### EMPLOYMENT OF FARMERS IN THE SHEEP AND GOAT LIVESTOCK SECTOR OF THE TRIKALA REGION IN GREECE

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heep and goat farming is an important sector of the livestock industry in Greece where a large number of the agricultural labour force is occupied. The agricultural labour force of Greece totals 771,516 people (National Statistical Service of Greece, 1996) which is 20.4% of the active labour force and produces 12-13% of the Gross National Product (SPA 2000, 1998). The sheep and goat livestock sector of Greece has a capacity of 13,276,593 sheep and goats accounting for 27.4% and 65.6% of the total meat and milk production respectively (National Statistical Service of Greece, 1991). Sheep and goat farming in Greece is a family business where a large

#### ABSTRACT

The employment of farmers in the sheep and goat livestock sector of the Trikala region in Greece was examined by using empirical social research methods. Sample data on population characteristics, education, employment status, and income of farmers were collected. Also, data on the descriptive characteristics of the farms were collected. Data collection was performed by using a questionnaire survey. The data of the study were analysed with descriptive statistical techniques and cross-tabulations. The results of the study give an insight on the employment of farmers and the needs for future growth of this sector. In addition, on the basis of these data, the profile of the sheep and goat farmer in this region was constructed.

#### <u>Résumé</u>

Dans ce travail on a examiné l'emploi des agriculteurs dans le secteur des moutons et de chèvres de la région de Trikala en Grèce en utilisant des méthodes de recherche sociale empirique. On a ainsi collecté les données d'échantillonnage sur les caractéristiques de la population, l'instruction, l'état de l'emploi et du revenu des agriculteurs. On a aussi collecté les données sur les caractéristiques descriptives des exploitations agricoles. La collecte des données a été faite à travers une enquête par questionnaire. Les données de l'étude ont été analysées par des techniques statistiques descriptives et des tableaux croisés. Les résultats donne un aperçu sur l'emploi des agriculteurs et les besoins de la croissance future de ce secteur. En outre, sur la base de ces données, on a construit le profil du moutonnier et du chevrier dans cette région.

number of the agricultural labour force is employed on a permanent or seasonal basis.

Some of the problems facing the sheep and goat livestock sector are low productivity and investment, ageing of the farming labour force (SPA 2000, 1998), possible negative effects of the law for use of grazing pastures (Hatziminaoglou *et al.*, 1995), and the imminent reduction or termination of subsidies which threatens the survival of sheep and goat farms in Greece. There is a fear that after the termination of subsidies, many sheep and goat farmers will go out of business resulting in an increase of the unemployment rate and desertion of the countryside which will have a negative effect on other sectors of the rural economy as well. Therefore, it was considered that a survey of employment in the sheep and goat livestock sector was necessary in order to access the current condition of the farmers and their ability to adapt to new market situations that may arise in the near future.

For this reason, the employment in the sheep and goat livestock sector of the Trikala region in Greece was examined since primary data for this region is lacking.

The region of Trikala, located in central Greece, is an important sheep and goat livestock producing area that has 146 rural communities where there are 4.890 farms with 234,647 sheep and 3.710 farms with 115,439 goats that contribute around 30% of the region's Gross Product (National Statistical Service of Greece. 1995). Specifically, by using empirical social research

methods, data on the demographic, educational, employment status, and income characteristics of the sheep and goat farmers were collected. On the basis of these data, the profile of the sheep and goat farmer in this region was constructed.

METHODOLOGY OF THE SURVEY

#### Population census

Population census data was supplied by the National Statistical Service of Greece and the Trikala Regional Office of the Greek Ministry of Agriculture.

#### Sampling

A stratified sampling of rural communities by size of their farms, distance from an urban centre and local geography (mountainous, hilly, plain) was used.

#### Data collection

Data on the demographic, educational, employment status, and income characteristics of the sheep and goat farmers in the region of Trikala were collected through a questionnaire survey. Also, data on the descriptive char-

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acteristics of the farms were collected. The questionnaires were completed by the investigators on location by visiting the farms and interviewing the farmers face to face in order to avoid misunderstanding in the completion of the questionnaires.

#### Questionnaire

The questionnaire had the following sections: farm description, demographic characteristics of farmers, educational level, occupation, income, insurance, future plans, job satisfaction from livestock farming, quality of life, and suggestions for improving farm life.

#### Data analysis

Data from the collected questionnaires were analysed by using *MINITAB for Windows, Release 10.1.* Percentage distributions for the various responses were generated and cross-tabulations were made between related responses.

#### RESULTS

Fifty seven (57) farmers residing in 23 rural communities in the region of Trikala accepted to have their farms visited and to be interviewed for completion of the questionnaire.

#### Farm description

Farms were mostly located in rural communities with a population less than 500 (65%) and a distance from an urban centre less than 50 km (91%). The geography of the farms' location was characterized as either mountainous (32%), hilly (39%), or plain (29%). All of the farms were family owned and operated. The farms had been in operation on an average for 26 years. The available facilities on the farm were characterized by most of the farmers themselves as not satisfactory (77%). Of the 57 study farms, 50 had on average 136 sheep and 20 had on average 104 goats. Sheep farming was mainly extensive (58%) or semi-intensive (40%). Goat farming was predominantly extensive (95%).

## Demographic characteristics of farmers

The distribution of farmers by gender was 88% men and 12% women. The majority of farmers (68%) were 45-64 years old, married (89%), had 2-3 children (83%), took care of 2-3 family relatives (86%), and owned their house (96%). Most of the farmers (83%) were native of the region of Trikala and 17% were native of other regions who moved into the region of Trikala. There were no absentee farm owners since all the farmers interviewed in the study were local residents in this region.

#### Educational level

**Figure 1** presents the distribution of sheep and goat farmers by educational level. An important observation is that the farmers' educational level was mostly primary school and below (74%), only 12% had finished high school, and a mere 2% had finished an occupational school.

#### Occupation

**Figure 2** presents the primary and secondary occupation of sheep and goat farmers. Most of the farmers (81%) had sheep and goat farming as primary occupation and 19% as secondary occupation. **Figure 3** presents the



Figure 1 - Distribution of sheep and goat farmers by educational level.



Figure 2 - Primary and secondary occupation of sheep and goat farmers.

years of practising sheep and goat farming. On average, farmers practised sheep and goat farming 10 hours daily on a year round basis for 30 years.

#### Income and insurance

**Figure 4** presents the farmers' total annual income and annual income only from sheep and goat farming. An important observation is that the majority of farmers (70%) have a low annual income and that sheep and goat farming is an important source of income for them. Almost all (93%) the sheep and goat farmers receive subsidies and of those who receives it 92% considers it as an important part of their annual income. All of the farmers had some kind of state pension and health insurance coverage.

# Job satisfaction from livestock farming

The majority of sheep and goat farmers (70%) responded that they were not satisfied with their occupation (**figure 5**). This result is related to the fact that only 5% of the farmers liked sheep and goat farming when they started it, while the majority of the farmers (47%) started it by necessity because they had no other choice (**figure 6**). Even though they

did not like it, 67% of the farmers responded that they would not change sheep and goat farming today. The main reason cited (50%) was that they are too old to start something anew. In addition, most of the farmers (77%) would not like their children to continue sheep and goat farming because it is a harsh job (54%), or because it is a job with no respect (26%), or because the income is low (20%).

#### Future plans regarding sheep and goat farming

A large proportion of farmers (27%) responded that they will stop sheep and goat farming if subsidies are terminated, while of those who will keep sheep and goat farming, 30% will increase the number of animals in their flock and 56% will apply a more intensive production system with more productive stock in order to increase their annual income.

#### Quality of farm life

Most of the farmers (58%) responded that the income from sheep and goat farming is not enough to cover their



Figure 3 - Years of practising sheep and goat farming



Figure 4 - Farmers' total annual income and annual income from sheep and goat farming.

life necessities. In addition, farm life would be better if they had higher income (60%), better services such as shops, schools, hospitals, and theatres (25%) and better housing conditions (15%). Their main suggestions for improving their income were higher prices for livestock products (39%) and income protection by the state (21%). On the other hand, most of the farmers (53%) would not like to attend an educational programme on sheep and goat farming to improve their production techniques.

#### CONCLUSIONS

The profile of the sheep and goat farmer in the region of Trikala that emerged from this survey is that of a man 45-64 years of age, born and raised locally, homeowner, who is married with 2-3 children and takes care of 2-3 family relatives (usually parents). His educational level is mostly primary school and below. He considers livestock farming as his primary occupation, he has been doing this job on an average for 30 years, and he is not satisfied with it. Also, he considers the facilities of his farm as not satisfactory. He opted for livestock farming because he



Figure 6 - Reasons for deciding to become a sheep and goat farmer.

had no other job opportunities, or to supplement his income from another primary occupation. A proportion of farmers will stop sheep and goat farming if subsidies are terminated, and some of them plan to increase the number of animals, which may contribute to environmental degradation and conflict with the law for use of grazing pastures, while some others will apply a more intensive and more productive system. The main factors which limit the possibilities of expansion and make the small holdings suffer the most severe financial constraints are: the small size of farms (the number of animals and the available land area per farm), the high land prices (competition of land from more economically viable crops), the state ownership of rangelands with the current legislation of land tenure, the low genetic potential (low productivity) of some traditional breeds still used, inadequate nutrition (nutritional fluctuations and imbalances), inefficiency or lack of co-operative ventures between rural production and retailing enterprises, and inadequate valueadding activities, such as regional and eco-labelling on farm processing and marketing, combined with an inefficient milk processing and poorly organized market (Zervas, 1998). The prospects for sheep and goat farming in the region of Trikala are not optimistic and probably this applies to the rest of Greece too. The agricultural labour force occupied with sheep and goat farming is ageing and the new generations are not encouraged by their parents to take over. Today, it is extremely difficult to persuade young people to practice extensive livestock farming in upland areas where there is no social life. Under these circumstances, a new strategy is needed to face the problems and disadvantages of the semiintensive and intensive livestock production system used (Zervas, 1995). Since the accession of Greece to the European Community in 1981 the poultry and pig livestock sectors have intensified while the sheep and goat livestock sector has remained largely unaffected. Sheep and goat farming is operated under traditional practices which even though does not require large capital for feeding and housing, it is a harsh job associated with a life style that is not attracting young people (Hadjigeorgiou and Papavasiliou, 1998). The integrated plan for regional development 2000-2006 (SPA 2000, 1998) proposes to rectify this situation by offering incentives for young people to become farmers, by giving investments for the improvement of farm facilities, genetic stock and grazing

lands, and by improving the quality of farm products through animal disease control measures, standardization, research and development. Whether this plan will lead to upgrading of sheep and goat farming in Greece it remains to be seen.

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