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Sustainable Rural Development in Albania Through Agriculture and Livestock: Challenges in the European Union Perspective

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Abstract: Albania's agricultural and food sector has shown remarkable resilience and adaptability over the last decades to a changing technological, economic, and social environment. This adjustment took place within a supportive policy setting that contributed to altering this long-term process. Whereas the agri-food sector still represents today an essential component of the Albanian economy, it has also shown critical importance for the environment and landscape in contributing over the centuries to creating and maintaining a variety of valuable semi-natural habitats to shape the majority of Albanian's landscapes. During the last two decades, Albania's agriculture sector passes through changes manifested through its modernization and a gradual increase in productivity. From 1995 productivity doubled and now amounts to around 3.500 USD per worker in the industry. Although it is a positive tendency, agriculture productivity is still five times less than in Greece, 15 times less than in Austria – two countries with several smaller farmers and share of extensive agriculture. These clearly show the development potential of the agriculture sector.

Keywords: technological changes; agriculture; EU; environment; production; rural development

1. Introduction

The agriculture sector plays a significant role in Albania's economy, with 18.6% of the GDP in 2019. Due to the growth in the service sector, the agriculture sector is slowly decreasing from 19.2% in 2016 [1]. However, it shows an absolute increase from 292,287 Mio ALL in 2016 to 312,627 Mio ALL in 2019. The Rural Development plan 2014-2020 is critical, as the long-term strategy is being created and outlines the activities for improving the livelihood in rural areas [2]. This strategy shall comply fully with the CAP – Common Agriculture Policy to be beneficial for EU funding programs. On a more oversized frame, the Rural Development Plan is essential not only because of the funding and different EU programs but also because it should harmonize Albania's agriculture with the EU's policies [3]. As known from additional statistics that will be proven below, agriculture is an important sector for Albania [4]. Hence, the Rural Development Plan and the different projects on various issues would need a special focus from the government and external factors to implement and bring the country to the common market based on the European model of Agriculture (EMA) [5].

2. Materials and Methods

The paper's main objective is to assess and analyze the Albanian livestock and agricultural development trend in the last decade, focusing on the sector's leading indicators.

It is considered in this framework information gathered and calculated from INSAT as well as MoARD. The realization of this paper is mainly based on the method of analysis and synthesis through the use of a wealth of information provided by official data and literature review.

3. Results and Discussion

There are about 352,315 farms in Albania [6]. Agriculture represents approximately 18.6% (National Strategy for Development and Integration 2014-2020) of the total GDP. Around 87% of the total farms in Albania are with livestock, which shows the importance of the country's sector. The number of livestock farms has been increasing and the number of heads per each farm since 1995. According to the latest data from the National Institute of Statistics in Albania, up to date, we have around 500,000 heads of Cattle, 11,400 heads of Sows, 1,896,000 heads of Sheep, 4,482,000 heads of poultry.

In 2018, the latest release of the Agricultural statistics from the MARDWA gave an overview of the following number of heads by region.

Table 1. The total number of heads by regions in Albania.

Region	Total number of heads per farm										
	Cattle	Cows	Sheep / Goats	Sheep	Milked Sheep	Goats	Milked Goats	Pigs	equipage	poultry	Beehives
Berat	25,7	19	243	158	120	85	68	0	9	421	19
Dibër	45,7	30	188	125	105	63	53	0	9	243	15
Durrës	30,7	21	65	44	35	22	17	1	2	947	36
Elbasan	59,9	43	304	177	119	127	87	1	14	485	25
Fier	70,5	50	291	249	168	41	33	2	11	628	21
Gjrokastër	23,1	15	398	270	203	128	97	0	7	115	25
Korçë	41,3	34	364	267	214	97	79	1	16	267	43
Kukës	41,1	29	106	73	57	33	26	0	5	122	20
Lezhë	34,6	23	95	34	24	61	44	3	1	175	11
Shkodër	50,5	38	144	78	57	66	49	2	5	524	24
Tiranë	50,0	37	136	82	65	54	44	0	6	349	18
Vlorë	26,6	20	465	338	253	127	99	0	7	206	31
Total	499,7	358,0	2 800	1 896	1 418,7	904	694,8	11,4	91,3	4 482,0	286,9

Animal production provides 52% of agricultural production value compared to 42% in 1992 and 35% in the 80ies [7]. The primary output is cow milk (42% by volume), followed by bovine meat 21%. Animal husbandry and dairy production activities have a long tradition in Albania due to the favorable natural resources for ruminants (both large and small) [8]. In the plains, cattle production is dominant, while the pastures and meadows in the hills and mountains are more suitable for sheep and goat production. Range and fields cover about 15 percent of the country's total area. The milk production is 1,145 million tons, and 85.1% of it is coming from cows. Most milk producers are semi-subsistence households. About 46% of milk production is delivered to milk processors. The rest is used for self-consumption, direct sale to consumers, or animals' feeding [9].

Even though the total number of heads has been increasing year after year, the situation in production has not been that effective. In Table 2, we can see that there has been a small increase in quantities of milk produced and some small changes in other animal products such as eggs, wool, honey, etc. From 2001 until 2018, the growth has been short and relatively not very significant, leaving space for more improvement in this area [10].

Table 2. Livestock production in Albania.

Production from livestock in quantities														
Description	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Milk	984	1010	1060	1064	1076	1102	1016	1040	1045	1070	1101	1105	1131	1133
Cows	840	904	904	917	930	956	868	895	907	930	955	957	969	965
Sheep	72	74	74	75	75	75	75	77	75	77	79	81	84	89
Goat	72	81	81	72	71	71	73	68	63	63	67	67	78	79
Live weight	114	118	123	129	133	137	158	141	143	145	147,9	150	153	155
Cattle	62	64	65	66	68	69	83	66	66	68	68,7	69	70	71
Sheep/Goats	37	38	38	42	41	44	46	43	44	44	45,3	48	49	50
Pig	10	11	12	13	15	15	16	16	16	16	16,8	17	17	18
Poultry	4	6	8	9	9	10	13	16	17	17	17,1	16	17	17
Eggs	608	660	720	780	738	716	736	803	811	846	858	887	830	835
Wool	3300	3300	3100	3300	3400	3200	3800	3000	3200	3300	3400	3000	3000	3100
Honey	1183	1232	1235	1990	1816	2114	2071	2517	2745	2886	2898	3000	3000	3000

Moreover, the improvement in production is not the only need for the Albanian country at the moment. Even though playing an essential role in the country's economy, agriculture is a very "non-moving" situation. On a quick look at the development of Agricultural land vs. Non-agricultural land (forestry, pasture & others) in the past 2000s' we can notice that there has been a slight decrease in the agricultural land after 2005. However, non-agricultural land has remained the same. The table below shows in detail the division between two types of land in Albania [11,12].

Table 3. Agricultural land use in Albania.

Division of Agricultural land and Non-Agricultural Land					
Description	2005	2010	2015	2017	2018
Total land	2875	2875	2875	2875	2875
Agricultural land	699	699	696	696	696
%	24%	24%	24%	24%	24%
Non-agricultural land (forestry, pasture & others)	2176	2176	2179	2179	2179
%	76%	76%	76%	76%	76%

After several studies, it has come to the result that the dominant type of farm in Albania is a mixed one, crop-livestock [13]. That is why by analyzing and comparing the data from the tables above, we can conclude that there's a need for improvement in the livestock sector and crops sector since the two fields are related to each other. However, both sectors' insignificant development is not related only to their "symbiotic" relationship and other factors directly related to the limitation of extension services such as lack of innovation, the dire financial situation on farms, etc.

To develop and increase production efficiency, there have been different projects implemented (or on-going) that have impacted the country. Below there's an overview of the most important projects that played a role in Albanian agricultural issues. The investments in agriculture are meager due to farmers' limited internal resources and demanding access to credit. The banking system is the leading financial intermediary in Albania [14]. The share of recognition to the agricultural sector is meager – less than 5% of Albania's total loan portfolio. The supply of bank credit to agriculture is constrained by the sector's structural problems, including the small size of farms, aging of farm population, lack of assets to be offered as collateral, underdeveloped land market, and lack of information the applicant's financial standing, etc [15].

Food processing is a relatively small economic sector in Albania [16]. In 2011 GVA in the food industry amounted to EUR 64.4 million, and the total number of employed was 14,000. There are about 2000 companies in the food processing industry, 95% of which are micro-companies. Albania's most important food-processing industries are bread and flour production, soft drinks production, milk and meat processing industries [17]. The development of food processing sector in Albania is constrained by many factors, some of which relate to scarcity of raw materials, insufficient homogeneity of quantities and quality, underdeveloped vertical integration between the producers of raw materials and the processing industry, lack of resources to improve food quality by introducing quality and food safety assurance systems [18]. The establishment of food safety and food quality systems has started, but so far only in larger food processing companies. Investments to comply with standards for environmental protection and treatment of waste are extremely limited. Like primary agriculture, the food processing sector's growth is constrained by the entrepreneurs' fixed internal resources and demanding access to credit.

Agricultural development is also vital in terms of enhancing the standard of living and poverty alleviation [19]. In addition to direct effects, by increasing income and food availability for agricultural households, it also indirectly affects living standards through lower prices in urban and rural areas. Agriculture remains one of the largest sectors in Albania, even in terms of employment [20]. Agriculture accounts for about half of total work. It is the primary source of jobs and income in rural areas [21]. Despite the limitations the sector faces. About 40% of Albania's labor force is engaged in agricultural activities, or 45% of those who work are involved in the agriculture sector. The total financial support to the farming industry increased from around 20 million EUR in 2018, which marks a significant increase compared to EUR 7.3 million in 2012 and the respective EUR 3.2 million fund in 2007. The national support schemes have contributed to the rise in the number of areas under plantation and production growth in several subsectors.

4. Conclusions

Although a growing number of rural areas are likely to become increasingly driven by factors outside agriculture, many rural areas (in particular, those which are depopulated or dependent on farming) are expected to face specific challenges regarding economic and social sustainability. Rural areas are very reliant on agriculture as the primary source of jobs and income for rural households. The sector is also vital for the supply of raw and processed products for consumers and exporters. Structural problems constrain the agriculture sector's competitiveness and productivity. Farm holdings are minimal (1.2ha) and fragmented, larger farms make up only 1% in cattle and 15% in small ruminants, 76% are subsistence, mechanization is low, the number of young farm holders under 25 years is only 1%, and trending down and with 33% above 65 years old (2012). More than 64% of farm operators have either none, elementary or low secondary education and limited knowledge in feeding, breeding, and animal health care practices. The EU has committed substantial financial resources to finance the development of agriculture and rural areas in Albania. The total expected investments to be implemented during the next three years are between EUR 120 and 150 million. The financial support for the development of agriculture and rural areas is growing steadily. The main bottleneck remains good governance of the financial means and the EU funds' absorption level, national once, and other support sources from different donors. For the successful implementation of grants under the IPARD measures and increasing the absorption rate of funds, it is considered "crucial that the business support services are fully prepared to offer potential applicants advice." The outlook for EU agricultural markets over the next years appears relatively favorable the Albanian agriculture, most notably for the vegetables and dairy sectors. However, these projections are particularly sensitive to critical assumptions regarding the economic environment, policy developments and remain subject to some uncertainties (e.g., potential impact of climate change). Together with environmental conditions, these positive market perspectives will have important implications for the medium-term prospects of Albanian rural areas.

Conflicts of Interest: The authors declare no conflict of interest.

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