures and operations of enterprises, enterprise groups are evaluated separately for, as well as the average of enterprises in the calculations were made. Operating results of the analysis and evaluation phase, agricultural enterprises are discussed in integrity.

The completed survey forms, data entry of information, made in a spreadsheet environment. Analysis of primary data is entered into the computer in the process, the program was evaluated using the SAS Enterprise Guide 3.0 (Anonymous 2004).

RESULTS

Problems of sheep breeding survey analysis and evaluation of the results obtained are as follows:

Evaluation examined the problems of sheep breeding enterprises

Causes decreases in the number of sheep, the state animal husbandry policy, degradation of pastures, shepherds costs, veterinary fees, lack of shelter, lack of people who do this job, the prices of medications, and an increase in feed prices are grouped under 8 main headings.

Enterprises were asked reasons for decreases in the number of sheep. 24.60% of enterprises rise in drug prices, 16.79% veterinary fees, 15.58% percent increase in feed prices, 12.29% lack of shelter, 11.48% reduction of pastureland, 10.44% shepherd's wages, 5.86% a lack of people who do this job, 2.97% and policy of the state's livestock are declared. Livestock policy, while the lowest share of the state livestock policy, has the highest share increase at prices of medications (Table 1).

Sheep rearing is one of the most important factors that increase in feed prices. Feed supply and increase prices, then leaves put the hard sheep breeders. Sheep breeders of the state of livestock policy and the expectations about the stability, constructiveness, and the front parts you listed.

Organizational status of the enterprises surveyed

Membership organizations of enterprises surveyed are as follows: agricultural loan (24.27%), agricultural development (15.93%), irrigation (18.87%) and Sugar Beet Producers' co-operatives (40.93%). When asked about the thoughts of the cooperative association of producers, 81.2% have found useful in terms of cooperative breeding, 18.8% stated that not the useful finding.

Educational status of the enterprises surveyed

Training in farming techniques, receive a status of small ruminants are calculated. 34.62% of enterprises have received training, while 65.38% percent stated that education is not receiving. Breeding of small ruminants as well as cattle breeding enterprises surveyed are included (Table 2).

Table 2. Training in farming techniques, receive a status of small ruminants

Enterprise groups	Yes	No
	%	%
1	36.99	63.01
2	30.00	70.00
3	27.27	72.73
Average of Enterprises	34.62	65.38

Family Labor force status of enterprises surveyed

Enterprises were asked to contribute to enterprises' family labor force. 85.21% of enterprises declared to the contribution of family labor operation. When enterprises grow, the contribution of family labor to enterprises is decreasing (Table 3). The reason for this, enterprises outside the labor force parallel to the growth of permanent and temporary supply is provided.

Table 3. Status of the contribution the enterprises of family labor

Enterprise groups	%
1	88.03
2	81.91
3	76.20
Average of Enterprises	85.21

Status of support payments at the enterprises surveyed

Enterprises surveyed were asked their sheep support to exploit the situation. 11.99% of enterprises support for feed, 41.35% vaccine support and 46.65% declared that benefited from the support payments. The first and the third group of enterprises, support and promote the vaccine utilization rate of payments is very close to each other (Table 4).

Table 4. State of sheep support to benefit

Enterprise groups	Feed Support	Vaccine Support	Support Payments
	%	%	%
1	11.80	41.30	46.90
2	13.74	40.91	45.35
3	10.10	42.52	47.38
Average of Enterprises	11.99	41.35	46.65

Status of use credit at the enterprises surveyed

Using your credit status of enterprises surveyed is given in Table 5. 51.12% of enterprises Agricultural Credit Cooperatives, 40.21% Republic of Turkey Agricultural Bank and then 8.66% persons declared that the party is using credit.

Table 5. Status of credit use

Enterprise groups	Persons	Agricultural Credit Cooperatives	Republic of Turkey Agricultural Bank
1	7.27	63.06	29.67
2	12.92	39.65	47.44
3	7.01	5.96	87.03
Average of Enterprises	8.66	51.12	40.21

The marketing situation of the enterprises surveyed

Asked how their marketing of products derived by the enterprises. 10.58% of enterprises declared as I take their products to market. 89.42% of enterprises, the product marketing stage attract a variety of problems (Table 6).

Table 6. Marketing possibilities of the products from sheepfarming obtained

Enterprise groups	Featured Product Market Rate
	%
1	9.59
2	15.00
3	9.09
Average of Enterprises	10.58

Status of housing conditions of the enterprises surveyed

Shelters of animals were made by stone, dried brick and briquette. When asked to enterprises about the structure of the housing animals lived, 14.42% animal shelters from stone structure, 56.73% dried brick, 28.85% percent stated that the brick were declared by enterprises (Table 7).

Table 7. Structures of sheltering animals

Enterprise groups	Stone	Dried Brick	Briquette
	%	%	%
1	12.33	60.27	27.40
2	15.00	40.00	45.00
3	27.27	63.64	9.09
Average of Enterprises	14.42	56.73	28.85

Status of supplying breeding animals at the enterprises surveyed

Surveyed enterprises supplying breeding animals provided the outside. However, this form of procurement, with the support of credit is breeding animals. Where the supply of breeding animals provided by the enterprises was asked about the question. 25.96% of enterprises stated that I did outside of the supply of breeding animals (Table 8).

Table 8. Status of supplying of breeding animals

Enterprise groups	To be outsourced (%)
1	26.03
2	25.00
3	27.27
Average of Enterprises	25.96

The factors causing the decline in sheep farming activity at the enterprises surveyed

The main factors causing the decline in activity in sheep, the shepherd not found and shepherd's fee, a low level of education and training is the problem, the problem of pasture in the early part of the lamb, animal theft, animal feed prices, product prices and are classified as other. Enterprises were asked the major factors causing the decline in activity in sheep. 27.88% of enterprises pasture problem, 22.12% feed prices, 18.27% product prices, 10.58% the early part of

Table 9. The main factors causing the decline in activity in sheepfarming

Enterprise groups		Shepherd Not Found And Shepherd's Fee	Third Of Low Levels Of Education And Training Is The Problem	Pasture Problem	The Early Part Of The Lamb	Animal Theft	Feed Prices	Product Prices	Other
1	%	5.48	8.22	26.03	12.33	8.22	19.18	20.55	0.00
2	%	5.00	0.00	40.00	5.00	10.00	25.00	15.00	0.00
3	%	9.09	9.09	18.18	9.09	0.00	36.36	9.09	9.09
Average of Enterprises	%	5.77	6.73	27.88	10.58	7.69	22.12	18.27	0.96

the lamb, 7.69% animal theft, 6.73% third of low levels of education and training is the problem, % 5.77 shepherd not found and shepherd's fee and then 0.96% ranked as the other. The highest share of the problem of pasture, while the second in feed prices, product prices, and others, took third place (Table 9).

Status of imports of animal products at the enterprises surveyed

All owners of enterprises surveyed, imports of animal products, and as a result, product prices decrease, contemplating harming sheep farming, marketing problems is drawn. Imports of meat and meat products, milk and milk products, have negative effects on sheep farming. Turkey meat imports be limited and should be brought under control and prevention of illegal animal access to the necessary legal criteria must be met.

The number of grazing days at the enterprises surveyed

On the number of sheep grazing days values are given in Table 10. According to enterprises groups, the number of grazing days varies between 109.52 and 268.75 days. According to average of enterprises, the number of sheep grazing day's value is 139.54.

Table 10. The number of sheep grazing days

Enterprise groups	Number of days
1	109.52
2	178.03
3	268.75
Average of Enterprises	139.54

Expectations from state related to the activity of sheep farming enterprises surveyed

What are the expectations of the enterprises that the government was asked about the activity of sheep?. 20.19% of enterprises use of cheap credit, % 19.23 provision of facilities such as credit subsidies, 18.27% promotion of fodder production, 13.46% supply of breeding animals, 11.54% marketing opportunities, 7.69% veterinary services, 5.77% in vocational education and 3.85% give the producers in the form of general education were ranked (Table 11).

Employment at enterprises surveyed

Reducing unemployment and from rural to urban migration rates were calculated for the prevention of dissemination of sheep farming. Owners of the enterprises surveyed enterprise groups, wants to spread of sheep farming. However, rural-urban migration and the prevention of spread of sheep farming have encountered some difficulties. These challenges of land and lack of capital, lack of schools and job opportunities, land fragmentation, the loss of the attractiveness of the village is classified as. To be declining as a result of intense rural-urban migration of young people in the village, the young people seeing the sheep difficult and laborious work that does not challenge.

Agricultural extension at the enterprises surveyed

The situation with respect to the work of agricultural extension activities related to sheep, studied enterprise groups and enterprises to the average, with activity in sheep show that agricultural extension efforts are insufficient. However, publications on sheep enterprises, agricultural enterprises, and educational organization expectations for delivery are available.

Table 11. Expectations related to the activity status of sheep from the state

Enterprise groups		veterinary services	use of cheap credit	supply of breeding animals	provision of facilities such as credit subsidies	marketing opportunities	vocational education	promotion of fodder production	give the producers in the form of general education
1	%	8.22	15.07	16.44	13.70	12.33	6.85	21.92	5.48
2	%	5.00	35.00	5.00	35.00	10.00	5.00	5.00	0.00
3	%	9.09	27.27	9.09	27.27	9.09	0.00	18.18	0.00
Average of Enterprises	%	7.69	20.19	13.46	19.23	11.54	5.77	18.27	3.85

DISCUSSION

Among the reasons for the decrease in the number of sheep in Konya, constitutes a significant proportion of reduction in the pasture lands. Barren due to overgrazing pasture areas of existing, inefficient and under threat of erosion. To increase the production of sheep, grazing must solve the problem. Pasture improvement, grazing, grazing in determining the capacity of the pasture area, the number of animals, while taking into account canceled, development and implementation of alternate grazing system should be provided.

Konya province, fallow fields and farm lands to be fodder cultivation and the yield will be affected by a positive feed requirements will be fulfilled. This is a point where sufficient incentives for the withdrawal of food crop cultivation is required. State, livestock policy to determine the realistic, modern, viable and keep continuity in mind.

Imports of meat and meat products, milk and milk products, have negative effects on sheep. Be limited and the illegal importation of meat animals should be brought under control and prevent access to the necessary legal criteria must be met. The sheep will be recorded and provided in parallel to this, the ear-ringed earrings support still needs to be paid to union members.

Livestock sector in the past, state-owned enterprise of that price formation and the stability of Feed Industry, Dairy Industry Authority privatized, Meat and Fish Company partially privatized. Merino fleece wool as raw material for textile industry in Turkey with the Wool and Mohair Inc. was founded to promote the production of lint. Institutions that support purchases for many years, in 1985, merino wool, lint imposed in 1994 put an end to support the purchase. This was released on the importation of raw materials. However, these institutions effectively in the new institutions be established to fill the gap. For this, the new regulations are needed to fill this gap.

Sheep enterprises in the supply of breeding animals is partly outside the province of Konya. There is growing need for qualified animal breeding of small ruminants in Konya. Breeding livestock breeders' unions member enterprises, the creation and dissemination systems must be pedigree. Enterprises with pedigree recording system should be increased subsidies.

The indigenous races, such as sheep farming in the province of Konya Dağlıç preserved as a source of genes, generation of the necessary studies are needed to continue. Sheep breeds of sheep breeders in the region in the hands of low efficiency. Due to the housing and feeding aren't good conditions, it has seen extensive damage to the existing animals. Current local races to reform and improve yields, animal husbandry is very important for the future. Internal or external origin, with the help of genotypes to adapt to the current conditions of the region should be the creation of new ones. Accordance with the requirements for the development of local races, a variety of universities and research institutions should be provided technical consultancy/organizations should demonstrate interest in the issue.

Many city and town in Konya, agricultural development cooperatives, agricultural credit cooperatives and associations of milk producers' unions are breeding animals. Job descriptions should be well identified and the cooperatives coordination with each other. These organizations must take a

decisive role in the market. Important benefit of the technical organization in the development of animal husbandry. For this purpose, sheep and goat breeders to ensure the continuation of troops and to gain public awareness will be in a stronger position with the organization.

Among the reasons for the decrease in the number of sheep in the province of Konya, is an important factor in the absence of the person carrying out the work sheep. A migration from rural areas to urban areas in the province of Konya is continuing. Create new jobs in the villages and to improve the living standards of people living in these areas should be encouraged investments in these places. Should be given priority for rural development projects to do, the future sources of domestic and foreign funds should be given the opportunity.

Among the factors causing the decline in activity in the province of Konya sheep, have low levels of education and training are the problem. In Konya province, wide to combat unemployment, to the use of an active labor, employment and make the implementation plan, the employment-related tax deductions, exemptions, exceptions, such as the provision, qualified workforce, the provision of vocational training of the workforce, human resources and the most effective way to optimize the preparation of projects for the assessment of and must be implemented.

Market determine the policies of animal production, animal breeders to improve by increasing revenues, establishing the balance of supply and demand in the market, market prices, producers and consumers will be satisfied. Manufacturers of the products obtained have problems making the marketing stage. These problems, uncertainty and instability of prices, the unsuitability of market opportunities, and the time of the product term can't be sold, is the difficulty of bringing to the market.

Animal husbandry in all developed countries under the auspices of the state and also has a high level of state support. In these countries, the farmers into the hands of stock market prices and the difference between the prices, paid by the state in support of the producers. Konya is an important center for the presence of small ruminants. European Union (EU) countries, the production of lamb meat is available in a serious deficit, these deficit countries such as Australia and New Zealand meets. At this point, Turkey is the gap may close. Make the necessary amendments to the EU standards of production, the province of Konya, with the potential to be removed to the fore. In addition, raw materials such as fleece processed into finished products and value-added acquisition is important for increasing the income of local people. Not only wool to find a value only in Turkey but in many parts of the world is a problem.

Credit needs of agricultural enterprises in the province of Konya, a large part of that place sheep farming, tried to be meet through the Republic of Turkey Agricultural Bank and Agricultural Credit Cooperatives. However, credit is more than bureaucratic procedures related to the purchase, a portion of sheep breeders have led to third parties. In this case, higher loan rates to be obtained, leaving growers in a difficult position. All investments made for the cultivation of small ruminants, low-interest loans and repayment maturities of long-term needs to be. In addition to lowering costs, and the diversification of credit, lending institutions/organizations

to compete with the increase in the number will increase, this will reduce the loan interest rates. Enterprises in this way, a more economical way of using credit, enterprises will grow and the more efficient location in the past.

As in other parts of Turkey, brucellosis in the province of Konya (the young throwing), epidemic diseases such as tuberculosis, a serious threat to animals. Because of foot and mouth disease found in sheep and parasitic diseases, reproductive performance in sheep and human health is adversely affected, cases of sheep mortality remains high. Veterinary services becomes an important factor to be expensive, can't be sufficiently protective and preventive measures. As a result of the common use of pastures, sheep disease control epidemic is increasing the number of animals is reduced, the yield loss.

Thanks to protective measures related to animal diseases, animal products, exports will be affected positively. Developed countries such as the European Union and the United States, to protect agriculture and livestock have serious agricultural support funds. Such applications are described in the law of agricultural insurance in Turkey. According to the Law No. 5363 dated 14.6.2005 agricultural insurance, guaranteed by Article 12 risks that will be given in the following way: the coverage will be herbs, herbal products, and greenhouses, agricultural buildings, agricultural tools and machinery for livestock drought, hail, frost, flood, the ground water, floods, storms, hurricanes, earthquakes, landslides, fires, accidents, and animal diseases and pests that cause losses and/or important for the agricultural sector of interest is determined by the Council of Ministers upon the proposal of the Board guarantees regarding other risks (Anonymous 2011a).

Among the reasons for the decrease in the number of sheep in the Konya province, shows lack of shelters. Traditional procedures used by growers in the region, unsuitable shelter conditions, inadequate care and feeding activity of sheep with the requirements of work to do.

One reason for the decrease in the number of sheep in the province of Konya, shepherd's fare. Can't be found competent shepherds, sheep farming is one of the most important problems. So many came to drop sheep breeders. Certified training courses organized shepherd and a shepherd to fill the space in this area should increase the attractiveness of the profession.

Among the factors causing the decline in activity in the province of Konya sheep, there is an early cut of lamb. Early lamb sector, poses a serious problem for sheep farming. That can be used as a stud rams and ewes, cutting must be prevented at an early age. In order to prevent the early part of the lamb, sheep meat on the carcass should be paid to supporting a certain weight. Early lamb production losses are caused by cutting of meat. Food, Agriculture and Animal Husbandry 25 kg live weight, which is taken by the Ministry under the decision should be applied to prevent the lamb sector. If the cutting is made late, over-exploitation of pasture lands and unbarred causes. Illegal slaughter of animals, small animal husbandry is one of the major problems, production, marketing issues, and tax losses. For these sections are reduced to a minimum, effective and monitored legal regulations and practices are needed.

One of the factors causing the decline in activity in the province of Konya, sheep, animal theft. Sheep breeders in

the region is one of the major problems faced by the increase of animal theft. To prevent animal theft, manufacturers, and rigorously fulfill the duty of the state. In particular, the animal creation and development of the insurance system is required.

Expectations about the state of activity of sheep in the province of Konya, the producers are in training. Directly related to animal husbandry activities in the province of Konya, many public agencies are available. Bahri Dağdaş International Agricultural Research Institute, Agriculture and Veterinary Faculty of the University of Selçuk, Konya is an advantage for the province. Livestock-related education and research institutions, entering into all other sectors of cooperation, animal husbandry in the province of Konya, the direction and shape to produce projects.

Small animals rescued, the traditional breeding methods, more modern agricultural methods should be made conscious production. For this, the public institutions/organizations, the private sector and civil society organizations by organizing training seminars jointly made aware of breeders and growers are given training at the end of the training certificates of completion of education should be encouraged.

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