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# ASSESSING THE IMPACT OF FARMERS' SUBSIDIES ON PRODUCTION AND THE AREA OF AGRICULTURE LAND IN KORCA REGION, ALBANIA

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## Abstract

Recently, a huge debate has been evolved worldwide regarding farmer's subsidies and their impact in terms of performance of agriculture farms and productivity. Based on that, author conjectured that's also the case for Albania, since we aspire to get closer to the integration of the agriculture sector toward EU. The paper aims to assess the impact of subsidies (mainly payments on farmers) on production and the area of agriculture land in Korca region, committing that it may represent the same trend in Albania, since this region is well known for the development of agriculture, mostly orcharding. The study was conducted based on the available literature and interviews that were made with farmers, in order to be objective and clearly determine the effects of farmer subsidies on sustainable development of agriculture farms. Thus, the nature of the study is to identify and explore if there is a relationship between subsidies, productivity and the structure of agriculture land. Results of the statistical analysis showed that between the farmers who benefited from the financial payments and variables "planted agriculture area with orchards" and "productivity" exist



important conjunctions. It was concluded that the financial support available for the agriculture sector should focus on farm modernization in order to increase their performance and create alternative income resources.

Keywords: Subsidies, agriculture farms, productivity, cultivated area, Korca region-Albania

#### INTRODUCTION

The Inter-sectorial Strategy for Rural Development and Agriculture (ISARD) 2014 – 2020, states that since 2013 the performance of the agriculture sector has increased because of the funds allocated for agriculture. However, the economic performance of the sector still remains insufficient because of small and fragmented farms, low levels of modern technology and total productivity of the production factors compared to EU average. In order to overpass these problems and be competitive in the region, it is certainly important to increase the level of investments including subsidies to farmers in the form of direct payments.

In addition, until 2013 the direct support of farmers was mainly oriented to encourage productivity and stimulate the agriculture area planted with orchards, vineyards, olive groves, etc. Since then, the form of support has changed and it is being oriented more in supporting the output delivered in agriculture warehouses. Actually, according to the Agency for Agriculture and Rural Development (AZHBR), the direct support on agriculture and rural development consists of three main pillars:

- 1. Increased competition of agricultural products (12 schemes)
- 2. Investments on agriculture (6 schemes)
- 3. Diversification of the economic activity in rural areas

Brinkman and Warley (1983), describe some of the features that may be affected from structural changes of agriculture farms. These structural changes sometimes may be considered like that because they evoke changes in the number of agriculture farms, size, intensity of their activity and the credibility of farmers, from the income that derives from non agriculture sector.

However, it is important to underline that the available literature, over the way how agriculture policies and programs influence the structure of farms, show that the application of support schemes may offer contradictory results (Tweeten, 1993).

Despite the fact that different studies support the idea that direct payments may anticipate structural changes and decrease the number of farms, there are other studies that support two different opinions, based on the argument that support programs may delay the

consolidation of farms. In the meantime, various studies conclude that the application of support schemes has no impact at all on the performance of farms.

Based on the "Agripolicy" project (2010), "Direct Payments in Non-member State Countries and Candidate Countries", in respect to structural changes, the major impact is recorded in Latvia and Lituania (LIAE 2009). In both countries was observed a decrease in the number of farms and an increase in the average farm size. While at Poland, (before becoming a member state) direct payments were observed to be rather an obstacle than a support to structural changes.

As for the impact on farm productivity, in Bulgaria was observed a growing up of the extensive crops, whereas those with intensive agriculture shrink off. Direct payments had an impact upon productivity of production factors (Ivanov and Popov 2009).

In Latvia, during 2003, agricultural production volumes grew up by about 20%, mainly in crop production. Meanwhile, in Slovakia, the agricultural output showed constant increasing from year to year. It is important to be mentioned that the Slovakian economy of particular production branches was considerably diverse and the majority of them would have been lossmaking without subsidies.

However, despite different theories that exist about the impact of direct payments on productivity and the structure of agriculture farms, it is observed that productivity and the area planted with orchards in Korca region has been increased due to the subsidies obtained by farmers and the concentration of their investments on new orchard plantings, storage capacities and irrigation systems.

## **RESEARCH METHOD**

Because of the type of the study and characteristics of the region where the research was undertaken, field research has been oriented toward the literature linked with sustainable development of agriculture, application and the impact of financial support in Albania, mainly orcharding. Basically the research has exploratory and descriptive nature.

In order to have a better understanding and assess the conjunction that exists between farm subsidies in the form of direct payments, productivity and the area planted with orchard trees, we decided to apply interviews with farmers, in the form of questionnaires, known as a collection method of primary sources. In order to assess the impact of farmer's subsidies in Korca region, we investigated the number of farmers that benefited from national support schemes during the period 2007 – 2009, meaning that the total population comprised was 425 farmers, while the sample population was 160 valid questionnaires. Considering the formula for the selection of the sample size of Cochran, W.G, (1977), the level of reliability on this case is 93%. According to Collis and Hussey (2003), primary data is known as original data that is collected from the main source. Sources to collect primary data include observations, survey, questionnaire, and personal interviews (Hussey and Hussey 1997). Also secondary data were gathered, consisting on other similar studies, newspapers, sources from governmental institutions, etc.

The research technique used in this study is that of intentional sample. The selection of an intentional sample means that the researcher is looking for individuals that posses certain features that are considered to be important for the study. During this method, the researcher chooses the sample in accordance with the objective of the study (Saunders et. al., 2009; Cooper & Schindler, 2006).

In order to conduct the research it was chosen the region of Korca, as a potential agricultural region, well-known for the high production of orchards, mainly apples. Based on that, we believe that the findings and the results that are found during this study represent the same trend regarding the impact of subsidies in the whole country.

In order to identify whether there is an impact between direct support and variables "productivity" and "planted agriculture area with orchards" it was used the Chi Square Test analysis. If we want to see whether there is a relationship between two categorical variables we can use Pearson's chi-square test. This is an extremely elegant statistic based on the idea of comparing the frequencies you observe in certain categories to the frequencies you might expect to get in those categories by chance (Andy Field, 2009).

## **RESULTS AND DISCUSSIONS**

The population comprised in this study were farmers that have benefited from the support schemes of the agriculture sector in Korca region, while from 168 questionnaires distributed, 160 of them were considered valid (remaining had data inconsistency). The diversification of the sample was done based on the administrative units that had the highest number of farmers supported (Table 1).

Table 1. Level of sample diversification

Administrative units	Frequency No. Valid cases	Percentage
Bulgarec	30	18.7
Mollaj	20	12.5
Drenovë	18	11.2
Pojan	24	15
Pirg	68	42.5



Orcharding is considered one of the most important sub-sectors in this region, where farmers are especially supported for new plantings of orchards and investments on irrigation systems. The table below illustrates an overview of the data's that comprises the agriculture area planted with the main orchards in the region of Korça, during the period 2007 - 2012, as a result of farmer's subsidies.

Table 2. New plantings with orchard trees

			Planted area with Orchard trees area in total (in hectares)			d trees
Region	Year	Planted area in total				
		(Hectares)	Apples	Pears	Plumbs	Cherries
Korça	2007	38.94	32.74	0.3	3.9	2
	2008	96.17	74.92	-	11.58	9.67
	2009	98.35	71.65	1.18	9.69	15.83
	2010	91.7	70.8	-	3.52	17.38
	2011	70.42	34.18	3	3.63	28.9
	2012	49.95	38.9	0.73	1.62	8.7

Source: Regional Directory of Agriculture

According to table 2, it is observed that in Korça region, the highest area with new plantings of orchards, as a result of farmer's subsidies in the form of direct support, consists during the period 2008 - 2009, where the total area of new plantings with orchards is around 194 hectares for both years. In the meantime, from the total area of new plantings, 146 hectares of the area is planted with apples, showing the potential of the region in terms of productivity for apples.

In order to identify whether exist a conjunction of farmer's subsidies (in the form of direct payments), over the area planted with orchards and productivity, it was used Chi Square Test analysis. In addition, were assessed the relations; "the amount of funds received - planted area with orchards and productivity".

## The conjunction "funds received –area planted with orchards"

Before examining through Chi Square Test analysis whether there was a conjunction between these two variables, the following hypothesis was stated: The amount received from the financial support affects the area cultivated with orchards.

Table 3. Chi Square Test analysis "financial support received – area planted with orchards"

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-Square	112.292	12	.000
Likelihood Ratio	42.999	12	.000
Linear-by-Linear Association	19.067	1	.000
N of Valid Cases	160		

The data's shown on table 3, states that  $\chi(12) = 112.292$ , while p = 0.00 < 0.05, indicating that the relationship between these two variables is considered to be statistically important, confirming that the financial support affects positively (increases) the area planted with orchards.

# The conjunction "funds received – productivity"

The same method used above was applied to verify the hypothesis: The amount received from the financial support affects productivity.

Table 4. Chi Square Test analysis "financial support received – productivity"

	Value	df	Asymp. Sig.(2-sided)
Pearson Chi-Square	181.762	12	.000
Likelihood Ratio	38.941	12	.000
Linear-by-Linear Association	8.082	1	.004
N of Valid Cases	160		

The data's shown on table 4, states that  $\chi$  (12) = 181.762, while p = 0.00 < 0.05. These values indicate that the relationship between these two variables is considered to be statistically important, confirming that the financial support affects positively (increases) productivity.

## **CONCLUSIONS & RECOMMENDATIONS**

Results showed that unlike other countries, in Albania farmer's subsidies in the form of direct payments have an important impact in the area cultivated with orchards and productivity. This was verified from the statistical analysis (Chi Square Test), where in both cases p = 0.00 < 0.05, meaning that the relationship between the variables was considered statistically important. Since the region of Korca it is considered to be the most important in the country regarding the production of fruits, it can be said that this findings stand also for whole Albania.

Compared to other regional countries, Albania is one of countries with the lowest level of farmer's support, if we refer to direct payments. Even though during the last years the financial fund for support schemes of agriculture has been increased, still the level of supported farmers covers around 20% of them, meaning that exist premises for demoralization of individuals that are involved in this sector. Based on that, it is necessary to increase the level of support in the form of direct payments. The financial support available for the agriculture sector should focus on restructuring and modernization of farms, aiming to increase their performance.

Further research, defining the scale of the factors that affect sustainable development and performance of farms may be undertaken, in order to facilitate the application and implementation of agriculture policies in Albania.

#### REFERENCES

Andy Field, (2009). Discovering statistics using SPSS, third edition: 688-689

AZHBR: www.azhbr.gov.al

Brinkman G. and Warley T.K. (1983). Structural change in agriculture and related industries. Agribusiness: an international journal. 8(3): 219-232.

Cochran, W. G. (1977). Sampling Techniques. New York: Wiley.

Collis, J. and Hussey, R. (2003), Business Research: A Practical Guide for

Undergraduate and Postgraduate Students, Palgrave Macmillan, Houndmills, Basingstoke, Hampshire.

Hussey, J. and Hussey, R. (1997) Business Research, Basingstoke: Macmillan.

Ivanov B. and Popov R. (2009). Review of available literature on direct payments in Bulgaria.

LIAE (2009). Review of available literature on direct payments in Lithuania.

MBUMK, Strategjia Ndërsektoriale për Bujqësinë dhe Zhvillimin Rural 2014-2020.

Saunders, M., Lewis, P., Thornhill, A., (2009). "Research methods for business students", fifth edition, Pearsons.

Tweeten L. G. (1993). Government commodity program impacts on farm numbers. In Hallam A. (ed.) "Size, structure and changing face of American agriculture". Boulder: Westview Press: 336-364.