THE IMPACT OF THE NATIONAL SUPPORT SCHEMES TO FARMERS IN ALBANIA

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I. Abstract:

Since 2007 the Governement of Albania give support to farmers and agro-businesses in the form of measures up to 50% of the total value of investment/measure to develop their economies, increase the agriculture production and incomes . This policy goes in line with the country strategic documents to support the rural areas as well as the recommendations of the European Commission in the framework of the aspiration of Albania to EU membership. The share of agriculture to the country GDP is 20% and the sector is steadily grow with a 3-5% every year contributing substantially to the country growth. In addition, the support of the government to the sector through national measures, is increasingly contributing not only to the sector growth, but to the increase of the farmers'income and improvement of the quality of life in rural areas. The relevant instruments to evaluate the impact of the policies implemented. However, some steps are undertaken to evaluate the impact of these policies. This paper is an effort to estimate the agriculture productivity, the farmers incomes using statistical methods.

1.   Introduction

Since 2007 grants are allocated to farmers and agro-businesses in the form of measures up to 50% of the total value of investment/measure to develop their economies, increase the agriculture production and incomes. For the period 2007-2015, around 8000 applicants each year, have benefited from a total amount of 68 million €. The allocations are granted on annual basis following certain criteria which promote the increase of the agriculture planting, the cultivated agriculture area and the facilitation of the farmers credits. The schemes reflect the government policies for the development of the rural areas and agriculture sector. The list of measures change from year to year with the purpose of adjusting with the majority of farmer's needs. However, the instruments to evaluate the impact of the measures are not yet established.

The literature used is based upon survey data collected from interviewed farmers. In addition, data from Albanian Institute of Statistics, FAOSTAT, Eurostat, as well as data from the Ministry of Agriculture of Albania are used for the purposes of the study. Foreign literature relevant to the paper also has been inquired and used for the same purposes.

2.   Rural development in Albania and policy challenges

2.1   The general socio-economic situation

The population has declined around 8.0 per cent, compared to the 2001, according to the Population and Housing Census 2011, the usually resident population in Albania was 2 821 977. The main causes of this decline are mainly the reduction of fertility and immigration during the compared period (INSTAT 2011).

Table 1 : Albanian Population according to Censuses of the Population and Housing 2001 and 2011

000 inhabitants

	2001	**2011**	**2012**
Population	3.069	2.800	2.816
0-14	899	579	582
15-59	1.826	1.773	1.783
60+	344	448	451

Instat- Albania in figures 2013

The average age of the resident population is increased from 30,6 years in 2001 to 35,3 years in 2011.

For the first time, the population living in urban areas has exceeded the population living in rural areas. The resident population in urban areas was 53.5 per cent, while 46.5 per cent of the population lived in rural areas.

Table 2 : Population according to the urban-rural division

%

	2001	**2011**
Urban	47	54
Rural	53	46
Total	100	100

INSTAT Population and Housing Census 2011

The internal population movement from rural area to the urban area is the main cause of the inverted proportion of urban-rural population, according to the census 2011. During the intercensal period 2001-2011 these movements have been continuous and with high intensity.

Furthermore, after 1990 the country experienced massive migrations which, combined with the internal movements brought changes in the distribution of the population and its demographic

characteristics. Since 1990, approximately one fifth of the total population has left the country and live abroad, making Albania to experience large population movements from rural to urban areas (Carletto et Al, 2004). In the period 1989 - 2001, the population decreased by 4% to 3,069,275 and the rural population by 15 percent.

According to Barjaba 2000, there were 800 thousand Albanian migrants. In 2005, the Albanian government published the figure of 1 million emigrants. The World Bank studied this phenomena in its scope, features and trends, based upon the LSMS 2005 data. One of the derived conclusions is that 75% of emigrants (Azzarri et Al., 2009) are male and the majority of them are young male from rural area of the country.

This phenomena caused negative consequences to the labor forces, the development of the rural area and the level of living of rural population.

Table 3 : The population structure in Albania, 2011

	Urban	**Rural**	**Total**	**Rural/Totali**
Total	1,498,508	1,301,630	2,800,138	46.5%
Male	742,671	660,388	1,403,059	47.1%
Female	755,837	641,242	1,397,079	45.9%
Female/total	50.4%	49.3%	49.9%	

Instat: Poluation and Housing Census 2011

2.2 Economic, agricultural and rural development

According to INSTAT (preliminary figures for the year 2014), the real economic growth of the Albanian economy for 2014, 2.02 % compared to the year 2013. The sector of agriculture, forests and fishery count for 20,0 % of GDP and the 2014 growth is 2,25 % in real terms, contributing with 0.44 percentage point in the GDP growth. (Table 4, INSTAT, 11 december 2015).

Albania is a middle income country according to OECD with per capita income of 4587 $ in 2014 (table 1 below). The population has a negative increase as we can notice from the data. In 2014 Albania has a population of 2.894 million people, compared to 2897 million in 2013 and 3162 million in 2007 (Instat, administrative data).

Tab.4 Main macroeconomic indicators (2013-2014 with current prices)

	2013*	2014**
Gross Domestic Production with current prices (in million leks)	1.350.555	1.400.549
National gross income (in million leks)	1.353.368	1.383.843
Annual real growth of GDP at constant prices compared to the previous year (in %)	1,11	2,02
Annual average population (in thousand inhabitants)	2.897	2.894
Gross Domestic Product per capita in:		
Thousands leks	466	484
Euro	3.323	3.457
USD	4.411	4.587

2013* Data are semi-final

2014** preliminary data on yearly basis

Source: Instat, December 2015

According to INSTAT data, the labor force in agriculture accounts for 50 % of the working age population or around 47.7% of the total employed (442,806 employed in 2014).

The labor force in rural areas is characterised by a higher number of women compared to men, while the agriculture holdings are headed by men in 93.5% of the cases.

Imports of agro-food products have increased by 4.4 % in 2014 compared to 2013 and 1.28 times compared to 2007, while exports have increased even at higher pace, namely 11.5 % in 2014 compared to 2013 and 2.21 times compared to 2007, thus trade deficit is growing at lower rate (1 to 9 in 2011) , but the trade imbalance is still a big challenge for the sector, 1 to 5.4 in 2014. (table 5).

Table 5 : Trade in food and agricultural products

	Units	2007	2013	2014	2014/2013 In %	2014/2007 In %
- export of agri-food products	mill. EUR	54.8	108.7	121.2	111.5	221.2
- share in export of all products	%	7.0	6.2	6.6	106.5	94.3
- import of agri-food products	mill. EUR	503.9	622.1	649.4	104.4	128.9
- share in import of all products	%	20.9	16.8	16.5	98.2	78.9
- trade balance in agri-food products	mill. EUR	-449.1	-513.4	-528.2	1/5.4	1/7.7

Source: Instat

The labor productivity in agriculture measured by GVA for annual working unit (AWU) is increased significantly with more than 46% in 2011 compared to 2007 while in 2012 reached the value of 3,615 Euro per AWU (IPARD 2 Program).

Despite the positive trend of the agriculture production in Albania, the performance is still low if compared to EU countries. This situation is dedicated to the small scale and fragmented farming,

low level of technology absorption and investments in agriculture (still low at EUR 20 million), weak irrigation and drainage infrastructure exposing the agriculture sector to severe weather conditions and climate change effects. In the recent years there has been an increase in the farm size but the Utilised Agriculture Area (UAA) per holding in Albania is still very low, only 2.8 ha (Zhllima et al.) .

3.   Description of the current situation and identification of the needs

3.1 National schemes

The National schemes in Albania are allocated to farmers in the form of support and direct payments with the aim to increase the agriculture production in the main agriculture sectors. The support to farmers is given on annual basis and goes to promote the production more and less the investments. However, the types of measures have changed from year to year aiming at promoting the farmers initiatives to invest in the use of their agriculture land. One of the new schemes is related to the support of the rural credits in the agro-processing and farms mechanisation. During the period 2007-2015, approximately 68 million Euro (using the rate of 1 Eur=140 ALL) have been allocated in the support of directs schemes and investments to farms and agribusinesses. Also, the number of measures per year has been 17 in average. We are interested in the subsidies to vineyards. Therefore, we will continue analysing data in this direction.

The Government subsidies for the vineyard sector are increased from year to year accounting for 3.2 million € for the period 2007-2012. However, the support for this sub-sector is decreased in the years 2013-2014. Meanwhile in 2015 the value for the plantation of vineyards more than doubled compared to 2014. (table 6).

Table 6: Subsidies in vineyards 2007-2015   **Value in EURO**

	2007-2012	2013-2014	2015	Total
Subsidies to vineyards	3,065,810	113,965	78,338	3,258,113

Source: Albanian Payment Agency

4.   Methodological aspects

A survey of three hundred farmers – treated (with investment grant) and not treated - has been conducted. The questionnaire has been designed such that assess outcomes, impact and government subsidy scheme procedural issues . In addition, secondary data from the Ministry of Agriculture, INSTAT and other official sources has been used in the analysis.

Vineyard and olive tree production are the sectors included in the study given their potential to produce outcomes in midterm perspective (up to four years). Fier and Korca are the regions selected based on their potential for growing vineyard and olive trees but also based on intensity of related government support scheme.

The survey instrument - the questionnaire - was designed in such a way that one can assess the likely outcome (and possibly impact) of government subsidy scheme.

Quasi experimental design using Propensity score matching has been used to assess the impact of Albanian government subsidy scheme.

4.1 Some results of the intervention 2007-2012

The survey study shows a positive link among subsidies allocated by the government to farmers and the increase of their income.

For the purpose of this paper, a sub-sample of farmers is selected, the vineyard farms and the production of grapes. There are 118 cases of vineyards, from which 78 farmers have invested in the past 6 years . More than a half of them (40 vineyard farmers) have benefited from the Government subsidies, while 38 farmers have not benefited (Table 7). The purpose of including both subsidised and non-subsidised farms is to study the effect of the subsidies allocated.

Table 7: The distribution of the vineyards in the sample

Sector	Subsidized in 2008	Not Subsidized in 2008	Total
Vineyard	40	38	78
In percentage	51.3%	48.7%	100%

According to the survey, the vineyard area has been increased by 2.3 times from 2008 to 2012 (table 8). In 2008, both groups, subsidised and not subsidized have almost the same area of fruits. When we compare the area for the same group, in 2012 the area for subsidized group has been

tripled, while for not subsidized group the increase is 1.5 times . There is a clear impact on the fruit area (table 9-10).

Table 8: Government subsidy impact on fruit area

		Total fruit area in 2012	Total fruit area in 2008
		Mean	Mean
Subsidy in 2008	Not subsidized	6.0	3.9
	Subsidized	9.9	3.2

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740[a]	.547	.535	4.3544

a. Predictors: (Constant), Subsidy in 2008, Total fruit area in 2008

Table 10: The significance of government subsidy on fruit area (The significance>.05 support no significant impact)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.374	.822		2.887	.005
	Total fruit area in 2008	.927	.107	.675	8.663	.000
	Subsidy in 2008	4.563	.989	.359	4.611	.000

a. Dependent Variable: Total fruit area in 2012

The vineyards farmers that have given a positive answer to the question"Have you made investments over the past 6 years", answered that they have received subsidies from the state in average 3,681,146 ALL. Almost ¾ of the subsidised vineyard farmers declare to have increased income.

Further, the answer to the question if there is change in family income, 70,1 % of the farmers declare to have income increased (figure 1 below), while 71.8% of the subsidized farmers declare to have income increased.
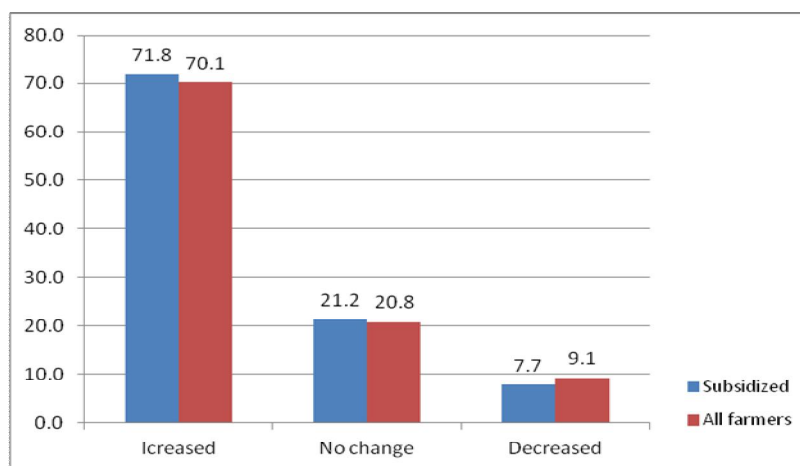
Figure 1: The change in family income (%)

Table 11: Government subsidy impact on increased family income

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	df	Sig. (2-tailed)
					Paired Differences		t	df	Sig. (2-tailed)
Pair 1	Government subsidy impact on increased family income - Own money impact on increased family income	-2.375	.957	.239	-2.885	-1.865	-9.922	15	.000
Pair 2	Government subsidy impact on increased family income - Bank loan impact on increased family income	1.500	.707	.500	-4.853	7.853	3.000	1	.205

Although the graph comparing the change in family income show that there is no significant difference on the increase of the family income subsidized or not, the paired sample test for government subsidy impact on increased family income vs own money impact on increased family income shows significance therefore, the impact of the government subsidy on increased family income is significant (table11). Meanwhile, the significance associated with pair government subsidy versus own money show that the difference in impact is not significant.

The subsidies received have an impact in the future plans to invest in the sector. From the survey results that the impact of having been treated with subsidies, is very strong to more than a half of vineyeard farmers who have plans to invest in the near future.

Table 12: **Government subsidy**

Impact on future plans to invest

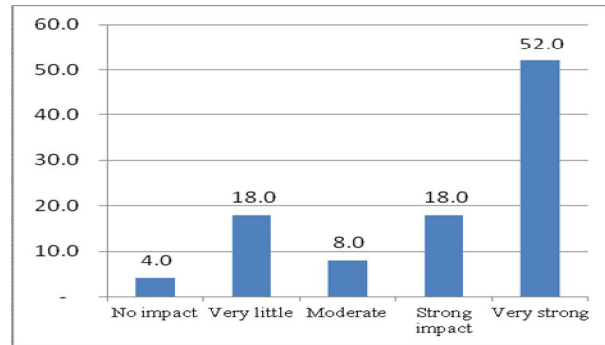| Statistics		
N	Valid	38
	Missing	40
Mean		3.87
Median		4.00
Mode		5
Std. Deviation		1.339

Figure 2: Government subsidy in the future plans to invest

The figures show that the 71% of farmers state that government subsidy has strong an very strong impact in future plans to invest.

Farmers' statements support that government subsidy has a strong impact on applying for other grants. On a scale 1 (weak impact) to 5 (very strong impact), farmers choose the average 4.12 meaning that government subsidy have more than strong impact on applying for other grants (Table 13). Four in five farmers state that government subsidy has a strong and very strong impact on their capacity to apply for other grants.

Table 13

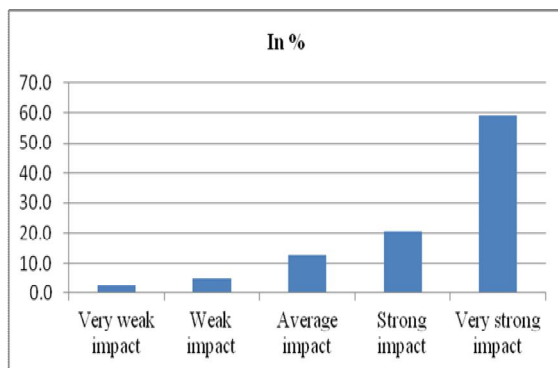| Statistics	
C91. Government subsidy impact on applying for other grants	
N Valid	39
Missing	39
Mean	4.28
Median	5.00
Mode	5
Std. Deviation	1.050

Figure 3: Government subsidy in the future plans to invest

The farmes under study have been coupled to analyse the effects of the government subsidies.The subsidized farmers average age is almost the same in two groups (55.82 vs 54.25) (table 14).

Table 14: Age of farmers

				Statistic
Age of HH head	Not subsidized	Mean		55.82
		95% Confidence Interval for Mean	Lower Bound	51.96
			Upper Bound	57.92
		5% Trimmed Mean		56.19
		Median		59.50
		Minimum		24
		Maximum		77
	Subsidized	Mean		54.25
		95% Confidence Interval for Mean	Lower Bound	50.15
			Upper Bound	57.88
		5% Trimmed Mean		55.08
		Median		57.00
		Minimum		24
		Maximum		76

The education level is similar for both groups. The median value for both groups is 4 corresponding to Agriculture high school, and the farmers' distribution through different education levels is similar (Table 15).

Table 15 Farmers education level

Subsidy in 2008 * Highest education level Crosstabulation							
			Highest education level				Total
			elementary school - four years	Mandatory school - 9 years	Agricultural high school	General and technical high school	University	
Subsidy in 2008	Not subsidized	Count	1	12	13	2	8	36
		% within Subsidy in 2008	2.8%	33.3%	36.1%	5.6%	22.2%	100.0%
	Subsidized	Count	2	9	14	9	4	38
		% within Subsidy in 2008	5.3%	23.7%	36.8%	23.7%	10.5%	100.0%
Total		Count	3	21	27	11	12	74
		% within Subsidy in 2008	4.1%	28.4%	36.5%	14.9%	16.2%	100.0%

Groups are also similar in terms of main employment with Self-employed on farm representing the most frequent main employment (Table 16).

Table 16: Main employment

				Main employment			Total
			Wage employment in public sector	Wage employment in private sector	Self-employed in non-agricultural sector	Self-employed on farm	
Subsidy in 2008	Not subsidized	Count	3	3	4	26	36
		% within Subsidy in 2008	8.3%	8.3%	11.1%	72.2%	100.0%
	Subsidized	Count	8	3	3	25	39
		% within Subsidy in 2008	20.5%	7.7%	7.7%	64.1%	100.0%
Total		Count	11	6	7	51	75
		% within Subsidy in 2008	14.7%	8.0%	9.3%	68.0%	100.0%

The header "Subsidy in 2008 * Main employment" spans the table.

5.   Recommendations for the future

➢ The national schemes should promote the creation of the farmers/producers associations which mean higher production and exports and more income to farmers.

➢ The situation shows that the land fragmentation is one of the weak points of the agriculture and rural development .

➢ The IPARD –like instrument showed that reaching the standards is a big challenge for the policymakers, executers and farmers/agrobusinesses with the purpose of having access to IPARD funding in the near future.

➢ The policies should focus also to the land consolidation reform supporting projects of land consolidation which will bring to the creation of economically viable, competitive and sustainable farms and will bring the better use of the territory and agriculture.

➢ The importance of regular yearly monitoring and review of the schemes in addressing current and future priority needs in regard to the strengthening of the sector and improve the quality of life in rural areas.

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