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The Impact of Standardization of Livestock Products on the Economy of Farmers and the Local Economy

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Abstract

There is a strong link between agriculture and the economy. Smallholder farmers are the foundation of the livestock sector and an essential element in building and developing the local dairy value chain, critical to the development of its local economy. Economic growth is necessary for poverty reduction. The main objective of the study is to know the impact of livestock production on the regional economy of Gjirokastra. The result of the study identifies employment generation and income generation as the major benefit of standardized livestock production. The study hereby recommends that the government should take standardized livestock production as one of the major factors contributing to the economy and also put some policies in place in order to encourage farmers to collaborate in this regard. In Gjirokastra, and despite the efforts made since the transition from the communist regime until now, farmers still face many problems that prevent them from participating effectively in the development of the milk value chain. This research study refers to the views of small farmers in the Gjirokastra region about the milk production sector and the problems faced by these farmers. This study also investigates the effect of several factors (ethical factors, tradition, animal welfare, cultural factors, etc.) on the milk value chain. Convergence model was used in mixed method triangular design as a methodology for this research study. As part of the social data, 34 farmers who produce and sell milk and cheese in the Gjirokastra District were interviewed. The results showed the influence of ethical, cultural and traditional factors on the development of the value chain. The results also showed the problems and difficulties faced by small farmers in rural areas, on the one hand, and the gap between these farmers and government and private organizations on the other.

Keywords: standardization, dairy products, value chain, small farmers, food safety, Gjirokastra District

Introduction

This study was financed by the National Agency for Scientific Research and Innovation within the project "Standardization of Livestock Products in Gjirokastër District".

Livestock systems occupy about 30 percent of the planet's ice-free terrestrial surface area and are a significant global asset with a value of at least $1.4 trillion. (Steinfeld et al. 2006) The livestock sector is increasingly organized in long market chains that employ at least 1.3 billion people globally and directly support the livelihoods of 600 million poor smallholder farmers in the developing world (Thornton et al. 2006).

Livestock are important in supporting the livelihoods of poor farmers, consumers, traders and laborers throughout the developing world. The greatest impact of livestock in sustainable development designed to help the poor is an enhancement of livestock-production systems. Animal diseases are crucial constraints in this: the animals of poor people are particularly vulnerable to disease because of the expense, absence or unsuitability of animal-health and production inputs. (FAO 2010). Livestock production is an important part of the national economy and an integral component of state and local economies. The production of livestock, as well as other commodities, causes ripple effects throughout the economy in the form of employment; production in allied industries; taxes paid to local, state and federal governments; indirect impacts from purchases of input supplies; and induced impacts from household spending throughout the state.

In Albania, about half of the farmers are engaged in animal husbandry, including the dairy sector. Dairy products occupy an important part in the consumption basket of Albanian families. Milk production is mainly dominated by cow's milk, with a contribution higher than 4/5 of the milk produced.

In general, dairy products are destined for the domestic market, so the increase in production is mainly driven by the increase in domestic demand, while the balance of international trade in dairy products shows a structural deficit [1]. The dairy sector is considered a priority sector based on the potential for import substitution.

Many processing factories have problems with liquidity related to the process of cheese production technology. For this reason, there is a need for short-term loans in this value chain. Also, milk processors as leaders in the milk value chain can be considered for financing under the value chain approach.

[1]INSTAT, Foreign Trade, of Goods, November 2022

Studies show that about 75% of farms in the world are family farms. According to official data 1, the number of farmers registered and equipped with NIPT in Albania during 2022 is 62,922, approximately 35% of the total of 181,549, of which 14,206 were registered only during 2021. Despite different development policies and modernization that each country adopts to advance the field of agriculture in all its sectors, small farmers face numerous challenges at the local and international level. Smallholders are the backbone of the economy in countries that depend heavily on agriculture and livestock. The dairy sector is one of the most important agricultural sectors for smallholder farmers, as it plays a fundamental role in their daily income and self-sufficiency, as well as food security. If farmers are forced to change their behavior due to international hygiene standards, without appropriate government solutions to support them, social problems will arise and economic issues will arise for society. These potential events could lead to farm abandonment by farmers. The resulting consequences can be drastic and have a long-term impact. These consequences can cause substantial changes in the natural landscape of the district due to the lack of livestock.

In Gjirokastra and in most developing countries, milk production depends on small farmers. It also contributes to ensuring family livelihoods, supporting food and nutrition sovereignty and maintaining food security. Therefore, small farmers in these countries, and especially in Gjirokastër, are considered as one of the most important actors in the development of the agricultural sector.

Milk production is an integral part of the small farm economy in Albania and many other countries. It is what gives them self-sufficiency in terms of food and some cash. For example, small milk producers in countries such as Greece and Macedonia are represented by a large part of the economic policies adopted in the development of the dairy sector. Many small farmers in these countries have managed to increase their production and compete in larger markets.

The increase in milk production in developing countries globally results from an increase in the number of animals kept and not from an increase in productivity per head. Low food quality, animal care and disease prevention, demand for access to markets and use of all available services on their part lead to the underdevelopment of the milk value chain.

Factors Affecting Livestock Production in Gjirokašter District

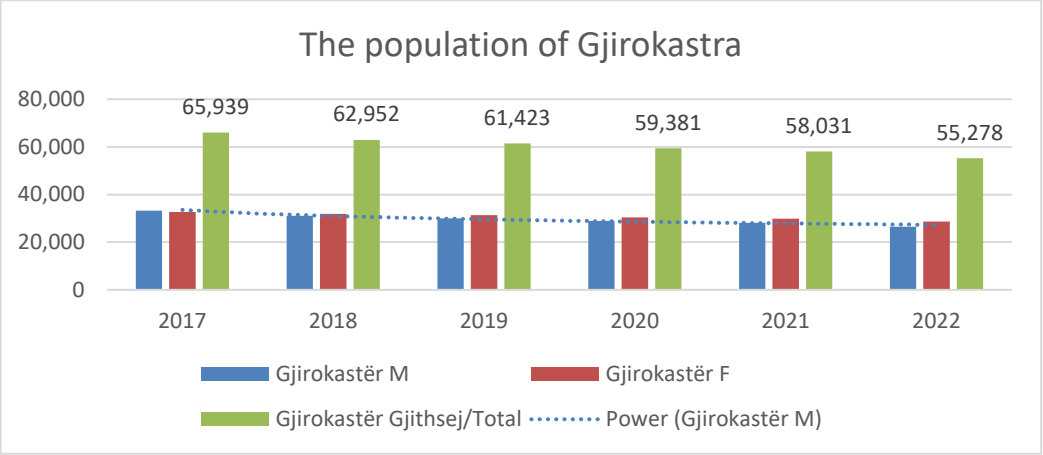
Socio-demographic and socio-economic factors

Socio-demographic factors such as gender, family and age, socio-economic statuses such as income, education, employment and residential area are essential vital factors that directly affect farmers and the existing agricultural economic system.

[1] INSTAT, Business Registers , 2021

According to INSTAT's official publications, the District of Gjirokastra has the lowest percentage of the population, with about 2.0% of the total population. The population of Gjirokastra District has been decreasing in recent years, reaching the lowest figure of 55,278 inhabitants in 2022 .

Figure 1: Population of Gjirokastra 2017-2022



Source: Graphic presentation made by the author, based on INSTAT data

The division of the population according to the Urban and Rural classification was last developed in 2014, and according to this division, the rural population in Gjirokastër occupied 36.9% of the total population. picture 2 shows change IN population between areas Urbana AND rural IN Gjirokastra. During the last years, the rural population, at the national level, has decreased by about 7%, which means that, on average, the current rural population in Gjirokastër District is approximately 30%, that is, about 16,580 inhabitants.

While Gjirokastra has undergone massive changes over the past few years, many constructive initiatives and programs have emerged that help develop the village and support small farmers.

Budget 2022 represents the largest fund for direct support and investment for farmers. According to official data, for 2022, the budget for farmers is 3.2 billion ALL or 26 million euros.

For 2021, the budget was worth about 22 million euros, while the budget in 2022 is 4 million euros more than a year ago. But, compared to the countries of the region, Albanian farmers have the lowest support from the government. Over the years, it has been considered the largest fund, but in comparison to itself, because compared to the Region and the Balkans, these figures are the lowest.

Meanwhile, Kosovo's direct support for farmers has been around 50 million euros, and there is also a big difference with Montenegro, Kosovo, Macedonia and Serbia.

Recent developments in the global economic crisis have also had their impact on Albanian farmers. According to the Income and Standard of Living Survey (IAS) 2021, which measures the standard of living, relative poverty and material deprivation in Albanian families, it results that the Indicator of the risk of being poor in Albania in 2021 is 22.0 %, marking a slight increase of 0.2 percentage points, compared to 2020.

Farmers' access to rural areas and market control is complicated, especially in relation to climate change. Small farmers face new risks, but they do not have enough knowledge about adaptive measures and cannot cope with them. This development presents a new threat that could threaten rural areas

All these factors subject Gjirokastra's milk production to significant challenges: the decline of the population in rural areas, the increase in poverty and the loss of dynamism and entrepreneurship in those areas with an increase in emigration of young people and a small number of retirees. , who depend for their livelihood on remittances as well as social transfers.

Ethical Factors

The consumption of the Albanian population relies heavily on animal products, in particular, on animal products milk. The demand for these products has always been high, as they constitute an important part of the average consumption basket of Albanian families.

Livestock production raises a wide range of ethical issues. One of the most important issues is concern for animal welfare.

Consumer awareness of food quality and safety has increased dramatically, as the ethical factor of animal products has played an important role in consumer behavior. On the other hand, dairy producers, retailers and the food industry are demanding higher animal welfare standards to obtain excellent quality, which supports the economy on the one hand and maintains food safety and food safety standards on the other. .

Animal welfare is a complex subject that varies from culture to culture. It is a subject that has scientific, cultural, social, ethical, religious and political dimensions.

The production of safe food for humans depends on the health and productivity of these animals.

For example, state legislation intended to support animal welfare in the opinion of farmers is not entirely fair from a political point of view. Increasing such laws creates a sense of insecurity among farmers and undermines confidence in the political decision.

Regarding traditions, studies have shown that rural farmers have a shared understanding of the cultural, political, economic, and social context of what it means to be a good farmer. Therefore, modern financial plans and legislation aimed at developing the dairy sector and increasing interest in animal welfare are considered by many farmers as a threat because it conflicts with their deep-rooted culture and traditions.

In addition, the experience of these farmers is also an important factor, especially in the ethical issue. Political decisions, which aim to increase the awareness and knowledge of farmers, play a major role in creating a communication bridge between them and the responsible parties. As a result of all the circumstances and events affecting the county's population, small farmers faced and still face many problems in the milk production sector. Lack of fodder and limited pastures available for grazing cows are among the most critical problems facing farmers. The lack of adequate housing for animals or places prepared for them in terms of health in rural areas increases the risks that animals suffer. The farmer's use of antibiotics in animal feed is due to the lack of health care caused by the lack of veterinarians. Human consumption of these dairy products and its by-products can generate disease and resistance that can be transmitted to farmers and threaten their safety and health.

In an effort by small farmers to take care of animals and to try to increase the quality of dairy products, families with many cows are trying to provide enough food from grass in summer and wheat, corn and straw in winter, despite the high prices of these materials, and to keep pace with animal welfare regulations. In the region under consideration, most farmers own a small number of cows with low productivity. Thus, providing the necessary food can be a problem for them compared to those with large farms.

Methodology

Study Area

The research study was conducted in Gjirokastër District, which is one of the 12 districts in Albania and has an area of 2,884 km^2. Until 2000, the District of Gjirokastra was divided into three districts: Gjirokastra, Përmet and Tepelën. Since the 2015 local government reform, the district consists of the following 7 municipalities: Dropull, Gjirokastër, Këlcyre, Libohovo, Memaliaj, Përmet and Tepelenë. The District Municipalities consist of about 270 municipalities and villages in total.

From the research in this district, 34 milk processors were identified and studied, about 47% of whom operate in the Gjirokastër District, and 26% in the Përmet and Tepelën districts

Table 1: Milk processors by District

District	Milk Processors
Gjirokastra	16
Permet	9
Tepelena	9
in total	34

Source : Author, result of the study

Mostly, farmers are concentrated in the administrative units Antigone, Carshove, Cepo, Dhemblan, Dropull i Siperm, Kelcyre, Qender Municipality, Kurvelesh, Kurvelesh, Lazarat, Lekel, Libohove, Lopes , Odrie, Picar, Suke e Zagori.

Methodology- Mixed Method

This study relied on the convergence model in the tripartite design of the mixed method approach. Using a mixed method design allows questionnaires or surveys and interviews to be conducted together. Mixed method is a methodology that attempts to break down the qualitative-quantitative divide by integrating aspects of both approaches. However, both methods are not mutually exclusive, but can be used together to create combined results.

We used the experimental design of qualitative and quantitative surveys and interviews as primary data. Data and information about the dairy sector in Gjirokastër County were adopted as supporting data.. This publication aims to present a quantitative survey of farmers in Gjirokastër County and discuss the factors provided by expert opinions.

Survey and data collection

All the data used in this study were collected through a survey distributed to all farmers who were included in the study. These data were collected from 34 women working in 18 administrative units: Antigone, Carshove, Cepo, Dhemblan, Dropull i Siperm, Kelcyre, Qender Municipality, Kurvelesh, Kurvelesh, Lazarat, Lekel, Libohove, Lopes, Odrie, Picar, Suke of Zagori. In this selection are included all the farmers who have been identified and who exercise the activity within the geographical area of the study. The farmers have completed the distributed survey, and personal interviews have also been conducted during the visits that have been made to their work environments. The questions were arranged in a logical manner and related to each other, depending on the purpose of this research. All interviews were face-to-face and all these questionnaires were completed during the interviews.

Some of the factors that were taken into consideration in this study are: location, gender, socio-economic sphere of the family, family size, milk supply, range of products, annual profits, accumulated experience, points of sale and marketing of products.

The survey included 34 small farmers, of which 34 were men. The data collected through the survey was transferred and stored in English.

After the survey was completed, all survey data were transferred to an Excel spreadsheet. The number of interviewed farmers was 30, so the size of this sample allows the generalization of the results to all small farmers in Gjirokastër.

Data Analysis

The results of the survey were transferred to an excel sheet as coded data, to show the descriptive statistical results for each section of the variables.

SPSS software version 27.0 (IBM, USA) was used for all statistical analyses, where the general comparison between survey factors was calculated using Spearman correlations (rs). An independent samples t test tested whether the means of two independent samples were different. ArcGIS Pro was used to map the study area.

Results and Discussion

The results showed that the percentage of male farmers who participated in the survey was higher than the percentage of women (100%).

The demographic characteristics of the questionnaire show how Girokastri society has been influenced by ancient culture and traditions. Women in rural areas still do not have enough freedom or access to the market and follow all developments in agriculture, especially the cheese production sector. As the results of the questionnaire show, women are mainly responsible for livestock on the farm or at home. They are the ones who milk the cows and prepare the milk for sale or for home use to make cheese or other products. Some of the women we interviewed reveal this situation as:

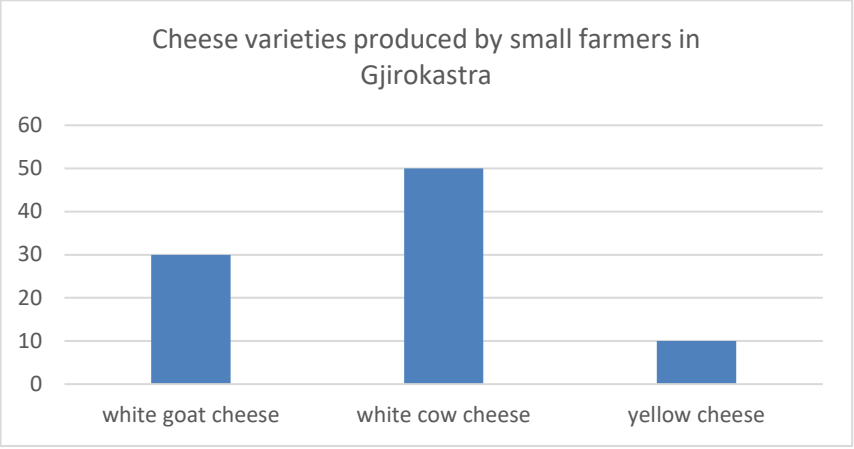
"We are the ones who do all the work at home. The men mainly deal with the trade and the distribution network, while we collect the milk and prepare it for sale or to make cheese. This is the hard work that makes selling milk and cheese possible."

Other women stated that: “My mother and grandmother have done this work in the past; they milked the cows and made cheese and prepared it for sale or consumption at home. And here we are doing the same job, nothing has changed."

Most of all, regional culture and traditions play an important role in rural society and directly affect livestock breeding and marketing.

The results show that 47.9% of the interviewed small farmers use a part of milk to make only two types of cheese, white goat cheese and white cow cheese, but with different qualities, as these are the most sought after types of cheese.

Figure 2: Cheese varieties produced in the interviewed farms (N = 34, Mean = 27, Std. Dev. = 31,112).



Source: Questionnaire results

It is essential to consider the cultural and social background of smallholder farmers. With few reservations, women in rural areas are still the ones who make the cheese at home and milk the cows.

Hygiene standards in the production process and food safety measures are mostly strictly enforced. The produced cheese is sold in the premises where it is produced or at their points of sale, in small markets or supermarkets, and therefore it is difficult to monitor it continuously.

Based on all this, the social and cultural identity of small farmers is an important and essential factor in the development of the value chain for cheese production and the support of the rural community, which helps to grow the local economy.

According to the report of the United Nations Organization, the roles of men and women in agriculture and animal husbandry are justified on the basis of various factors, among which the main ones are the differences in physical strength between them and gender stereotypes.

Women's and men's roles are defined by the activities available, as men believe that all jobs and activities that require physical strength are their responsibility.

This patriarchal system is still widespread in the Gjirokastra region, especially in rural areas, as the traditions of this society place women as responsible people.

Thus, a proper understanding of the role of women in the dairy chain helps in developing and strengthening the dairy value chain. Rural women are the cornerstone of this activity, starting from the milking stage to the preparation or production of cheese for sale.

Therefore, these Albanian laws and legislation should pay more attention to the roles of rural women and provide them with all the necessary support to include them in the development phase of the local economy

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