# SCIENTIFIC HORIZONS

Journal homepage: https://sciencehorizon.com.ua Scientific Horizons, 26(1), 102-110



UDC 338.43.02 DOI: 10.48077/scihor.26(1).2023.102-110

# Performance management assessment in agriculture organisations (using factorial parameters case of Albania)

Zamira Sinaj<sup>\*</sup>

Doctor of Economic Sciences. ORCID: https://orcid.org/0000-0003-2231-6842. University "Ismail Qemali" Vlore 9400, Kosova Str., Vlore, Albania

# Miftar Ramosacaj

Doctor of Mathematical Sciences. ORCID: https://orcid.org/0000-0002-7852-0319. University "Ismail Qemali" Vlore 9400, Kosova Str., Vlore, Albania

# Elmira Kushta

Doctor of Mathematical Sciences. ORCID: https://orcid.org/0000-0002-6200-4635. University "Ismail Qemali" Vlore 9400, Kosova Str., Vlore, Albania

# Article's History:

Received: 18.11.2022 Revised: 20.02.2023 Accepted: 14.03.2023

# Suggested Citation:

Sinaj, Z., Ramosacaj, M., & Kushta, E. (2023). Performance management assessment in agriculture organisations (using factorial farameters case of Albania). *Scientific Horizons*, 26(1), 102-110.

Abstract. The relevance of the study is determined by the need to identify solutions to increase the productivity of agricultural and food enterprises in Albania and to improve their production. The purpose of the study is to analyse the production of agricultural and food products, the level of remuneration of agricultural workers, the impact of state financial assistance on production volumes, and to provide proposals for increasing productivity in the agricultural sector. The methodological approach is based on: statistical analysis, the analogy method, graphical method, method of logical generalisation. The key findings are the substantiation of the expediency of mechanisation in the production of agricultural products, and an increase in the budgetary financial support and the wages of employees to boost the productivity of agricultural enterprises, reducing the dependence on imported goods and increasing the export of Albanian agricultural products to the world markets. The authors confirmed that to enhance the productivity of agricultural and food enterprises, it is necessary to focus on raising the wages of workers, mechanising production, and expanding the area of irrigated land. This will raise the competitiveness of Albania's agricultural and food products to a new level and increase its exports to the world markets. The findings of the study and the conclusions formulated on their basis are of practical importance for the managers of agricultural and food enterprises in Albania when developing measures to increase the



Copyright © The Author(s). This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/)

\*Corresponding author

103

productivity of workers, as well as for the government of the country when approving the areas of financial support for economic activities

Keywords: remuneration rate; financial support; international trade; mechanisation; production efficiency

# INTRODUCTION

Agriculture and the food industry are facing numerous challenges: the need to produce more food to feed a growing world population, the declining rural workforce and growing population in large cities, the search for more efficient production methods, and the adaptation of agriculture to climate change. The natural conditions of Albania are favourable for the development of agricultural production, in particular, the cultivation of fruit trees, vegetables, olive oil, and cereals. However, the country's agriculture and food sectors are affected by outdated agricultural equipment and low labour productivity. Therefore, it is important to find ways to increase the productivity of the agrarian sector with the purpose of improving its future growth and boosting the export of agricultural products from Albania to ensure food security in the world.

The labour productivity in the agriculture and food sectors in Albania was investigated by Albanian, American, Romanian, Lithuanian, Brazilian, and Indonesian researchers. The analysis of the forms of management of agricultural land in Albania, ownership, productivity per unit area and ways to properly manage them was carried out by the Albanian scientist S. Lushaj (2021), who investigated the obligations of law enforcement agencies and bodies for property management, property rights, and certification of ownership of agricultural land. The efficiency of labour productivity management depends on the success of labour resources management, in particular, meeting the needs of employees in terms of remuneration and other requirements for the organisation of production, and on mechanisation and innovation in production, which facilitates the work of employees and helps to increase production.

The impact of agricultural mechanisation on the income growth of farmers was studied by Chinese researchers Y.B. Zhou *et al.* (2019), who sought to provide suggestions on policies to promote the development of agricultural mechanisation and increase farmers' incomes. The authors argued that agricultural mechanisation contributes to the overall income of farmers and increases the wages of their employees. Important research into the impact of changes in soil cover and climate on labour productivity and agricultural production was carried out by Albanian scientist E. Lekaj (2019), who argued that these factors are important for soil and plant resources assessment and sustainable production management planning.

The profitability of agricultural production is also an indicator of labour productivity. That said, in the last 5 years, due to the rapid increase in prices for raw materials imported for production in Albania, there was a decrease in profitability, which negatively affected labour productivity. The impact of the 2021 high fertiliser prices, which added to the expenses for farmers, was studied by the American researcher S. Aaron (2022), who stressed that potential reasons for such an increase can be both supply and demand factors. That is, if farmers respond to high prices by using less fertiliser per acre, it would provide environmental benefits in the form of less nitrogen and phosphorus in rivers and lakes.

One of the negative phenomena in the development of agriculture in Albania is the high share of imports, which indicates the insufficiency of domestic products to meet the needs of the country's population. Indian scientist S. Simkhada (2019) has concluded that low productivity, growing population, the number of companies engaged in food and feed processing, high production costs, and the redirection of agricultural state aid to the non-productive sector are the main reasons that contribute to the large imports of agricultural products. The main risk groups of agricultural imports in foreign trade according to their relevance for such imports were identified by Lithuanian scientists L. Baranauskaite and D. Jureviciene (2021). The researchers identified eight risk groups: supply and demand risks, production risks, management and operational risks, logistics and infrastructure risks, political risks, regulatory risks, and financial risks.

However, despite the significant contribution of researchers to the study of this area, the issue of increasing labour productivity in the agricultural sector of Albania remains controversial and requires further investigation. *The main purpose of the study* is to analyse the state of labour productivity in the agricultural and food enterprises of Albania to propose solutions for its improvement, which would contribute to the sustainable development of the agricultural sector and increase the export of agricultural products.

# MATERIALS AND METHODS

The methodological approach in this study is based on: statistical analysis, which is used to study the dynamics of employment and wages in the agricultural sector of Albania; the analogy method for comparing incomes and expenses between small and large agricultural producers in Albania; the graphical method – for the graphical display of the results obtained; logical generalisation for summarising information on the state of productivity of agricultural enterprises and the factors that affect it to identify areas for its improvement. The scientific research involves assessing the state of labour productivity in agricultural and food production, identifying factors that can positively affect the increase in production and incentives for agricultural workers, and elaboration of proposals for increasing labour productivity in the agricultural sector of Albania. The presented study is carried out in three stages. The first stage involved the application of the statistical analysis. It allowed investigating the dynamics of labour productivity and the share of employees in the agricultural sector of Albania for 2018-2022.

To analyse the dynamics of the level of remuneration of agricultural workers for 2018-2022, data from the World Bank (Agriculture & Rural Development..., 2022) and the Institute of Statistics of Albania (Statistics by Agricultural sector..., 2022) were taken as a basis. Statistical analysis of the import-export activities of Albania, in particular, on trade in agricultural and food products, was carried out based on data from the International Trade Organization for 2019-2022 (Albania – Country Commercial Guide, 2021). In the second stage, using the analogy method and guided by data from the Food and Agriculture Organization (FAO, 2022) the income and expenses of small and large agricultural producers in Albania for 2022 are compared. Using the graphical method, the data obtained during the research on the breakdown of land in Albania by purpose and the dynamics of the employed population of Albania in the food and agriculture industry are displayed in the form of charts and graphs. At the final stage of the study, the approaches to the factors, the application of which would contribute to the increase of production and productivity in the agricultural sector of Albania, are summarised.

Based on the findings, the conclusions summarising these results are formed, namely: proposals for increasing the level of labour productivity are substantiated. The application of the method of logical generalisation of the results allowed determining further approaches to the investigation of labour productivity in the current conditions of development of the agricultural sector of Albania.

#### RESULTS

Given that Albania is in the process of acceding to the European Union (EU), support for food and agricultural development policies is crucial to prepare the country's agricultural sector to face the competitive pressures of the EU single market. To maximise its benefits in the EU single market, Albania is making efforts to reform its food and agricultural policy. For the last 17 years, the FAO, which has 195 members and is a specialised agency of the United Nations, has played an active role in supporting the development of the food and agricultural sector in Albania. FAO directs its efforts to ensure food security in the world by providing people with regular access to sufficient, high-quality food to enable them to lead active and healthy lives (FAO, 2022).

FAO's focus is on the transformation of Albanian agriculture to support smallholder farmers and the EU integration process. One of the main tasks is to increase labour productivity in this area. Notably, an increase in the agriculture productivity in Albania is a source of increasing production volumes. In turn, the improvement of production can lead to a reduction in human labour costs for the manufacturing of products and, as a result, to saving working time. This would create preconditions for reducing the working hours, working week, and the total number of working days per year, extending free hours of agricultural workers, and increasing their productivity. Productivity management in food and agricultural enterprises should be carried out considering the issues that exist in this sector and the factors that affect it. Food and agriculture are one of the largest and most important sectors for the Albanian economy and accounts for 21% of the country's gross domestic product, which is much higher than in the EU countries, where this sector mainly accounts for only 2% (Agriculture & Rural Development..., 2022). The total area of Albania is 28,750 square kilometres. Agricultural land is a significant part of the total area (Fig. 1) (FAO, 2022).

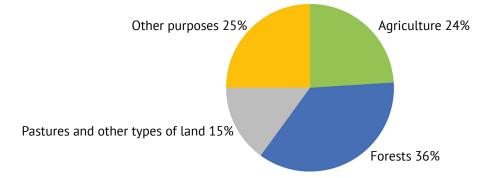
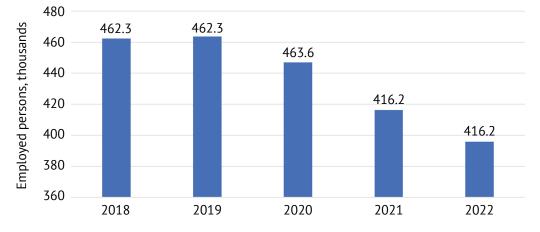


Figure 1. Distribution of land use in Albania for 2018-2022

#### **Source:** compiled by authors

Albania consumes more foreign agricultural products than it produces for export to other countries. Dependence on imported products has a negative impact on domestic production, in particular, due to rising prices for imported products. Thus, during 2019-2021, there was an increase in raw material costs, as feed prices increased by 50% in 2022, which was conditioned by the shortage of grain and cereals caused by the armed aggression of the russian federation against Ukraine. This suggests the necessity to increase labour

productivity to reduce the dependence of the agricultural sector of Albania on imported products and to increase domestic production and competitiveness in foreign markets. Labour productivity depends significantly on the number of people working in food and agriculture (Fig. 2) (Albania Employment, 2021).



*Figure 1.* Dynamics of the employed population of Albania in food and agriculture for 2018-2022 *Source:* compiled by authors

The data in Figure 2 show that the number of people employed in agriculture during 2018-2022 has a gradual downward trend. Generally, employment in food and agriculture in the country in Albania in 2021 was 36.1% of the total number of employees, which is 9.9% less than in 2014 (Agriculture & Rural Development, 2022). Wages have a significant impact on the attractiveness of working in the agricultural sector. It is worth noting that the average gross monthly wage in the agro-industrial sector in 2022 is EUR 331, which is the lowest level of remuneration

among other areas of activity and 47% less than the average wage in the country (EUR 509). However, during 2018-2022 there was a slight increase in wages in the agricultural sector, which had a positive impact on the volume of production. Labour productivity in the agricultural sector can be defined as an indicator of output per employee. To analyse the dynamics of labour productivity, the deviation of the indicators of the reporting and base periods should be found (Table 1) (Statistics by Agricultural sector..., 2022; Albania Employment, 2021).

Table 1. Dynamics of employment, wages and volumes of agricultural products produced in Albania in 2018-2022

· · · · · · · · · · · · · · · · · · ·	··· · · · · · · · · · · · · · · · · ·	1 7	.,				···· <b>r</b>	<i>r</i>					
			Incre	ment		Incre	ment		Incre	ment		Incre	ment
Indicator	2018	2019	+/-	%	2020	+/-	%	2021	+/-	%	2022	+/-	%
Annual salary. EUR	3.600	3.840	240	6.7	3.852	12	0.3	3.900	48	1.2	3.970	70	1.8
Annual production volume. thousand tonnes	9.221.4	9.376.7	155.3	1.7	9.480.9	104.2	1.1	9.413.9	-67	-0.7	9.452.2	38.3	0.4
Number of employed workers. thousands of people	462.3	463.6	1.3	0.3	447	-16.6	-3.6	416.2	-30.8	-6.9	435	18.8	4.3
Number of products produced by one employee (productivity). tonnes	19.9	20.2	0.3	1.4	21.2	1	4.9	22.6	1.4	6.6	23.5	0.9	3.8
Share of the change in the production volume		99.2			115.9			54			76		

Source: (Statistics by Agricultural sector..., 2022; Albania Employment, 2021)

The data in Table 1 show that despite the decrease in the number of people employed in agriculture, the volume of products produced during 2018-2022 gradually increased. This had a positive effect on the labour productivity index, which increased by 13.6% over the entire period. The value of the share of the change in the volume of production shows that under the changes in labour productivity, the volume of agricultural production increased the most in 2020, but decreased in 2021, which was mainly conditioned by a decrease in the number of employed by 6.9%. In 2022, this number increased again, which is a positive trend. However, according to FAO, 72% of agricultural products are produced for domestic consumption, which indicates the need to modernise this production, in particular for small landowners (FAO, 2022). Small business entities engaged in the production of agricultural products in Albania prevail over large ones. This negatively affects production costs and overall productivity. Below, the authors compare the income and expenses of small and large agricultural producers in Albania for 2022 (Table 2).

Indicators	Prod	ducers		
Indicators	small	large		
The average size of the employed area. ha	0.4	1.7		
hare of small farms in the total number. %.	74	24		
Total income. USD	16.354	17.280		
Cost of production per 1 ha. USD	4.978	1.945		
Costs of production value. %	32	28		

Source: (FAO, 2022)

As is evident from Table 2, the share of small farms engaged in the production of agricultural products and food significantly prevails in their total number. At the same time, the cost of production for small producers is almost twice higher than for large ones, and production costs are 3% higher. This advantage of small producers over large ones is the main obstacle to increasing their productivity and competitiveness and investing in the modernisation of production. Thus, only 11% of small producers have access to motorised equipment, only 50% of small owners can apply fertilisers on their fields, and 48% of the area is irrigated, making agricultural production highly dependent on precipitation, especially during the summer growing season. To increase agricultural production and labour productivity, it is necessary to reorganise producers by merging them and creating larger enterprises to increase production and efficiency. It will also reduce costs and increase the competitiveness of Albanian agricultural products in foreign markets. Reducing labour and production costs will encourage an increase in product profitability. Among the existing challenges in the agriculture and food sector that have a negative impact on productivity are high rates of migration from rural areas, low technological levels of production, and insufficient financial support for small businesses. Only 0.2% of small farms receive loans for their development, while their investments in the development of production reach 32% of their value (FAO, 2022).

The government of Albania constantly provides financial support to the agricultural sector, which positively affects production. Thus, the financial support programme for 2017-2021 identified agriculture as one of the priority sectors. During this period, about EUR 193.2 million was invested in the regions of Albania to support agriculture and economic entities entering the markets. In 2018, the total budget allocation for the agriculture and food sector reached EUR 43 million, which is significantly higher than the average expenditure over the previous 10 years (about EUR 25 million per year). The total amount of budget support for the agricultural sector in Albania is about 18% of the total amount of subsidies for all types of economic activity (Agriculture & Rural Development..., 2022). The impact of national support on the income of greenhouse and dairy farms is positive. The consequences of such impacts were analysed in three main areas: greenhouse vegetable cultivation, apple cultivation, and dairy production. According to studies conducted by the FAO, in 2019, revenues for greenhouses increased by 30%, apple cultivation – by 9.4%, and dairy products – by 69% (FAO, 2022).

It is necessary to expand support for the development of agriculture and food industry because it can solve the issue of providing production with the necessary technologies and improving the quality of land cultivation, which would improve fertility and productivity in this sphere. Along with these shortcomings in the development of the agricultural sector, the profitability of the sold products and the interest of workers in increasing productivity are negatively affected by the establishment of low prices for the sold products in Albania. For example, the export of tomatoes from the country is estimated at USD 0.5 (EUR 0.48) per kilogramme, while Italy exports the same product to the UK for USD 2.4 (EUR 2.3) per kilogramme, which is 4.8 times more expensive than Albania (Albania – Country Commercial Guide, 2021). The import figures for Italy are given for comparison since this country has a developed agricultural sector similar to the Albanian one.

Summarising the above, it is necessary to note that despite the fertility of Albania's lands and favourable natural and climatic conditions for the development of the agro-industrial sector, the productivity of agricultural and food enterprises faces such problems as: high dependence of production on imported products; a decrease in the level of the employed population, and low wages in the agro-industrial sector compared to other types of economic activity in Albania; the predominance of the number of small producers in their total number, the profitability of production of which is lower compared to large producers; and insufficient level of state financial support for the agro-industrial sector. The mentioned issues are the grounds for finding ways to improve the production of agricultural and food products with the aim of increasing labour productivity in this sphere and improving the competitiveness of agricultural products in foreign markets

#### DISCUSSION

The analysis of the state of labour productivity in agriculture and food in Albania showed that this sphere is promising in development and should become a priority for the government of the country, in particular, for the allocation of financial support, which can be directed to stimulate workers in the form of wages, providing production with the necessary equipment for land cultivation, improving irrigation, which will increase their productivity. The results obtained in the course of the study suggest that the proposals are aimed at increasing the production of the agro-industrial sector and improving the conditions for development in order to increase the participation of Albania, as a member of FAO, in ensuring food security in the world. Production efficiency management is a process that improves the productivity of employees of the enterprise, company, and other business entities, and also allows achieving better results in production (Qureshi et al., 2012; The Effectiveness of Performance..., 2019).

The importance of increasing the efficiency of rice cultivation to ensure food security in the world was underlined by Indonesian researchers N. Nurliza *et al.* (2017). The results of the study proved that labour productivity depends to a greater extent on the desire and interest of employees to perform their work. A similar argument is expressed by Thai researchers J. Angsukanjanakul *et al.* (2019), who argue that to improve productivity in the agricultural sector, the professional development of employees or managers who are of high value to organisations is necessary. The authors conclude that obtaining the necessary knowledge in the agricultural sector and continuous training of employees is essential for increasing the productivity of the enterprise.

The paper reports on the low level of wages in the agricultural sector and the need to raise it. The same opinion is shared by the Indonesian researchers G.P. Pratama and N. Hermina (2022), whose study shows the impact of bonuses to the basic wage on the performance of employees of the agricultural training centre. Another factor, which affects the performance of employees is the work discipline factor. Workplace discipline requirements are established to improve employee ethics and productivity in the company. The analysis of agricultural production demonstrated that it is important to observe environmental friendliness in production, which will preserve the quality of the land on which the products are grown and increase their competitiveness in the EU markets. This conclusion is supported in the study by Romanian researchers V. Burja et al. (2009), which cite the characteristics of the two most commonly used environmental management systems promoted by EU legislation, and stresses the need for their adoption by Romanian agricultural enterprises to improve compatibility with EU environmental regulations.

Agreeing with the opinion of the Indian scientist S. Shevade (2022), it should be stressed that with the growth of the world's population, the struggle for natural resources is also growing, which will lead to pressure on agricultural production of food, energy, and other various high-value products. The author argues that with the increasing concern about the environmental impacts associated with the needs of a growing population, a life cycle assessment system in agriculture is rather important. However, the lack of a consistent approach to the impacts of some resources that are important for agriculture (e.g., land and water use) complicates this analysis. The role of environmental protection in the production of agricultural and food products was stressed by the Brazilian scientists E. Lopes et al. (2021), who argue that executives responsible for the technical and administrative management of productivity in agriculture are looking for solutions based on environmental efficiency. Such measures involve resource consumption and waste generation with minimal harm to the environment.

It is necessary to consider the results of the study by Brazilian scientist G.S. Medina (2019), who analysed: the degree to which the Brazilian government prioritises conservation in its agricultural policy budget; what existing agro-environmental measures effectively ensure environmental conservation; what are the opportunities for improving existing policies to address current environmental challenges.

The researcher argues that despite agri-environmental mechanisms having gained benefits, they make up only 5.8% of the American, 5.75% of the European, and 1.25% of the Brazilian agricultural policy budgets. Key resource conservation issues remain unresolved, such as water and nutrient management, landscape level management, soil quality and biodiversity loss in Europe, where bird and farmland populations have declined by over 40%. It is therefore necessary to increase investment in environmental protection to ensure that agricultural production remains competitive.

The study has proved that the increase of labour productivity in agriculture and food is positively influenced by the financial support of this sector by the state. Such arguments were also expressed by Thai scientist T. Laiprakobsup (2019) regarding the impact of government support for rice cultivation aimed at increasing its production in the country and achieving self-sufficiency. The researcher argues that the less likely the government is to impose tax barriers on the rice sector and price controls in Southeast Asia, the greater the likelihood of rice production growth in the long term. The study concludes that increasing the level of mechanisation of production contributes to the growth of productivity in the agricultural sector. A similar opinion is supported by and the American researchers H. Takeshima et al. (2020), who points out that mechanical technologies can increase the production of crops grown in heterogeneous agro-ecological conditions.

Chinese scientists J.Q. Peng et al. (2022) underline the fact that the level of mechanisation has a significant positive impact on the cost of production, income, and profitability of all types of crops. For every 1% rise in the level of mechanisation, the yield of grain crops increases by 1.6%. Therefore, the author recommends increasing subsidies for the purchase of agricultural machinery and improving the capacities of farmers to use new tools to extend their service life. The study emphasises the negative impact of rising world prices on agricultural production and proposes to reduce dependence on imported raw materials used in this sector. The economic consequences of higher fertiliser prices for 64 representative crop farms are analysed by American scientists J Outlaw et al. (2022). At the same time, Serbian researchers N. Njegovan and M. Tomas-Simin (2020) analysed the impact of inflation and prices on agricultural and food products as a complex phenomenon and examine their causes and consequences. In particular, authors pointed out the importance of demand, which causes inflation in less developed countries and leads to higher food prices, further putting pressure on wage growth, which is usually not a consequence of productivity growth.

The presence of causal relationships between agricultural imports, agricultural productivity, and economic growth is evidenced by the findings of the African scientists E.N. Mwangi *et al.* (2020). The paper emphasises the need to reduce the number of small businesses by consolidating them to increase productivity. At the same time, Bulgarian researchers H. Harizanova and R. Terziyska (2021) note that small farms have an important place in the agricultural sector of Bulgaria. The impact of various factors brings out a variety of opportunities for the development of such farms, suggesting that some farms will make efforts to improve their economic viability. However, as noted by the Italian scientists C. Cidon *et al.* (2021), regardless of the size of production, consolidating the practices of various enterprises, public support and knowledge networking in the agricultural sector are crucial.

The analysis of the productivity management of agricultural enterprises revealed that productivity depends on many factors and indicators, in particular, the size of the enterprise, the qualification of employees, the use of innovative and advanced technologies, etc. Enterprise productivity management is crucial for boosting its competitiveness. According to the Chinese scientists Y. Huo *et al.* (2022), the balanced scorecard is commonly used in many areas due to the comprehensive and objective characteristics of performance management. The scientists analysed the problems faced by agricultural enterprises in productivity management and its application in innovations in productivity management of agricultural enterprises, which will contribute to long-term development.

The analysis of the above-mentioned studies confirms the conclusions and proposals presented in this paper regarding the improvement of labour productivity management in agricultural and food enterprises in Albania. To enhance the productivity of agricultural and food enterprises, it is necessary to focus on raising the wages of workers, mechanising production, and expanding the area of irrigated land. This will raise the competitiveness of Albania's agricultural and food products to a new level and increase its exports to the world markets.

#### CONCLUSIONS

According to the objective set in this paper and based on the analysis of the state of productivity in agricultural and food production in Albania, the following proposals are formulated. To encourage employees of agricultural enterprises, it is proposed to increase wages at least to the level of the average wage in the country, which will boost employment in this sector. The expediency of applying innovative technologies and mechanisation in the production of agricultural products has been substantiated, as it will simplify the process of land cultivation and harvesting, expand the area of irrigated land and increase their fertility, reduce production costs, and increase the volume of production. The study revealed the positive impact of budget financial support on the productivity of agricultural enterprises and proved the need to increase such assistance, which will contribute to the growth of production for export. The comparison of agricultural exports and imports highlighted the benefits of reduced imports and the negative pressure on production from higher commodity prices. The expediency of consolidation of small enterprises was emphasised, as it can reduce their production costs and increase the profitability of agricultural products.

ACKNOWLEDGEMENTS

### **CONFLICT OF INTEREST**

The authors report no conflict of interest.

## REFERENCES

None.

- [1] Aaron, S. (2022). The story of rising fertilizer prices. <u>*ARE Update*</u>, 25(3), 1-4.
- [2] Agriculture & Rural Development. Albania. (2022). Retrieved from https://data.worldbank.org/indicator.
- [3] Albania Country Commercial Guide. (2021). Retrieved from <u>https://www.trade.gov/country-commercial-guides/albania-agricultural-sector-agr</u>.
- [4] Albania Employment: Private Sector: Agriculture. (2021). Retrieved from <a href="https://www.ceicdata.com/en/albania/employment-by-sector/employment-private-sector-agriculture">https://www.ceicdata.com/en/albania/employment-by-sector/employment-private-sector-agriculture</a>.
- [5] Angsukanjanakul, J., Banpotb, K., & Jermsittiparsert, K. (2019). Factors that influence job performance of agricultural workers. International Journal of Innovation, Creativity and Change, 7(2), 71-86.
- [6] Baranauskaite, L., & Jureviciene, D. (2021). Import risks of agricultural products in foreign trade. *Economies*, 9(3), article number 102. doi: 10.3390/economies9030102.
- [7] Burja, V., Burja, C., & Voicu, E.V. (2009). Environmental performance management in agricultural holdings. *Bulletin UASVM Horticulture*, 66(2), 70-75.
- [8] Cidon, C., Figueiro, P.S., & Schreiber, D. (2021). <u>Agroecology strategies to promote conservation insights from Brazilian small farmers</u>. In *Proceedings of 2<sup>nd</sup> International Agrobiodiversity Congress* (pp. 1-12). Rome: Alliance Bioversity & CIAT.
- [9] FAO. (2022). Retrieved from https://www.fao.org/home/en/.
- [10] Harizanova, H., & Terziyska, R. (2021). Opportunities for the development of small farms in Bulgaria. *Perspectives on Agricultural Science and Innovations for Sustainable Food Systems*, 62, 53-60. doi: 10.22620/sciworks.2020.02.005.
- [11] Huo, Y., Ye, S., Wu, Z., Zhang, F., & Mi, G. (2022). Barriers to the development of agricultural mechanization in the North and Northeast China plains: A farmer survey. *Agriculture*, 12(2), article number 287. <u>doi: 10.3390/agriculture12020287</u>.
- [12] Laiprakobsup, T. (2019). The policy effect of government assistance on the rice production in Southeast Asia: Comparative case studies of Thailand, Vietnam, and the Philippines. *Development Studies Research*, 6(1), 1-12. doi: 10.1080/21665095.2019.1568900.
- [13] Lekaj, E., Teqja, Z., & Bani, A. (2019). The dynamics of land cover changes and the impact of climate change on ultramafic areas of Albania. *Periodico di Mineralogia*, 88(2), 223-234. <u>doi: 10.2451/2019PM849</u>.
- [14] Lopes, E., Zepka, L., & Depra, M. (2021). Sustainability metrics and indicators through the life cycle assessment: A brief history. In Sustainability Metrics and Indicators of Environmental Impact (pp. 1-5). London: Elsevier. doi: 10.1016/B978-0-12-823411-2.00001-3.
- [15] Lushaj, S. (2021). Improving the governance and administration of agricultural land in Albania. *Annual Review of Territorial Governance in the Western Balkans*, 3, 58-70. <u>doi: 10.32034/CP-TGWBAR-I03-05</u>.
- [16] Medina, G.S. (2019). Where are governments leading their agricultural sectors? Comparative lessons from agrienvironmental measures promoted in the U.S., Europe and Brazil. *Estudos Sociedade e Agricultura*, 27(1), 5-23. <u>doi: 10.36920/esa-v27n1-1</u>.
- [17] Mwangi, E.N., Chen, F., & Njoroge, D.M. (2020). Agricultural imports, agriculture productivity and economic growth in Sub-Saharan Africa. *Journal of African Trade*, 7(1-2), 15-28. doi: 10.2991/jat.k.200902.001.
- [18] Njegovan, N., & Tomas-Simin, M. (2020). Inflation and prices of agricultural products. *Economic Themes*, 58(2), 203-217. doi: 10.2478/ethemes-2020-0012.
- [19] Nurliza, N., Dolorosa, E., & Yusra, A. (2017). Rice farming performance for sustainable agriculture and food security in West Kalimantan. AGRARIS: Journal of Agribusiness and Rural Development Research, 3(2), 84-92. doi: 10.18196/agr.3248.
- [20] Outlaw, J., Bryant, H.L., & Raulston, J.M. (2022). <u>Economic impact of higher fertilizer prices on AFPC's</u> representative crop farms. Agricultural and Food Policy Center, 22(1), 3-11.
- [21] Peng, J.Q., Zhao, Z., & Liu, D. (2022). Impact of agricultural mechanization on agricultural production, income, and mechanism: Evidence from Hubei province, China. *Frontiers in Environmental Science*, 10, 1-15. doi: 10.3389/fenvs.2022.838686.
- [22] Pratama, G.P., & Hermina, N. (2022). <u>The effect of performance allowance and work discipline on employee</u> <u>performance at the Lembang Agricultural Training Center (BBPP)</u>. *Scientific Journal of Management*, 10(1), 106-112.

- [23] Qureshi, J.A., Shahjehan, A., & Afsar, B. (2012). <u>Performance management systems: A comparative analysis</u>. Global Journal of Business Management, 6(11), 1-7.
- [24] Shevade, S. (2022). Management of agricultural produces and lifecycle. *International Journal for Research in Applied Science & Engineering Technology*, 10, 2061-2068. <u>doi: 10.22214/ijraset.2022.42615</u>.
- [25] Simkhada, S. (2019). Review on Nepal's increasing agricultural import. *Acta Scientific Agriculture*, 3(10), 77-78. doi: 10.31080/ASAG.2019.03.0650.
- [26] Statistics by Agricultural sector and Labor market in Albania. (2022). Retrieved from http://www.instat.gov.al.
- [27] Takeshima, H., Hatzenbuehler, P.L., & Edeh, H.O. (2020). Effects of agricultural mechanization on economies of scope in crop production in Nigeria. *Agricultural Systems*, 177, 1-12. doi: 10.1016/j.agsy.2019.102691.
- [28] The effectiveness of performance management system in manufacturing industry. (2019). Retrieved from <a href="http://eprints.utar.edu.my/3418/1/FYP\_Ng\_Kai\_Xin\_1704158.pdf">http://eprints.utar.edu.my/3418/1/FYP\_Ng\_Kai\_Xin\_1704158.pdf</a>.
- [29] Zhou, Y.B., He, K., Zhang, J.B., & Cheng, L.L. (2019). Growth, structural and distribution effects of agricultural mechanization on farmers' income. *Journal of Sichuan Agricultural University*, 37(05), 723-733. doi: 10.16036/j.issn.1000-2650.2019.05.019.

# Оцінка управління ефективністю в сільськогосподарських організаціях (з використанням факторних параметрів на прикладі Албанії)

#### Заміра Сінай

Доктор економічних наук. ORCID: https://orcid.org/0000-0003-2231-6842 . Університет «Ісмаїл Кемалі» Влоре 9400, вул. Косова, м. Влоре, Албанія

#### Міфтар Рамосако

Доктор математичних наукр. ORCID: https://orcid.org/0000-0002-7852-0319. Університет «Ісмаїл Кемалі» Влоре 9400, вул. Косова, м. Влоре, Албанія

# Ельміра Кушта

Доктор математичних наук. ORCID: https://orcid.org/0000-0002-6200-4635. Університет «Ісмаїл Кемалі» Влоре 9400, вул. Косова, м. Влоре, Албанія

Анотація. Актуальність дослідження зумовлена необхідністю пошуку шляхів підвищення продуктивності сільськогосподарських і харчових підприємств Албанії та вдосконалення їх виробництва. Метою роботи є аналіз виробництва сільськогосподарської та харчової продукції, рівня оплати праці працівників сільського господарства, впливу державної фінансової допомоги на обсяги виробництва та надання пропозицій щодо підвищення продуктивності в аграрному секторі. В основу методологічного підходу покладено: статистичний аналіз, метод аналогії, графічний метод, метод логічного узагальнення. Основними результатами дослідження є обґрунтування доцільності механізації виробництва сільськогосподарської продукції, а також збільшення бюджетної фінансової підтримки та заробітної плати працівників для підвищення продуктивності сільськогосподарських підприємств, зменшення залежності від імпортних товарів та збільшення експорту албанської сільськогосподарської продукції на світові ринки. Автори підтвердили, що для підвищення продуктивності сільськогосподарських і харчових підприємств необхідно зосередитися на підвищенні заробітної плати працівників, механізації виробництва та розширенні площ зрошуваних земель. Це дозволить підняти конкурентоспроможність сільськогосподарської та харчової продукції Албанії на новий рівень і збільшити її експорт на світові ринки. Результати дослідження та сформульовані на їх основі висновки мають практичне значення для керівників сільськогосподарських і харчових підприємств Албанії при розробці заходів щодо підвищення продуктивності праці працівників, а також для уряду країни при затвердженні напрямів фінансової підтримки господарської діяльності

**Ключові слова**: рівень оплати праці; фінансова підтримка; міжнародна торгівля; механізація; ефективність виробництва