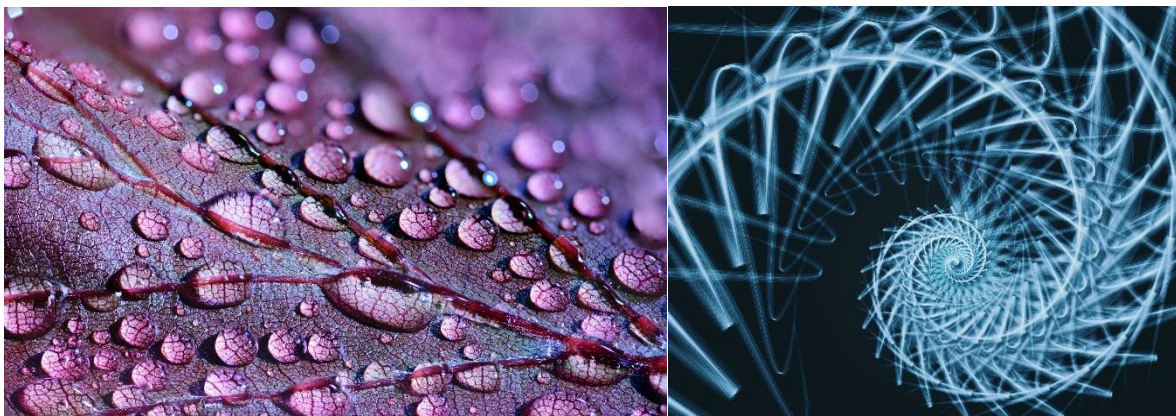


**JBM**

Research and Innovate

**JOURNAL  
OF  
BIO-BASED MARKETING**



---

**VOL.2, 2022**

# The Journal of Bio based Marketing<sup>©</sup>

## Research and innovate

The Journal of Bio based Marketing (JBM) provides a forum for academics, researchers, entrepreneurs, young experts, professionals, educators to analyze global aspects of bio-based marketing as a theoretical idea and real business model in value chain of bio-based products. Covering all aspects of knowledge regulation and order including organizational issues, technology support, knowledge representation, transfer of knowledge and knowledge valorization. JBM focus on the following topics:

- Bio-based technologies;
- Bio-based marketing strategies;
- Technology transfer and new business models;
- Policy and regulation of bio-based products
- E-marketing and sales

JBM is indexing in OpenAire.



DOI 10.5281/zenodo.6587025

## Editorial Board

Professor Sofronij Miladinovski - MIT University, Skopie – North Macedonia – *editor in chief*  
Professor Dimitre Nikolov – Institute of agricultural Economics – Sofia, Bulgaria  
Professor Hrabrin Bashev - Institute of agricultural Economics – Sofia, Bulgaria  
Professor Ivan Boevski – New Bulgarian University, Sofia, Bulgaria  
Professor Sreten Miladinovski – MIT University, Skopie – North Macedonia  
Professor Sofronij Miladinovski - MIT University, Skopie – North Macedonia  
Professor Rangel Trandafilov – Balkan Agricultural Institute, Sofia, Bulgaria  
Professor Jose Luiz Garcia Lopez – Polytechnic University of Madrid, Spain  
Professor Dusan Cogoljevic – Faculty of Business Economics, Belgrade, Serbia  
Professor Jesuf Feiza – AAB – College in Pristina, Republic of Kosovo  
Professor Alex Svidersky – Pedagogical Institute – Pavlodar, Kazakhstan  
Associate professor Petar Borisov – Agricultural University of Plovdiv, Bulgaria  
Associate professor Teodor Radev - Agricultural University of Plovdiv, Bulgaria  
Associate professor Kamen Petrov – University of National and World Economy, Bulgaria  
Associate professor Rezeal Kolaj - Agricultural University of Tirana, Albania

**Managing Board**

Associate professor Petar Borisov, DSc

Associate professor Teodor Radev, PhD

Professor Ivan Boevski, PhD

Assistant professor Fidan Qerimi, PhD

**Adress:** Osvojudenie str. 33 Entr. A, Plovdiv, Bulgaria, 4000

**E-mail:** [journalbiobasedmarketing@gmail.com](mailto:journalbiobasedmarketing@gmail.com)

**Phone number:** +35932894627260

[www.journalbbm.wordpress.com](http://www.journalbbm.wordpress.com)

**ACKNOWLEDGEMENTS**

The results published in the articles at the current issue are funded by National Scientific Program – “Intelligent Plant-growing”, 2021-2024, Ministry of Education and Science – Bulgaria, Sofia. The aim of the programme is to support basic and applied research to create models for robotic technologies, digital diagnostic and forecasting methods, and digital management of crop farms to ensure a sustainable and efficient food system. For further information, please visit the official website of the program –

[www.nnp-ir.bg](http://www.nnp-ir.bg)

**Publishing house**

**Belloprint, Pazardjik**

**Konstantin Velichkov str. 97**

**Phone number: +35934441694**

---

ISSN 2683-0825

## *CONTENT*

<b>CHALLENGES OF MARKETS DURING THE POST-PANDEMIC IN ALBANIA: A PHILOSOPHICAL OBSERVATION ON FOOD CONSUMPTION THROUGH THE THEORY OF PLANNED BEHAVIOR.....</b>	<b>5</b>
<b>ECONOMIC DEVELOPMENT AND LIVING STANDARD OF THE POPULATION IN KOSOVO, AFTER INDEPENDENCE.....</b>	<b>13</b>
<b>DIAGNOSIS OF THE INNOVATION PROCESS IN AGRICULTURAL HOLDINGS IN THE REPUBLIC OF BULGARIA .....</b>	<b>28</b>
<b>RELATIONSHIP AND INTERACTION BETWEEN ECONOMIC DEVELOPMENT AND EMERGENCY MANAGEMENT .....</b>	<b>46</b>
<b>DIGITALIZATION PROCESSES IN PRECISION FARMING AND THEIR ROLE IN SECTORAL COMPETITIVENESS.....</b>	<b>59</b>
<b>TRADITIONAL PROBLEMS OF THEORY AND PRACTICE OF PERSONNEL MANAGEMENT IN TRANSITION ECONOMIES .....</b>	<b>76</b>
<b>METHODOLOGICAL APPROACH TO CATEGORIZE BULGARIAN FESTIVALS AND HOLIDAYS.....</b>	<b>88</b>

## CHALLENGES OF MARKETS DURING THE POST-PANDEMIC IN ALBANIA: A PHILOSOPHICAL OBSERVATION ON FOOD CONSUMPTION THROUGH THE THEORY OF PLANNED BEHAVIOR

Rezeal Kolaj<sup>1</sup>, Petar Borisov<sup>3</sup>, Myslym Osmani<sup>2</sup>, Ekaterina Arabska<sup>4</sup>

<sup>1</sup>E-mail: rkolaj@ubt.edu.al Department of Economics and Rural Development Policies, Agricultural University of Tirana, Albania.

<sup>2</sup>Department of Mathematics and Informatics, Agricultural University of Tirana, Albania.

<sup>3</sup>Department of Management and Marketing, Agricultural University of Plovdiv, Bulgaria.

<sup>4</sup>Department of Management, University of Agribusiness and Rural Development, Plovdiv, Bulgaria.

### ABSTRACT

The food markets in the post-pandemic period across Europe have been characterized by slowdown growth, declining income, and rising energy prices. In Albania, these developments have created social distortions, raising the poverty line and concerns about the impact of socio-economic factors to food consumption. The food consumption is an interdisciplinary scientific subject and the influence of key socio-economic factors beyond a standard-simplistic-approach can be analyzed also in the level of causes and social consequences through the theory of planned behaviour (TPB).

The study objective is a measurement of the influence of some variables such as age, religion, education level, gender, family members, family employees and income to meat consumption in the food markets of Tirana, Albania. The statistical model used shows that while the number of family members and consumer's religiousness (Muslim or Christian) does not affect to meat consumption, age, education levels, gender, family employees and family income affect significantly. The findings provide a multidisciplinary observation to food consumption problem, calling for attention to poverty.

**KEY WORDS:** food consumption, employees, income, theory of planned behavior (TPB).

### ABSTRAKT

Die Lebensmittelmärkte nach der Pandemiezeit hatten in ganz Europa ein verlangsamtes Wachstum, sinkende Einnahmen und steigende Energiepreise gekennzeichnet. In Albanien haben diese Entwicklungen zu sozialen Beschränkung geführt, die Armutsgrenze hat sich erhöht und Bedenken hinsichtlich der Auswirkungen sozioökonomischer Faktoren auf den Lebensmittelkonsum ausgelöst. Der Lebensmittelkonsum ist ein stark diskutiertes wissenschaftliches Thema. Der Einfluss sozioökonomischer Schlüsselfaktoren über einen standardisierten, vereinfachenden, Ansatz hinaus kann durch die Theorie des geplanten Verhaltens (TGV) auch auf der Ebene der Ursachen und sozialen Folgen analysiert werden.

Das Ziel dieser Studien ist eine Messung des Einflusses einiger Variablen wie Alter, Religion, Bildungssystem, Geschlecht, Familienmitglieder, Familienangestellte und Einkommen auf den Fleischkonsum auf Lebensmittelmärkten in Tirana, Albanien. Das verwendete statistische Modell zeigt, dass die Anzahl der Familienmitglieder und die Religiosität des Verbrauchers (muslimisch oder christlich) zwar keinen Einfluss auf den Fleischkonsum haben, aber das Alter, das Bildungsniveau, das Geschlecht, die Familienangestellten und das Familieneinkommen haben einen signifikanten Einfluss auf diese Entscheidung. Die Ergebnisse bieten eine multidisziplinäre Beobachtung des Problems des Lebensmittelkonsums und ergeben die Aufmerksamkeit auf Armut.

**STICHWORTE:** Lebensmittelkonsum, Mitarbeiter, Einkommen, Theorie des geplanten Verhaltens (TGV).

## RÉSUMÉ

Les marchés alimentaires de la période post-pandémique à travers l'Europe ont été caractérisés par un ralentissement de la croissance, une baisse des revenus et une hausse des prix de l'énergie. En Albanie, ces évolutions ont créé des distorsions sociales, relevé le seuil de pauvreté et suscité des inquiétudes quant à l'impact des facteurs socio-économiques sur la consommation alimentaire. La consommation alimentaire est un sujet scientifique interdisciplinaire et l'influence des facteurs socio-économiques clés au-delà d'une approche standard simpliste peut également être analysée au niveau des causes et des conséquences sociales à travers la théorie du comportement planifié (TCP).

L'objectif de l'étude est de mesurer l'influence de certaines variables telles que l'âge, la religion, le niveau d'éducation, le sexe, les membres de la famille, les employés de la famille et le revenu sur la consommation de viande sur les marchés alimentaires de Tirana, Albanie. Le modèle statistique utilisé montre que si le numéro de membres de la famille et la religion du consommateur (Musulman ou Chrétien) n'affectent pas la consommation de viande; l'âge, le niveau d'éducation, le sexe, les employés de la famille et le revenu familial affectent de manière significative. Les résultats fournissent une observation multidisciplinaire au problème de la consommation alimentaire, attirant l'attention sur la pauvreté.

**MOTS CLÉS:** consommation alimentaire, employés, le revenu, théorie du comportement planifié (TCP).

## INTRODUCTION

Food markets in the post-pandemic period have been characterized by challenging processes everywhere in Europe. The main problems have been slowdown growth, declining income, and rising energy prices. However, while their effects on well-being are very different between countries, the dynamics seem particularly worrying for small economies. Moreover, the above factors and the interaction between them offer a pessimistic and unpredictable perspective for non-integrated markets. In Albania these developments have created social distortions, raising the poverty line and concerns about the impact of socio-economic factors to food consumption. General internal inadequacies and asymmetric shocks from international markets have caused far-reaching consequences on production, markets, and consumption. In fact, the increase of basic food prices has exposed previously unknown threatening trends to markets, sustainable consumption, good nutrition, access to food and poverty, etc.

It seems that high food prices can turn out threatening as the 'Sword of Damocles' during this decade. Among the food products group, high-energy-value products such as meat and by-products represent a very important group-category based on the still safe consumer demand, despite actually high prices and tendencies. The meat consumption is a complex-interdisciplinary scientific subject and the influence of key socio-economic factors beyond a standard-simplistic-approach may be observed more deeply in the level of causes and social consequences analyzing it through psychology behavior, consumer attitude, subjective norms (e.g., beliefs on poverty and/or malnutrition) and the theory of planned behaviour. Moreover, in a broad multidimensional and psycho-sociological sense food consumption is an expression of the level of democracy and meat eating may philosophically explain the social roots of processes and the multiple connections with traditions, values, culture, ethics, etc.

To produce or cook something special-rare is an essential concept characteristic of European society and which was later borrowed in culture, aesthetics, and art. In a broad and multidimensional sense — 'Carpe diem', a mythical phrase of Roman poet Horace its used as the closest thing in a scientific-philosophical sense that unites well-being and happiness, ancients, and moderns in the Way of Life. In the scriptures and top Bible verses from the Old and New Testaments discovered a prudent interpretation on

meat eating. A. Dumas also alongside the intellectual aspect of meal, emphasizes meat eating as its material part. In the early Albanian tradition of some provinces also, the host of the family with cordial ceremonies asked the invited guests about their preferred piece of cooked meat and with special care served the cut parts aesthetically—pleasing on the guests' plates. However, Jean J. Rousseau perhaps prejudiced greater eaters of meat by considered them more ferocious than others.

In countries with intermediate developmental status meat consumption is very related to income level and the key socio-economic factors and given by unhealthy eating problems can be considered as an important expression of consumers well-being. Among the Western Balkan countries, Albania is presented within the regional interval of meat consumption and differentiated with EU members (table 1). Moreover, rising energy prices everywhere have raised concerns over food prices, and the meat consumption is probably the most important. So, an assessment of the impact of factors such as age, religion, education, gender, family members, employment and income to meat consumption may be important in a multiple and long-term sense for (1) sustainable food consumption, finances (e.g. daily turnovers, etc.) or inflation; (2) subjective welfare (e.g. food access), good nutrition; and (3) for the enrichment of the theoretical debate; or (4) livestock producers, etc.

**Tabela 1.** Annual meat consumption in EU and Western Balkan countries.

EU countries	Meat consumption (kg/capita)	Western Balkan countries	Meat consumption (kg/capita)
Bulgaria	60	Albania	39
Croatia	80	Bosnia and Herzegovina	43
Germany	79	Kosovo*	41–44
Greece	73	Montenegro	78
France	79	Serbia	56
Italy	82	Rep. of Nord Macedonia	39
Spain (Highest)	99	Turkey**	39

\*Considered indicator. Source: Attitudes and preferences of Kosovar consumers towards quality and origin of meat, 2018.

\*\*Indicator used for comparative purposes. Source: FAO, 2018.

The literature provides a comprehensive analyze of the impact of key socio-economic, psychological, political, technical, institutional etc., factors to meat consumption, and especially among emerging economies as an expression of basic energies needed (in kcal/day or MJ/d) that citizens should receive. By Moon et al. (2002), age is responsible for differences in intake patterns and food consumption. Richter et al. (2012), reveals that given the 'western', 'traditional', 'traditional and western' patterns of healthy food diet the meat consumption remain highest among young adolescents in Germany. Bonne et al. (2008), show that the impact of religion on food consumption depends on the religion and that in some countries the Muslim religion may be related to greater meat consumption. Wilkins et al. (2019), explains that the largest consumption of meat by consumers of the Muslim region related with specific brands within the segment. Reitsema et al. (2017), through a multidisciplinary approach reveals that dietary Christian religion may promotes specifically the consumption of some food products. By Davidson (2003), the tradition of the Christian religion is linked in many ways and conceptually with consumption and food diet.



By Koch et al. (2019), more high meat consumers were found among men's and lower-educated persons. Andreenko et al. (2015) find an exposure of persons with primary and secondary education to the diet and mode of food consumption. Mladenova (2019), finds a clear interdependency between persons with secondary level of education and the perception for healthy food consumption. Rabadán et al. (2020), show positive links between secondary education and meat (lamb) consumption. By Gossard et al. (2003), gender has a particularly strong influence on meat consumption. Tobler et al. (2011), underline gender as a particularly important for meat consumption and men's as greater consumers compared women. Thiele et al. (2001), suggests, that food consumption increases where the number of family members (children) is significantly higher. Thiele et al (2003), finds that single male (one-member family) consumes significantly smaller food. By Kostakis et al. (2020), employment status shows that families with employees have spent more on food consumption. By Gantcheva et al. (2001), family employment affects food consumption and well-being. Guenther et al. (2005), finds that individuals in higher-income households consume relatively more meat. By Ivanova et al. (2006), household income and unemployment play significant roles to food consumption. The literature also supports the importance of psychological factors such as consumer attitude and subjective norms (e.g., psychological consequences of food insufficiency, etc.) and the theory of planned behavior (TPB) predicts attitudes and especially behavioral intention as the most proximal determinant of human social behavior. Ajzen (1991), emphasizing the importance of theory (TPB) highlights those attitudes, subjective norms, and perceived behavioral control are related to appropriate sets of salient behavioral, normative, and control beliefs and expectancy-value formulations can explain behaviour and the relations. By Aertsens et al. (2009), findings value the theory (TPB) as relevant for better understanding consumption decisions which can be explained by relating food attributes and abstract values such as 'security', 'hedonism', 'universalism', 'benevolence', 'stimulation', 'self-direction', 'conformity', and the subjective or personal norms and (perceived) behavioral control which can influence in many ways to food consumption.

**Objectives and hypotheses.** The main objective of the study is a measurement of the possible influence of factors such as age, religion (Muslim, Christian), education level (primary and secondary), gender, number of family members, number of employees in the family and income to meat consumption in the food markets (supermarkets and butcher shops) according to consumer's perception in the capital of Tirana, Albania.

Specific objective of the study is an observation (even philosophical) of the relationship and potential impact of the main socio-economic factors on food consumption, potential causes, and social consequences in behavioral psychology of the consumer through the theory of planned behavior.

The study hypotheses are:

- H1 — with age meat consumption increases.
- H2 — increase of Muslim religion affects the increase of meat consumption.
- H3 — increase of Cristian religion affects the increase of meat consumption.
- H4 — increase of primary education affects the increase of meat consumption.
- H5 — increase of secondary education affects the increase of meat consumption.
- H6 — increase of the male gender affects the increase of meat consumption.
- H7 — increase of size family (by members) affects the increase of meat consumption.
- H8 — increase of (family) employees affects the increase of meat consumption.
- H9 — increase of (monthly) income affects the increase of meat consumption.



**Measurement procedure.** During the period October 2021 – February 2022 a quantitative questionnaire was applied for interviewing consumers in food markets of the city of Tirana. From the procedural point of view the measurements was implemented face to face by random choice and the above variables were verified according to the respective scales (1 – 5). Based on data provided a statistical model was used to test the above hypothesized variables and the significance is presented in the following table (table 2).

**Table 2. The significance of variables by statistical model.**

Model 1: OLS, using observations 1–220  
Dependent variable: Consumption (kg)

	<i>Coefficient</i>	<i>Std. Error</i>	<i>z</i>	<i>p-value</i>	
const	0.857182	0.566740	1.512	0.1304	
Age	0.242959	0.118633	2.048	0.0406	**
Religion_1	-0.335420	0.384406	-0.8726	0.3829	
Religion_2	-0.197384	0.423455	-0.4661	0.6411	
Education_1	-0.924148	0.324581	-2.847	0.0044	***
Education_2	-0.626724	0.298609	-2.099	0.0358	**
Male gender	0.356337	0.212741	1.675	0.0939	*
Family members	0.107254	0.130212	0.8237	0.4101	
Family employees	0.320929	0.138710	2.314	0.0207	**
Monthly income	0.00247811	0.00146737	1.689	0.0913	*

Mean dependent var	2.469318	S.D. dependent var	1.626662
Sum squared resid	482.7795	S.E. of regression	1.516229
R-squared	0.166875	Adjusted R-squared	0.131170
F(9, 210)	5.595099	P-value(F)	6.36e-07
Log-likelihood	-398.6191	Akaike criterion	817.2381
Schwarz criterion	851.1744	Hannan-Quinn	830.9425

Source: Data processed by authors.

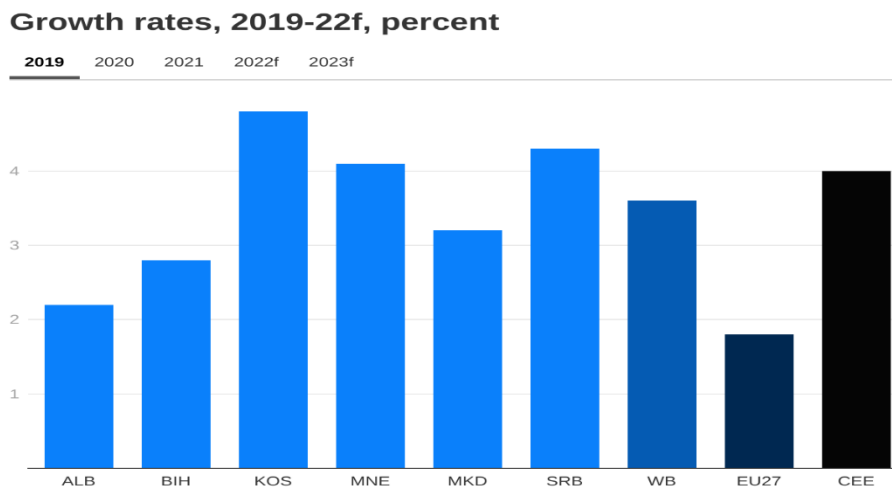
## RESULTS AND DISCUSSION

The paper in line with the objectives provides a multidisciplinary overview on the impact of main socio-economic factors and consumer well-being to meat consumption, taking a deeper look on anomalies and socio-psychological implications through the theory of planned behavior (TPB). The number of family members and consumer's religiousness (Muslim or Christian) does not affect to meat consumption and this finding proves the presence of the characteristics of consumer cosmopolitanism. Age, education levels (primary, secondary) gender, family employees and family income have significant (up to very high) impact to meat consumption (table 2). Among men's and youngest people, the opportunities for increasing meat

consumption also increase. Concerns about increased migration between men’s, youngest and qualified peoples, which may have an impact on sustainable meat consumption etc., should probably be considered here. Moreover, third ages and remaining pensioners consume less. By Schütz et al. (2018), meat consumption declines with advancing age. Education (primary, secondary) is negatively related to meat consumption, and this means that with the decrease of the presence of individuals with low education (1, 2), meat consumption can increase. In addition to privileged social status and information on a healthier richer diet, highly educated individuals are generally better paid in Albania affecting probably ability to consume more meat. Family employees and income affect meat consumption and this continuous repeatability deserves the main attention.

Poverty still represents an endless saga of suffering (even from communist period) given the missing material conditions, etc., and a higher sensitivity is required especially to family employment and income. Developed societies everywhere are characterized by a pronounced sensitivity to poverty and European society clearly self-identifies as a community that overcame poverty and malnutrition creating a professional society through industrialization and technological progress in agriculture. Old and new problems related to income, employment, well-being and the power of their consequences on consumption, access to food and/or protein-energy malnutrition etc., may create wider psychological and social pathologies among people. TPB suggests that behavioral intention determines the behavioral relations between peoples and social actions. Everything that matters, including concerns over the national growth rate (figure 1), or quality of living, the level of urbanization, the professionalism of the elected in the XXI century and the academy of sciences, up to the highest human feelings such as tolerance and respect between citizens or ethics and reason in a society, can be explained within this multidisciplinary interval of factors. Senauer (2001), highlights that in Maslow’s hierarchy of needs pyramid, at lower income levels, people are firstly motivated to satisfy their basic physiological needs for food in the context of the traditional food preferences of their culture, and the people in every society have used food for expressing higher motives, such as love, friendship and European affiliation.

**Figure 1.** Growth rates between the countries of the region (2019–22f, percent).



CEE: Bulgaria, Croatia, Czech R., Hungary, Poland, and Romania. Source: World Bank (Global Economic Prospects January 2021), WEO October 2020, national statistical offices, World Bank estimates.

\*CEE: Bulgaria, Croatia, Czech Republic, Hungary, Poland, and Romania. Source: World Bank (Global Economic Prospects, January 2021), WEO October 2020, national statistical offices, World Bank estimates.

## CONCLUSION

The impact of socio-economic factors on sustainable food consumption or psychological factors (e.g., beliefs about wealth, poverty and/or nutrition) can cause multifaceted distortions on the rules used by the parties, understanding on development, elites, etc. There is a rise in the poverty line (calculate e.g., a family with 2 children and parents an MP and a teacher) and the facts (BalkanWeb, July 15) illustrate cases of behavioral anomalies where people (based even on subjective norms) offer food to receive favors and here little matters if the calories are expressed in fish or meat products. There is a spread of poverty, and this appears in form and content; among young people, professors, local and central elected, which reflects behavioral intentions of growing groups of people that may endanger common values and cohesion, meritocratic hierarchy, the meaning over morality, culture, and basic ethics without which the social coexistence may remain unreachable. Poverty pervades everything, possibly alienating even the 'particle of the soul' necessary for any society. The level of sensitivity to it can explain the efficiency of the functioning of institutions and the level of social responsibility. The increase of poverty can be turned into a premise for evil and ugly behaviors and as Ch. Baudelaire once wrote '...the evil comes up softly like a flower...' by further producing unjust and inhumane practices. Given the worrying growing trends around the world, where a zero quote can be an approximate normalcy the recommendations go for optimal-return public policy, by increasing national agri-production and especially livestock where the focus should be on products with high energy value. Monitoring institutions can be focused on consumption and price differences between it (e.g., main chicken, beef, lamb), considering the interaction between rising energy prices and external factors or internal ones (e.g., why the price of goose meat does not change) effects on consumption, etc.

## REFERENCES

- Aertsens, J., W. Verbeke, K. Mondelaers, G. Van Huylenbroeck (2009). Personal determinants of organic food consumption: a review. *British food journal*. Vol. 111(10), 2009, 1140–1167.
- Ajzen, I. (1991). 'The theory of planned behavior'. *Organizational Behavior and Human Decision Processes*, Elsevier, vol. 50, 1991, 179–211.
- Andreenko, E., S. Mladenova, V. Akabaliev (2015). Influence of socio-economic, dietary, and behavioral factors on overweight and obesity in Bulgarian men. *The Anthropologist*, 21(1–2), 2015, 71–79.
- BalkanWeb, July 15. <https://www.balkanweb.com/video-mori-1-mije-euro-dhe-1-arke-me-peshk-per-vendin-e-punes-ish-zv-ministrja-rovena-voda-shkon-ne-spak-momenti-kur-del-nga-makina-e-policise/>
- Bonne, K., W. Verbeke (2008). Religious values informing halal meat production and the control and delivery of halal credence quality. *Agriculture and Human values*, 25(1), 2008, 35–47.
- Davidson, J.A. (2003). World religions and the vegetarian diet. *Journal of the Adventist Theological Society*, 14(2), 2003, 8.
- Gantcheva, R., A. Kolev (2001). Children in Bulgaria: Growing impoverishment and unequal opportunities (No. 84). UNICEF, Innocenti Research Centre, 2001.
- Gossard, M. H., R. York (2003). Social structural influences on meat consumption. *Human Ecology Review*, 2003, 1–9.
- Guenther, P.M., H.H. Jensen, S.P. Batres-Marquez, C.F. Chen (2005). Sociodemographic, knowledge, and attitudinal factors related to meat consumption in the United States. *Journal of the American Dietetic Association*, 105(8), 2005, 1266–1274.

Ivanova, L., P. Dimitrov, D. Ovcharova, J. Dellava, D.J. Hoffman (2006). Economic transition and household food consumption: a study of Bulgaria from 1985 to 2002. *Economics and Human Biology*, 4(3), 2006, 383–397.

Koch, F., T. Heuer, C. Krems, E. Claupein (2019). Meat consumers and non–meat consumers in Germany: A characterization based on results of the German National Nutrition Survey II. *Journal of Nutritional Science*, 8, E21, doi: 10.1017/jns. 2019, 17.

Kostakis, I., D. Paparas, A. Saiti, S. Papadaki (2020). Food consumption within Greek households: further evidence from a national representative sample. *Economies*, 8(1), 2020, 17.

Mladenova, G. (2019). Motives Affecting Consumer Attitudes and Consumption of Organic Foods in Bulgaria. *Economic Alternatives*, (4), 2019, 641–654.

Moon, W. W.J. Florkowski, L.R. Beuchat, A.V.A Resurreccion, P. Paraskova, J. Jordanov, M.S. Chinnan (2002). Food intake patterns of the unemployed and pensioners in Bulgaria. *Journal of Policy Modeling*, vol. 24(7–8), 2002, 621–637.

Rabadán, A., L. Martínez–Carrasco, M. Brugarolas, C Navarro–Rodríguez de Vera, E. Sayas–Barberá, R. Bernabéu (2020). Differences in Consumer Preferences for Lamb Meat before and during the Economic Crisis in Spain. *Analysis and Perspectives. Foods*, 9(6), 2020, 696.

Reitsema, L.J., T. Kozłowski, D.E. Crews, M.A. Katzenberg, W. Chudziak (2017). Resilience and local dietary adaptation in rural Poland, 1000–1400 CE. *Journal of Anthropological Archaeology*, 45, 2017, 38–52.

Richter, A., C. Heidemann, M.B. Schulze, J. Roosen, S. Thiele, G. Mensink (2012). Dietary patterns of adolescents in Germany–associations with nutrient intake and other health related lifestyle characteristics. *BMC pediatrics*, 12(1), 2012, 1–14.

Schütz, J., F. Franzese (2018). Meat consumption in old age: an exploration of country-specific and socio–economic patterns of eating habits of the European population. *Munich Center for the Economics of Aging (MEA)*, 2018.

Senauer, B. (2001). The food consumer in the 21st century: New research perspectives (No. 1710–2016–139984), 2001.

Thiele, S., C. Weiss (2003). Consumer demand for food diversity: evidence for Germany. *Food policy*, 28(2), 2003, 99–115.

Thiele, S., C.R. Weiss (2001). Variatio Delectat Consumer Demand for Food Diversity (No. 0102). *FE Working Paper*, 2001.

Tobler, C., V.H. Visschers, M. Siegrist (2011). Eating green. Consumers’ willingness to adopt ecological food consumption behaviors. *Appetite*, 57(3), 2011, 674–682.

Wilkins, S., M.M. Butt, F. Shams, A. Pérez, A. (2019). The acceptance of halal food in non-Muslim countries: Effects of religious identity, national identification, consumer ethnocentrism and consumer cosmopolitanism. *Journal of Islamic Marketing*, 2019.

## ECONOMIC DEVELOPMENT AND LIVING STANDARD OF THE POPULATION IN KOSOVO, AFTER INDEPENDENCE

Atdhe Kabashi<sup>1</sup>

<sup>1</sup>E-mail: atdhe.kb@gmail.com, Kolegji BIZNESI, 29 Motrat Qiriazhi, Prishtina, Republic of Kosovo

### ABSTRACT

The economic development of the Republic of Kosovo after the liberation, as well as after Independence took place in very difficult and specific political, social, and economic conditions. All these factors, each in their own way influenced the bad economic flows. Therefore, the purpose of this paper is to show the impact of some factors that appear in poor economic flows. The whole matter of the paper is reviewed through two main theses: Implemented economic policies and economic development challenges and living standard of the population. Economic development in Kosovo, both after the liberation and after Independence, was conducted ad hoc, without strategy, without vision, partially, etc. In other words, Kosovo did not even have a macroeconomic development policy. All this influenced the economic flows to have bad trends. The instruments of the implemented economic policy were not sufficiently in function of the local businesses, respectively of the economic development.

**KEYWORDS:** Living standard, Economic Policies, Development, Challenges, Analysis, Kosovo

### ABSTRAKT

Die wirtschaftliche Entwicklung der Republik Kosovo nach der Befreiung sowie nach der Unabhängigkeit fand unter sehr schwierigen und spezifischen politischen, sozialen und wirtschaftlichen Bedingungen statt. Alle diese Faktoren beeinflussten auf ihre Weise die schlechten Wirtschaftsströme. Ziel dieses Papiers ist es daher, die Auswirkungen einiger Faktoren aufzuzeigen, die sich in schlechten Wirtschaftsströmen niederschlagen. Das gesamte Thema des Papiers wird anhand von zwei Hauptthesen untersucht: Die umgesetzte Wirtschaftspolitik und die Herausforderungen der wirtschaftlichen Entwicklung sowie der Lebensstandard der Bevölkerung. Die wirtschaftliche Entwicklung im Kosovo, sowohl nach der Befreiung als auch nach der Unabhängigkeit, wurde ad hoc, ohne Strategie, ohne Vision, teilweise usw. durchgeführt. Mit anderen Worten: Das Kosovo verfügte nicht einmal über eine makroökonomische Entwicklungspolitik. All dies führte dazu, dass sich die Wirtschaftsströme schlecht entwickelten. Die Instrumente der durchgeführten Wirtschaftspolitik waren nicht ausreichend auf die lokalen Unternehmen bzw. die wirtschaftliche Entwicklung ausgerichtet.

**STICHWORTE:** Lebensstandard, Wirtschaftspolitiken, Entwicklung, Herausforderungen, Analyse, Kosovo

### RÉSUMÉ

Le développement économique de la République du Kosovo après la libération et l'indépendance s'est déroulé dans des conditions politiques, sociales et économiques très difficiles et spécifiques. Tous ces facteurs, chacun à leur manière, ont influencé les mauvais flux économiques. Par conséquent, l'objectif de ce document est de montrer l'impact de certains facteurs qui apparaissent dans les mauvais flux économiques. L'ensemble de ce document est examiné à travers deux thèses principales: Les politiques économiques mises en œuvre et les défis du développement économique et le niveau de vie de la population. Le développement économique du Kosovo, tant après la libération qu'après l'indépendance, a été mené de manière ad hoc, sans stratégie, sans vision, partiellement, etc. En d'autres

termes, le Kosovo n'avait même pas de politique de développement macroéconomique. En d'autres termes, le Kosovo n'a même pas eu de politique de développement macroéconomique. Les instruments de la politique économique mise en œuvre n'étaient pas suffisamment en fonction des entreprises locales, respectivement du développement économique.

**MOTS CLÉS:** Niveau de vie, Politiques économiques, Développement, Défis, Analyse, Kosovo

## INTRODUCTION

Economic development, both theoretically and practically, is a problem in itself and quite complex (Gashi, 2020). This is because economic development does not depend only on economic factors, but it is also influenced by many other factors, such as: historical, political, external, socio-economic system, etc. However, economic development in the first place in itself means the development of productive forces. For this reason, every country is committed to achieve the highest possible level of development of productive forces through economic development. Moreover, economic development represents the level of development of technologies and labor force, as well as the use of natural resources and the fulfillment of social needs (Ekonomski leksikon, 1995). Economists take numerous indicators to express the level of economic development of a country. Nonetheless, both within a country and internationally, the most relevant synthetic (macroeconomic) indicator taken to express the level of economic development is the Gross Domestic Product per capita (Rrustemi and Jusufi, 2021).

Within the challenges and problems faced by the economic development of Kosovo after the liberation and after Independence, there are many, but to single them out are:

- Inadequate implemented economic policy
- Inadequate personnel policy and nepotism
- Informal economy and tax evasion
- Privatization process
- Corruption etc (Jusufi and Ukaj, 2021).

## RESULTS AND DISCUSSION

***Inadequate implemented economic policy.*** There is the economic function of the state, not only in the socialist system, but also in the market economy. Economic function represents the role played by the state in the field of economic activities, in order to achieve the set goals of economic development of the country (Radev, Borisov and Miladinovski, 2019). These functions are numerous, but to be distinguished are: drafting a strategy for long-term economic development, planning and structural orientation of economic development according to the needs of the country, regulation and intervention in some economic areas, regulation of economic relations, respectively foreign trade with other countries, and so on.

In each country, the Government is responsible for drafting and implementing macroeconomic development policies. Economic development depends on the definition of measures and instruments of implemented economic policy, respectively on the measures and instruments of its subsystems, such as: fiscal policy, foreign trade policy and credit policy. Therefore, economic policy is a system of concrete measures, instruments, and actions of the state, in order to achieve the intended goals of economic development of the country. Through economic policy, the state creates preconditions and conditions for economic development as dynamic and sustainable as possible, as well as creates an economic structure in function of the development of local businesses, respectively the country's economy.

What will be the economic policy, **First**, it depends on the level of development of the productive forces, and, **Secondly**, by the level, creativity and professional ability of economic policy makers. Economic policy will be effective if it manages to mobilize all factors of production and put them in function of the economic development of the country. In modern times, the role of economic policy is to adequately incorporate the country's economy in international economic flows, namely in the world economic integration processes.

In a market economy, in principle the operation of economic laws should be free, especially the law of value. Thus, it was understood at the time of the liberal doctrine (*laissez-faire*), which was applied by Western countries until the onset of the great economic crisis of 1929-33. After this crisis, the doctrine of interventionism was introduced, i.e. the state intervention in the economy, the founder of which was J.M. Keynes. Therefore, starting from the period after the great economic crisis, as well as today, the market economy in itself does not mean the free operation of the law of value (supply and demand), but it is needed and often necessary, the intervention of state in the economy, to the extent that it does not impede the operation of the market economy. So, now the state is presented as **regulator**, and not like **controller** of economic processes.

Keynes in his capital work "**General theory of employment, interest and money**", brought a general stimulus to the idea that governments can and should take responsibility for controlling the level of economic activity. Interest rate policy and changes in government spending and taxation policies would be used to protect low unemployment (Backhouse, 2002). The need for state intervention in the economy arose from classical economists. "They were strong supporters of seeing an organized government, offering, an institution which they saw as crucial in stimulating economic growth."

In the post-liberation period, the market economy in Kosovo was not properly understood. The leaders thought that in a market economy the economic laws should operate completely freely, without any state intervention in the economy. This thesis is now being developed by **neo-liberals**, who insist on not interfering with the state in economic flows. Such an understanding of the market economy is completely wrong. Practice has shown that state intervention is needed and often necessary, because the economic mechanism (free operation of economic laws) by itself could not ensure adequate economic development and the solution of social problems.

Keynes is the most famous protagonist in contemporary economic theory, who developed the theory on the role, necessity and need for state intervention in economic development. He was primarily interested in how the state can ensure such economic development, which will provide national income and employment as much as possible. Therefore, according to Keynes, the opinion of the traditional theory on the ability of the capitalist system of production that through the market mechanism (in the conditions of market economy operation), automatically provide full employment, which for him was unacceptable. For this reason, Keynes raises the need for state intervention in the economy (Limani, 1994).

State intervention in the economy is not only present now, but was also when liberal doctrine operated. In the nineteenth century, when England was among the most industrially developed countries in the world, it preferred the free exchange of goods, both in the domestic market and in international market. At this time, the US and Germany were still agrarian countries and could not compete and face England's competition either in the domestic market or in the world market. Therefore, before these two countries, a dilemma was presented, should we enter into free competition with England and condemn ourselves to be agrarian countries forever, or implement **protectionist** policies in foreign trade.



In this direction, the concept that, given the economic level, especially industrial that had the US and Germany, in foreign trade dominated the protectionist policies should be implemented. In this way, these two countries managed to protect the local economy from the great competition of England, and thus managed to become the most developed countries in the world. Even today, all the countries of the world in which the market economy operates, in one form or another, exist and apply protectionist policy in foreign trade. Depending on political relations, countries also conduct foreign trade. From this, it follows that the local products should always be consumed permanently, while the imported products only when they are lacking in the local market. **"Whenever you buy something, you increase employment - it should be local, English commodity, if you want to increase employment in this country"** (Kejnz, 2001). With the consumption of local products, it enables the opening of new jobs and the development of the country's economy. Meanwhile, with the purchase of imported goods, I lose new jobs, because the profit goes to the producer, not the consumer. On the other hand, the producers with their products must respond to the quality, at least with European standards and at prices acceptable to the local consumer.

Now the question arises by itself. Should Kosovo implement a market economy according to the principles of liberal doctrine (*laissez-faire*), or implement a **protectionist** policy? With the system of protectionism in foreign trade, we should understand the taking of all measures and instruments of foreign trade policy undertaken by a country, especially customs, but also non-tariff ones, in order to protect the local economy from external competition, and creating the conditions for accelerating its faster economic and sustainable national development. Therefore, based on the level of economic development that Kosovo now has, and in order to protect local businesses from external competition, it should implement protectionist policies in economic transactions with other countries, as all countries in the wider region are more developed than our country.

The implementation of protectionist policy should be to the extent that it does not impede the operation of the market economy. The intensity of Kosovo's economic transactions with other countries of the world should depend on political relations with other countries. This practice is applied by all countries of the world. If a country behaves in a hostile manner, as is now the case of Serbia towards Kosovo, the protectionist system in foreign trade should be applied to it. Therefore, Kosovo, in order to punish Serbia for its hostile, hegemonic and territorial claims, must take economic measures.

For this reason, Kosovo has imposed a 100% tax on goods of geographical origin from Serbia and Bosnia and Herzegovina, as a response to their hostile behavior. So do the US. They take economic measures against all countries of the world, to punish their incorrect political and economic behaviors and those who disregard their policy, for example, towards China, etc. In such cases, it goes even further, becoming an economic embargo, often an economic blockade, the country with which diplomatic relations are broken, as a sign of punishment of the respective country. We are currently seeing the raise of tariffs on Turkish goods and interrupting Free Zone talks with the United States over the war in Syria.

In the economy of Kosovo, among others, we have the phenomenon of economic **penetration**, which means the penetration of another country's capital into one country's economy. Thus, Serbia has acted and is acting to this day towards Kosovo, advancing investments in our country, setting up colonies and other residential buildings, buying real estate, as well as providing assistance in various material forms to Serb residents in this part of Kosovo. In this way, Serbia is trying to achieve economic and political domination in the northern part of Kosovo, in order to secede this part of our country, and join it with Serbia. Kosovo could not stop this phenomenon because of the political situation that has been created in this part of Kosovo.

In a market economy, in order to create conditions, to mobilize and put into operation all factors of internal and external development, the Government must design and implement consistent macroeconomic development policies. To achieve this goal, measures and instruments of implemented economic policies are determined, which create the necessary operational conditions for the realization of the set goals, or certain economic development, both in sectoral and territorial terms. In this context, it should be emphasized that, in order to support local businesses and promote economic development, the Government should implement **expansionary fiscal** policies. Thus, through **expansionist** fiscal policy instruments, it supports local businesses by providing tax breaks. Meanwhile, through credit policy and investment policy, it enables the provision of the material factor and makes the sectoral orientation of economic development.

Kosovo, not only did not implement such a policy, but with the inconsistently implemented policies, influenced the instruments of fiscal policy, foreign trade policy and credit policy, to have bad effects not to say negative, so they were not in the proper function of developing local businesses. The instruments of these subsystems were mainly oriented to **collection of budget revenues as much as possible**, and much less in supporting the development of local businesses (Limani, 2018). For example, how can we justify customs in raw materials, or high interest rate on production loans, VAT on books, etc. Therefore, in this regard, it can be said that, with a completely free foreign trade policy, local businesses were not protected from external competition (Qorraj and Jusufi, 2021).

From what has been said above, it is not difficult to conclude that no Government after the liberation, as well as after Independence, did not design and implement consistent macroeconomic development policies, and did not make any economic reforms in the full sense, in order to create conditions for a more dynamic and sustainable economic development. Although, attempts were made to draft the Strategy document, they did not have a scientific and professional basis and methodology, they were done just for the sake of doing something in this direction. The drafting of the strategies so far, apart from the title, did not coincide either in terms of content or structure with a long-term strategy of proper development and as such did not see the light and remained somewhere in the drawer of the Government Office.

The goals of economic policy in the fight for a more dynamic development should be: **First of all**, improving the trade balance, and, **Secondly**, balancing tax revenues and normal budget expenditures, in order to increase production, not reduce it. Our government does not deal with either of these two essential economic issues. The foreign trade balance was permanently in deficit with a very high value, the unemployment rate is also high, we have growth and social problems, the level of living standards of the population falls, etc., precisely in the absence of economic development.

Economic processes, since the liberation, as well as after Independence had bad trends, followed by negative signs of the most relevant macroeconomic indicators. Thus, the balance of payments deficit has permanently increased, which in 2017 was in the amount of minus 2.669 million euros, which has now reached over 3.0 billion euros, the unemployment rate over 45.0% (although it is officially stated that it is around 30.9%), unfavorable economic structure (dominance of service branches, in relation to productive branches), increase of poverty and decrease of living standard of the population, increase of abuses, nepotism, corruption, organized crime, economic smuggling, tax evasion, kleptocracy, etc.

Therefore, based on the unfavorable economic and social trends and results, we can rightly conclude that all the Governments of Kosovo, starting from the interim to the last, did not design and implement objective economic and consequent policies, not to mention that we had a catastrophic economic policy. In fact, we can say that in Kosovo there was not even a macroeconomic development

policy, all the above-mentioned phenomena show the inefficiency of the implemented economic policy in the whole period after the liberation. Economic development occurred on ad hoc basis, without vision, without strategy and concept and in a partial way. Therefore, based on the practice so far, it can be concluded that, the term "**economic development**", in Kosovo was used only during the election campaign, and never again, promising that Kosovo will be made a "**Garden of flowers**". Although economic flows were unfavorable, neither the Government nor the Parliament ever put it on the agenda, to examine and analyze the bad economic trends.

The leadership in Kosovo, for their interests, did not implement an equal and unique policy for all businesses. Measures and instruments of the implemented economic policy, as well as through tenders, favored the economic subjects (businesses) that were an extended hand of the power, or of their relatives. Such a policy was negatively expressed in the overall economic development, as well as made possible the unequal distribution of national wealth, orienting it mainly to large companies, or rather *in "oligarchic-mafia-company"*, from which they also had their material source. These monopolistic enterprises are close to the leadership, respectively to politics. We have cases when their owners with the force of material domination (read: bribery, corruption, etc.), also won positions in high state institutions, such as: deputy prime minister, etc.

Therefore, from what was said above, it can be concluded that the Governments of Kosovo have lacked **economic analysis**. Through economic analysis, the Government had to review and explain the economic flows, phenomena, reports, processes and development trends of the local economy. Economic analysis serves to put to knowledge the internal sectoral interconnectedness and interdependence of the country's economy, as well as the reasons for their appearance and the avoidance of negative influencing elements. Economic analysis enables the clarification of the elements and the general economic mechanism, in order to ascertain how the economic system functioned, respectively the implemented economic policy, which will serve to take measures in giving development directions for the future period.

**Inadequate personnel policy and nepotism.** As it is known, the cadres represent the main factor of production and are the bearers of all socio-economic transformations, especially the educated cadres which enable the perfection of technical-technological processes in the processes of economic development. However, unfortunately, the Kosovar leadership did not understand the importance and role of professional staff, namely the vision of "sound" personnel policy as they lacked it. They lead a fully **wrong** and **authoritarian** staffing policy. The failed and corrupt personnel policy was best shown by the mafia phenomenon of the "pronto" personnel policy, implemented by those in power, or rather by **authoritarians**. We have several cases where in the most important economic ministries (Trade, Industry, Infrastructure), individuals with the profession of historian, doctor, i.e. non-professionals were appointed. Boards of directors in important public enterprises were even appointed as unprofessional individuals, who did not even know the name of the enterprise, nor did they compete for that position.

Today there are theorists with Schultz (1985) at the top who find that educated manufacturing is the main precondition for economic progress in the contemporary conditions of the technological revolution and it influenced the post-war economic development in some countries (Japan, Germany, Israel, etc.) to be the result of this factor. It is to be concluded that these countries even today favor the human factor, respectively educated staff, in relation to other factors. See for this, today Germany is looking for hundreds of thousands of skilled workers, for its own needs. Nobel laureate Schultz in his analysis finds that the decisive factor for ensuring human well-being is advancement in people and knowledge.

Anderson and Bowman (1966), based on some analyzes find that the development and transformation of knowledge into practice and intellectual skill is the basis for economic development.

From this, it follows that, natural resources, their size and labor are not enough for a rapid pace of development, for a higher level of development of productive forces, without professional staff. Therefore, from the economic point of view, no matter how rich a country is with natural resources, as is the case of Kosovo, it can not develop if the professional staff is not put into function, or as it is differently said, their "brain" is not used.

Such personnel policy implemented in Kosovo, left aside the professionals and genuine intellectuals, who with their experience would help in solving political, social and economic problems. In this way, the greatest personnel potential of Kosovo was destroyed. As a result of creation of this atmosphere, the wave of "brain" migration began, of all profiles, especially medical staff and youth. Therefore, based on the implemented personnel policy, it can be said that in Kosovo it was mainly based on lack of professionalism, it was rather based on *partisanship*. In other words, this means that in order to be employed, the level of education and experience was not important, but the main criteria were party "clothing", nepotism, provincialism, and many other "isms".

Based on the current political, economic and social situation, today in Kosovo, not considering the "ruling" stratum, which now represents the layer of millionaires, which they created on illegal, immoral grounds through abuses, abuse of position, corruption, etc., all are desperate, unmotivated and hopeless, *particularly youth* as the greatest economic and intellectual potential. Thus, the Kosovar leadership is locked in personal ego and snobbery, which is a harmful phenomenon to move forward in the socio-economic development of Kosovo. These actions, however, are contrary to the ethics of those in power. The public person (leadership), especially the leader, whether party or head of state institutions and bodies, should play the role of authority, with high morale, so setting a good example in the eyes of the people (Jusufi and Bellaqa, 2019; Jusufi and Lubeniqi, 2019).

On the contrary, if the individual in state institutional positions propagates values, which he does not have himself, as is the case with the leaders in Kosovo, he is not credible to the masses and represents a person outside the moral authority. The Kosovar paradox lies in the fact that, day by day, the leadership is lying to us even when they are lying publicly, we pretend to believe them, in this case they are getting braver by lying even more. Therefore, by allowing such a thing, we are presenting the opportunity as an individual, scientific institutions and as a society in general, by not reacting to these negative phenomena (Qorraj and Jusufi, 2019).

We are still not finding the strength (neither the Academy, nor the Scientific Institutions, nor the Universities, nor the intelligentsia), to fight this phenomenon, to call the "blind" "blind", or the "thief" a "thief". Thus, by not stopping the rush of these phenomena (scoundrels and delinquents), snob-politics has been formed that boasts about politicians in state institutions and bodies, considering or declaring themselves to be superior and omniscient in their judgments and the only ones who know to formulate state policies in all socio-economic segments. They seem to believe (even though they know it is not), that they are the cream of thought, judgment and the most necessary and prepared stratum to lead Kosovo.

Historically, the informal economy is present in all countries, especially in underdeveloped countries and in countries that have gone through or are in transition. This is because, in these countries, state bodies and institutions are not sufficiently in charge, or rather they are caught by those in power and abuses, abuse of office, corruption, etc (Qorraj and Jusufi, 2018). This is what happened with Kosovo after the liberation, as well as after Independence. Therefore, throughout the post-liberation period, especially after Independence, individuals and economic entities, taking advantage of the vacuum and dysfunction of independent institutional bodies (judiciary) and bribery of high-level leadership, as well as the non-operation of economic laws and measures of implemented economic policy instruments, made

inadmissible economic transactions. Thus, the conditions and opportunities for intensive action of the informal economy in Kosovo were created, which significantly damaged the budget revenues, put in a more unfavorable position the entities that performed fiscal obligations and thus, in addition to other negative effects, affected even in the disruption of the internal market.

The informal economy is developing completely illegally, which is why it is very difficult to ascertain its value and track it. Given the factual situation, it is thought that in Kosovo, the informal economy creates 30-40% of Gross Domestic Product. The informal economy is mainly taking place in the circulation of goods, but there is also informality in other areas, such as: non-declaration of employees, failure to present the real value of goods at the border, non-payment of VAT, or any other type of tax, and so on. The political situation created in the North of Kosovo, made that in the period 1999-2013, in the customs points one (1) and thirty one (31), that the customs administration of Kosovo did not have access, thus constituting "*legal-public*" crossing points where economic smuggling took place without any obstacles, carried by mafia groups from Serbia in cooperation with locals, respectively Serbian parallel bodies operating in this part of Kosovo, in cooperation with Albanian criminals.

The appearance and functioning of the informal economy in Kosovo to this day have been conditioned by several factors, and to distinguish them are:

- Institutional inefficiency of state bodies,
- Low level of economic development - lack of local production,
- Collapse and economic crisis,
- High unemployment and poverty rates,
- Low standard of living of the population,
- Fiscal burdens,
- Organized crime,
- Corruption etc.

There is no doubt that the informal economy, tax evasion, organized crime, corruption, nepotism, in addition to other negative effects, significantly influenced in obstructing the foreign direct investment and those from the Albanian diaspora. Due to these and other factors, the value of foreign direct investment in Kosovo was the lowest in the region. The value of these investments showed a permanent decline. Thus, the value of foreign investments in Kosovo fell from 440.7 million in 2007 to 287.8 million in 2017 (Statistical Yearbook of the Republic of Kosovo, 2018).

This value is not entirely an advancement of foreign investments, because this includes the investments of the Albanian diaspora in the purchase of real estate, such as: land, houses, apartments, premises, etc. Of course, not only the informal economy, but there are many factors that have influenced the non-attraction of foreign direct investment and the Albanian diaspora, but the nature of this paper does not allow us to expand further on this issue. In the context of this, it should be noted that, failing to create conditions by the Government of Kosovo for attracting these investments, as factors of great material importance for the development of Kosovo's economy, we have had cases when Albanians from the diaspora have invested their capital in other countries, such as: in Albania, Macedonia, Montenegro, etc., and not in Kosovo.

**Privatization process.** As it is known, as part of the transition process, the privatization process is the main link, without which this phase cannot be passed. The privatization process itself implies economic reform, however, unfortunately this was not well-conceived in Kosovo (Aliu, 2014). The process of privatization in Kosovo meant the transformation of socially owned enterprises into private property, at

all costs and without any economic criteria. There is no doubt that privatization is a key element of economic reform. It should not be understood as an end in itself, as was done in Kosovo, but a general economic reform, which should include:

- Reviving and reactivating the existing economy,
- Reconstruction and modernization of the economy
- Structural economic changes,
- Raising the welfare-living standard of the population etc.

The privatization process in Kosovo, from the beginning until today, faced many challenges and problems, and to single them out are:

- Lack of legal regulations,
- Late start
- Failure to specify the time period,
- Lack of transparency
- Frequent arbitrary interruption and negligence
- Exclusion of local workers and institutions,
- Inadequate economic approach (sales of socially-owned enterprises were made, without any economic criteria),
- Fundraising, destination and holding of assets
- Non-timely payment of 20% to employees according to the Regulation
- Changing the activity and giving into use of the land of socially owned enterprises for 99 years, without any destination definitions in its use (Rrustemi et al. 2021).

The privatization policies and model implemented affected the privatization process completely. Empirical analysis of the privatization process in Kosovo shows that the distribution of assets produced was unequal. The privatization process made it possible for the produced assets (the main assets-funds of socially-owned enterprises, respectively their wealth) to be concentrated in the hands of the minority, which was reflected in the rapid enrichment of a small stratum (war profiteers), and the impoverishment of most of the population and the destruction of Kosovo's economy. Therefore, the inefficiency of the privatization process in Kosovo is primarily a result of the model (Spin-Off) and inadequate operational policies, as well as its transformation into an end in itself, in the sense that at all costs social property should pass into private property, regardless of political, social and economic effects (Qorraj and Jusufi, 2019).

Therefore, based on what was mentioned above, and not leaving aside other factors, it can be concluded that the privatization process in Kosovo was a complete failure. This is best confirmed by the value of financial income on the occasion of the sale of socially owned enterprises so far. Thus, from the socially owned enterprises sold in the period 2002-2016, in total the amount of 661.3 million Euro (Privatization Agency of Kosovo, 2017). When we add to this that only the Tobacco Factory in Nis (Serbia), has been sold over 520 million Euros, the conclusion emerges that social enterprises in Kosovo have been sold for "**a penny**".

Finally, taking into account all that was mentioned above about privatization, it is concluded that the privatization process, as implemented in Kosovo, represents:

- The main challenge of destroying the existing economy,
- The main source of creating the army of the unemployed and
- The main source of corruption and abuse



**Corruption.** Lack of responsibility, respectively irresponsibility of relevant state bodies, such as: judiciary, police, etc., enabled individuals in high state and party positions to abuse their positions (Rrustemi et al.2020). Corruption in Kosovo has penetrated all state structures and institutions and is now in the phase of “*metastasis*”, Which means that it is present at the state level. However, so far no one has been convicted of corruption, except for a few small cases. This has not happened so far because there was no political will for such a thing, even though anti-corruption law exists.

Even the judiciary was not ready to take concrete measures even though the Anti-Corruption Agency had submitted to the relevant bodies, corrupt evidence and for individuals in high state and party functions. Normally, this could not have happened, because the people in charge of the institutions that were supposed to fight corruption were themselves corrupt. Therefore, corruption is not fought with the corrupt, because no one wants to be against themselves. Sublimating what was mentioned above about the phenomenon of corruption, it can be said that in our society “*Trust is dead, only his brother is left, Corruption*”.

In Kosovo, corruption has taken shape of a “*Vicious circle*”, which as such is embedded in all state instances and structures, or rather in every pore of life. This phenomenon permanently pervaded Kosovar society, stifling democracy and the rule of law (Rrustemi et al.2021). In terms of the level of corruption, Kosovo is at the highest level in the region and is compared to the most corrupt countries in the world, such as: Argentina, Sri Lanka, Benin, etc. According to the Corruption Perceptions Index Report (Published by: Transparency International), for 2016, Kosovo ranked 95th in terms of level of corruption, while Serbia ranked 72nd, Montenegro 64th, Bosnia and Herzegovina 83rd, etc.

**Living standard of the population.** Human being, in order to ensure his existence, needs to provide and consume material goods and services of various kinds. To secure them, there must be a source or financial resources (Jusufi et al. 2020). Both internationally and in Kosovo, the population as the main source for providing material (financial) means has the employment relationship, as well as pensions, social assistance, or any other form. Therefore, given that over 45% of the active population in Kosovo is unemployed, it turns out that the vast majority of the population faces difficulty for their physical existence. In 2015, the general poverty in Kosovo was: total 17.6% (urban 15.5%, rural 18.9%), while extreme poverty was: total 5.2% (urban 3.6%, rural 6,2%) (Statistical Year Book of Kosova, 2017).

This data shows that in Kosovo, a significant number of the population is on the verge of poverty. Taken globally, ***poverty lines include, or are considered, all those persons or a certain stratum of the population, who with the available means cannot ensure a normal and acceptable life, i.e. who cannot meet the most basic needs for their biological existence.*** This difficult social situation in Kosovo is mitigated to a large extent by material remittances from the diaspora, the value of which now reaches around 2.0 billion Euros. In the absence of any plan by the Government, for the orientation of these means in production, the vast majority of them (around 90.0%) goes for consumption.

Therefore, regardless of the source of individual and family income, the level of cash should be sufficient to ensure a reasonable welfare, which means meeting the basic necessities of life, or the minimum of existence (Jusufi and Gashi-Sadiku, 2020). From an economic point of view ***with a minimum of existence should be understood material means (level of income-family budget), which ensure the totality of living conditions: for the purchase of material goods necessary for life (food, clothing, housing, etc.), data on various services (social insurance, health, education, etc.), which are necessary for the individual and his family members.***

In the professional literature, when dealing with poverty, we distinguish two types of definition of poverty, which are:



- a) **Absolute poverty**, which represents the lowest level of income compared to meeting the basic vital requirements and
- b) **Relative poverty**, which represents the inequality that exists between individuals, families and certain strata of the population.

In addition to the above definitions, we encounter other definitions when it comes to poverty. In this case, we are bringing the definition of poverty according to the Council of the European Commission, which in 1984, defined poverty as follows: **“Poor will be considered a person or group of persons whose resources (material, cultural and social resources) are so limited as to exclude them from the acceptable minimum living standard in the state in which they live.”** In empirical analysis, the most relevant indicators that express the well-being of a country's population are numerous, but the most important are:

- a) **Income**, including general and real nominal income and for specific groups of the population, excluding income per capita-which includes: salaries, pensions, social assistance and other resources.
- b) **Consumption indicators**, whereas the most relevant indicators are taken specific products with **natural character**, such as: bread, meat, milk, etc., **conventional indicators**, such as: average calories, proteins, fats, carbohydrates, etc., per capita and
- c) **Social indicators**, including education, culture, health, housing, technical equipment (white goods), home orientation, housing conditions etc.

According to the United Nations, the poor population includes people with a daily income of less than two (2) US dollars, while the extremely poor population includes people with a daily income of less than one (1) US dollars. According to this criterion and an analysis made by the World Bank, it is said that around 17% of the population of Kosovo lives in extreme poverty lines (less than one Euro per day) and about 30-40%, in the borders of poverty. In other words, that means just enough for them to **live**. In the field, the social situation is even more pronounced than spoken. Thus, the TV show **“Edhe unë jam Kosovë - I am Kosovo too”** brought very drastic social cases in Kosovo, whole families without food and without a roof over their head (Jusufi and Ukaj, 2020).

If one hears that there are such cases in the most underdeveloped countries of the world, such as: Zimbabwe, Rwanda, etc., will be regretted, let alone in the middle of the Balkans and Europe in 21<sup>st</sup> century to have such social cases in Kosovo. It is unfortunate, but true, a few years ago in Mitrovica, a man died of starvation. A popular saying goes: **“What a state is this where my blood pressure is several times higher than my salary”**. This is true, because a large part of the population, especially in the private sector have wages significantly lower than the average in Kosovo, as well as the "basket" of life, not to mention the stratum of the population in social assistance (Jusufi and Ajdarpašić, 2020).

In all countries, in order to determine the strata of the population according to the standard of living, the indicators of the minimum subsistence are determined. For this purpose the main products that make up the so-called **“The subsistence basket”** are taken as an indicator. For food items this **“basket”**, or as they can be called otherwise **“Extreme-food or physiological poverty”**, which represents that level of income, which does not even enable the coverage of food needs to get the necessary calories for living of 2,600 cal. per day, is assigned according to the recommendations of world institutions (FAO), as well as by local institutions.

**Table 1.** The model of a monthly food rate for a person providing around 2,600 cal. per day, according to international standards in Kosovo for the period 2014-2018 (average prices). Source: Author's compilation. The consumption rate is taken according to the European nomenclature, while the data on the price level is taken from; Statistical Yearbook of the Republic of Kosovo, 2017, p. 242 and ASK data.

Products	Monthly consumption rate in units of measurement	Prices per unit			Total value		
		2014	2016	2018	2014	2016	2018
I. Main food products							
1. Bread - piece	30.0	0.36	0.29	0.29	10.80	8.70	8.70
2. Pasta - kg	1.0	1.30	1.36	0.66	1.30	1.36	0.66
3. Rice - kg	1.0	1.31	1.33	1.31	1.31	1.33	1.31
4. Beans - kg	1.0	2.82	2.15	2.34	2.82	2.15	2.34
5. Potatoes - kg	6.0	0.42	0.40	0.51	2.52	2.40	3.06
6. Fresh vegetables - kg	12.0	0.84	0.85	1.13	10.08	10.20	13.56
7. Fresh fruit - kg	6.0	1.13	1.15	1.15	6.78	6.90	6.90
8. Marmalade - kg	1.5	1.51	1.42	1.43	2.27	2.13	2.15
9. Sugar - kg	1.5	0.69	0.81	0.66	1.04	1.22	0.99
10. Oil - liter	2.0	1.15	1.16	1.05	2.30	2.32	2.10
11. Meat, by-products - kg	3.0	3.72	3.68	4.50	11.16	11.04	13.50
12. Milk and yogurt - liter	9.0	0.80	0.76	0,86	7,20	6,84	7,74
13. Cheese - kg	1,0	3,49	3,71	3,91	3,49	3,71	3,91
14. Egg - piece	30,0	2,75	2,36	2,43	2,75	2,36	2,43
Monthly value for main food products					65,82	62,66	69,35

Therefore, referring to the data in table no. 1, it turns out that the minimum subsistence for a month of an individual, expressed only in basic food items for 2014 was 65.82 Euros, for 2016 it was 62.66 Euros and for 2018 it was 69.35 Euros. According to international methodology, the monthly value for an individual is multiplied by four (4), as the average family rate. Thus, based on this data, it turns out that **"Basket"** of living in Kosovo for 2014 was 263.28 Euros, in 2016 it was 250.64 and in 2018 it was 277.40 Euros.

The social problem in Kosovo is also shown by the number of families that benefit from social assistance (Jusufović and Ramaj, 2020). The number of families benefiting from social assistance has decreased, but is still high. Thus, this number fell from 35,654 people in 2009 to 26,117 people in 2017. Meanwhile, the number of family members also showed a decrease from 152,508 in 2009 to 106,628 (Statistical Yearbook of the Republic of Kosovo, 2018). The number of family members receiving social assistance in 2017 includes 6.0% of the total population of Kosovo. In fact, the value of social assistance is low, which does not even nearly meet the existential needs of these families. These aids are enough not to let them die for lack of food.

## CONCLUSION

As it is known, the economic development of Kosovo, after the liberation as well as after the Independence took place in specific political, social, and economic conditions. All these influenced the economic development to face many challenges and problems. Economic development depends on defining the measures and instruments of the implemented economic policy. Through these systems, the Government creates preconditions and conditions for the development of local businesses, the most dynamic and sustainable development possible, as well as creates an economic structure in function of the development of the country's economy. Economic policy will be effective if it manages to mobilize all factors of production and put them in function of the economic development of the respective country.

Economic processes, since the liberation, as well as after Independence had bad trends, followed by negative signs of the most relevant macroeconomic indicators. Therefore, based on the unfavorable economic and social results, we can rightly conclude that all the Governments of Kosovo, starting from the interim to the last, did not design and implement objective economic and consequent policies, not to mention that we had a **catastrophic** economic policy. In fact, it can be said that Kosovo did not even have an implemented economic policy. Kosovo governments lacked economic analysis. Although economic development was the main challenge of our society, neither the Government nor the Parliament saw it to put this problem on their agenda. The economic analysis would enable both the Government and the Parliament to clarify the elements and the general economic mechanism, to ascertain how the economic system works, respectively the implemented economic policy, which will serve in taking adequate measures for giving directions to development for the next period. All this happened, not leaving aside other factors, lack of professionalism in state institutions and bodies.

Therefore, the low level of development of the productive forces, affected the decline in living standards of the main part of the population of Kosovo. As it is known, in Kosovo the vast majority of the population has employment as the main material source. Therefore, given that over 45% of the active population in Kosovo is unemployed, it turns out that the vast majority of the population faces difficulty for their physical existence. In Kosovo, a significant number of the population is on the verge of poverty. In other words, this means that this part of the population, with the monetary means at their disposal cannot ensure a normal and acceptable life, namely, that cannot meet the most basic needs for their biological existence.

Therefore, given what was mentioned above, it is not difficult to conclude that in terms of the level of economic development, Kosovo is part of the least developed countries in the region and beyond, as well as in terms of living standard, the population of Kosovo has the lowest standard of living in relation to the population of neighboring countries.

## REFERENCES

- Aliu, F. (2014). Privatization Process in Kosovo. *Iliria International Review*, 1.
- Džon Majanard Kejnž, *Ekonomski Eseji, trendovirazvoja, Ekonomski Centar za Mir i Razvoj (ECPD), Beograd 2001*, pg. 69.
- Ekonomski leksikon (1995), Leksikografski zavod, "Miroslav Krleža", Zagreb;
- Gashi, B. (2020). The impact of public debt on the economic growth in South-Eastern Europe: An empirical panel investigation. *Economic Studies/Ikonomicheski Izsledvania*, 29 (2), 3-18. [https://www.iki.bas.bg/Journals/EconomicStudies/2020/2020-2/1\\_Burim-Gashi\\_f-f.pdf](https://www.iki.bas.bg/Journals/EconomicStudies/2020/2020-2/1_Burim-Gashi_f-f.pdf)
- Gilpin, R. (2000). *Global Political Economy, Understanding the International Political Order*, Tirana. [https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=378718](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=378718)

Jusufi, G., Ajdarpašić, S. (2020). The Impact of EU Programmes on Financing Higher Education Institutions in Western Balkans - Evidence from Kosovo. *LEXONOMICA: Journal of Law and Economics*, Vol. 12. No.1. <https://journals.um.si/index.php/lexonomica/article/view/530>

Jusufi, G., Bellaqa, B. (2019). Trade barriers and exports between Western Balkan countries. *Naše gospodarstvo/Our Economy - Journal of Contemporary Issues in Economics and Business*, Vol.65, No.4. <http://www.ng-epf.si/index.php/ngoe/article/view/219>

Jusufi, G., Gashi-Sadiku, F. (2020). Impact of Fiscal Policies in Western Balkans SMEs Growth: Evidence from Kosovo. *Central European Public Administration Review (CEPAR)*, Vol. 18, No. 2. <http://cepar.fu.uni-lj.si/index.php/CEPAR/article/view/475/496>

Jusufi, G., Lubeniqi, G. (2019). An overview of Doing business in Western Balkan: The analysis of advantages of Doing Business in Kosovo and North Macedonia. *Iliria International Review*, Vol.9, No.2. <https://www.iliriapublications.org/index.php/iir/article/view/512>

Jusufi, G., Ramaj, V. (2020). The Impact of Human Resources on the Export Performance of Kosovo SMEs. *Ekonomski Vjesnik/Econviews: Review of Contemporary Business, Entrepreneurship and Economic Issues*, Vol.33, No.2. [https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=362227](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=362227)

Jusufi, G., Ukaj, F. (2021). Turkey's Trade with Western Balkans: Looking beyond the Turkish Foreign Policy. *InterEULawEast: Journal for the International and European Law, Economics and Market Integrations*, Vol.8, No.2. <https://hrcak.srce.hr/en/clanak/392855>

Jusufi, G., Ukaj, F., Ajdarpašić, S. (2020). The Effect of Product Innovation on the Export Performance of Kosovo SMEs. *Management: Journal of Contemporary Management Issues*, Vol.25, No.2. [https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=360019](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=360019)

Jusufi, G., Ukaj, M. (2020). Migration and Economic Development in Western Balkan Countries: Evidence from Kosovo. *Business Excellence- Poslovna izvrsnost*, Vol.14, No.1. [https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=347272](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=347272)

Mankiw, G. N., Taylor, P.M. (2012). *Economics-Macroeconomics*, Tirana, 230 p.

Musa Limani, (2018). *Economy of Kosovo, -in historical periods*, College "Business", Prishtina, pg. 350.

Musa Limani, *Economic Policy*, University of Prishtina, Faculty of Economics, Prishtina, 1994, p. 42-50.

Privatization Agency of Kosovo, Annual Report 2016, March 2017, p. 15.

Qorraj, G., Jusufi, G. (2019). EU vs. Local Market Orientation: Western Balkan Entrepreneur's Challenge. *Entrepreneurial Business and Economics Review (EBER)*, Vol.7, No.4. <https://eber.uek.krakow.pl/index.php/eber/article/view/572>

Qorraj, G., Jusufi, G. (2021). Does EU Trade Integration Support Export Promotion: Probit Analysis, Evidence from Kosovo. *InterEULawEast: Journal for the International and European Law, Economics and Market Integrations*, Vol.8, No.1.

Qorraj, G., Jusufi, G. (2018). The EU Stabilization and Association Agreement for the Western Balkans: Between Challenges and Opportunities. *Croatian International Relations Review*. Vol.23, No.81. [https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=294497](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=294497)

Qorraj, G., Jusufi, G. (2019). Regional Integration of the Western Balkans: Regional Economic Area or Creative Destruction Idea. *Management & Gouvernance, Entreprises - Territoires – Sociétés*. PGV, No.21. <http://gregpgv.com/wp-content/uploads/2020/05/MG21.pdf>

Roger E. Backhouse, *History of Economic Theories*, Tirana, 2002, pg. 366.

Rrustemi V., Mladenović D., & Jusufi G. (2021). Social Marketing Challenges in Western Balkans: Evidence From Kosovo. *Medicine, Law & Society*, 14 (1), 153-172.  
<https://journals.um.si/index.php/medicine/article/view/1174>

Rrustemi, V., Hasani, E., Jusufi, G., Mladenović, D. (2021). Social media in use: A uses and gratifications approach. *Management: Journal of Contemporary Management Issues*, Vol. 26, No.1.  
[https://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=376909](https://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=376909)

Rrustemi, V., Jusufi, G. (2021). Understanding Social Media Marketing Activities in Western Balkans: Empirical Insights from Kosovo. *Ekonomski Pregled/Economic Review*, Vol. 72, No.6.  
<https://hrcak.srce.hr/en/clanak/390914>

Rrustemi, V., Podvorica, G., Jusufi, G. (2020). Digital Marketing Communication in developing countries: Evidence from the Western Balkans. *LEXONOMICA: Journal of Law and Economics*, Vol.12, No.2. <https://journals.um.si/index.php/lexonomica/article/view/1010>

Schultz, Th. (1985). *Ulaganje u ljude*, Zagreb,  
*Statistical Yearbook of the Republic of Kosovo 2018*, pg. 235.

Radev, T., P. Borisov, S. Miladinovski. (2019). Intervention Effects of Rural Development Programme on Landscape Management in Bulgaria. *Faculty of Business Economics and Entrepreneurship. International Review* (2019/3-4), 62-72.  
<https://www.webofscience.com/wos/woscc/full-record/WOS:000507394500006>

## DIAGNOSIS OF THE INNOVATION PROCESS IN AGRICULTURAL HOLDINGS IN THE REPUBLIC OF BULGARIA

Atidzhe Alieva – Veli<sup>1</sup>

<sup>1</sup> E-mail: atidzhe.alieva-veli@europarl.europa.eu, Agricultural University of Plovdiv, bul. "Mendeleev" 12, 4000 Trakiya, Plovdiv, Bulgaria

### ABSTRACT

The innovations in the Bulgarian agriculture during the last 10 years are a fact and the role of the Common Agricultural Policy (CAP) for their implementation in the sector cannot be denied. With the help of the CAP, Bulgarian agriculture renewed its machines, equipment and technologies used in production. In parallel with this process, farm staff faced the challenge of acquiring skills to work with these new machines and technologies so as to increase farm productivity and make them more competitive in the market. Today, the CAP is focusing on the idea of accelerating innovation in agricultural holdings in EU Member States. This idea is realized through the spending of money in the direction of digitalization of agricultural production, implementation of the principles of the circular economy as well as those of the bio-economy in the development of agricultural holdings. This process, in turn, creates the need for training and financial encouragement of farmers to cope with these new challenges in the established business environment.

The purpose of this study is to diagnose the innovation process in agricultural holdings in Bulgaria and to determine the main results of innovation management in farms.

**KEYWORDS:** innovation, CAP, agriculture, innovation system

### ABSTRAKT

Die Innovationen in der bulgarischen Landwirtschaft in den letzten 10 Jahren sind eine Tatsache, und die Rolle der Gemeinsamen Agrarpolitik (GAP) für ihre Umsetzung in diesem Sektor kann nicht geleugnet werden. Mit Hilfe der GAP erneuerte die bulgarische Landwirtschaft ihre Maschinen, Geräte und Technologien, die in der Produktion eingesetzt werden. Parallel zu diesem Prozess stand das landwirtschaftliche Personal vor der Herausforderung, sich die Fähigkeiten anzueignen, mit diesen neuen Maschinen und Technologien zu arbeiten, um die Produktivität der Betriebe zu steigern und sie auf dem Markt wettbewerbsfähiger zu machen. Heute konzentriert sich die GAP auf die Idee, die Innovation in den landwirtschaftlichen Betrieben der EU-Mitgliedstaaten zu beschleunigen. Diese Idee wird durch die Ausgabe von Geldern in Richtung der Digitalisierung der landwirtschaftlichen Produktion, der Umsetzung der Prinzipien der Kreislaufwirtschaft sowie der Bioökonomie in der Entwicklung der landwirtschaftlichen Betriebe umgesetzt. Dieser Prozess schafft wiederum den Bedarf an Ausbildung und finanzieller Förderung der Landwirte, um diese neuen Herausforderungen im etablierten Geschäftsumfeld zu bewältigen.

Ziel dieser Studie ist es, den Innovationsprozess in landwirtschaftlichen Betrieben in Bulgarien zu diagnostizieren und die wichtigsten Ergebnisse des Innovationsmanagements in landwirtschaftlichen Betrieben zu ermitteln.

**STICHWORTE:** Innovation, GAP, Landwirtschaft, Innovationssystem

### RÉSUMÉ

Les innovations dans l'agriculture bulgare au cours des 10 dernières années sont un fait et le rôle de la politique agricole commune (PAC) dans leur mise en œuvre dans le secteur ne peut être nié. Avec

l'aide de la PAC, l'agriculture bulgare a renouvelé ses machines, équipements et technologies utilisés dans la production. Parallèlement à ce processus, le personnel agricole a dû relever le défi d'acquérir des compétences pour travailler avec ces nouvelles machines et technologies afin d'augmenter la productivité des exploitations et de les rendre plus compétitives sur le marché. Aujourd'hui, la PAC se concentre sur l'idée d'accélérer l'innovation dans les exploitations agricoles des États membres de l'UE. Cette idée se concrétise par des dépenses dans le sens de la numérisation de la production agricole, de la mise en œuvre des principes de l'économie circulaire ainsi que de ceux de la bioéconomie dans le développement des exploitations agricoles. Ce processus, à son tour, crée le besoin de formation et d'encouragement financier des agriculteurs pour faire face à ces nouveaux défis dans l'environnement commercial établi.

L'objectif de cette étude est de diagnostiquer le processus d'innovation dans les exploitations agricoles en Bulgarie et de déterminer les principaux résultats de la gestion de l'innovation dans les exploitations.

**MOTS CLÉS:** innovation, PAC, agriculture, système d'innovation

## INTRODUCTION

The innovations in the Bulgarian agriculture during the last 10 years are a fact and the role of the Common Agricultural Policy (CAP) for their implementation in the sector cannot be denied. With the help of the CAP, Bulgarian agriculture renewed its machines, equipment and technologies used in production (Borisov, Kolaj, Yancheva, and Yancheva, 2019). In parallel with this process, farm staff faced the challenge of acquiring skills to work with these new machines and technologies so as to increase farm productivity and make them more competitive in the market. Today, the CAP is focusing on the idea of accelerating innovation in agricultural holdings in EU Member States (Stoeva, Dirimanova, and Borisov, 2021). This idea is realized through the spending of money in the direction of digitalization of agricultural production, implementation of the principles of the circular economy as well as those of the bio-economy in the development of agricultural holdings (Popova, 2021). This process, in turn, creates the need for training and financial encouragement of farmers to cope with these new challenges in the established business environment.

The purpose of this study is to diagnose the innovation process in agricultural holdings in Bulgaria and to determine the main results of innovation management in farms.

The CAP influences the innovation process in agriculture both in terms of the renewal of the production resources used and in terms of the products produced for the final consumer (Radev, Borisov and Miladinovski, 2019). The present study analyzes the state of the innovation process at the farm level. The systematic approach is used as a leader in the diagnosis of the innovation process in agricultural holdings. Agriculture is presented as an open system that interacts with the environment. This system interacts with the environment through its inputs and outputs, which is why innovations are explored both at the input and at the output of the farm system (Borisov, Stoeva, and Dirimanova, 2021).

**Research methodology.** The main method used to gather information about the state of the innovation process in agricultural holdings is the personal interview accompanied by filling out a special questionnaire. The survey of 180 agricultural holdings from different planning regions of the Republic of Bulgaria aims to gather information needed to determine the factorial and performance indicators and markers used as reliable diagnostics of the innovation process in agricultural holdings.

Organizing the survey

In order to gather the necessary information, the calculation of the above indicators is based on the implementation of the following research activities:



- preparation of a questionnaire for studying the state of the innovation process in agricultural holdings;
- conducting a survey and focus groups of farmers

The database of the Rural Development Directorate and the Compensatory Measures Directorate at the Ministry of Agriculture and Food - Sofia was used as a source for the sample formation. The obtained general population consists of 10,542 organizations that meet the criteria defining them as agricultural holdings in the country. In the formation of the sample, the method of simple random sampling was used, as its constituent units were selected by irreversible selection. The sample size is 180 agricultural holdings.

**Table 1.** Number of surveyed agricultural holdings by regions. Source: Own.

Area (NUT2)	Number	Survey period
Plovdiv	30	02/10 - 02/17/2022
Pazardzhik	30	03/01 - 03/17/2022
Sliven	30	20/03 – 05/04/2022
Haskovo	30	04/05 - 04/18/2022
Kardzhali	30	21/04 – 28/04/2022
Yambol	30	04/30 - 05/10/2022
<b>Total:</b>	<b>180</b>	

**Questionnaire.** A specially developed questionnaire aims to collect information that will characterize the innovation process at the agricultural level. The structure of the questionnaire is subject to the logical framework - collecting adequate and accurate information needed to calculate factorial and performance indicators as well as for the calculation of effect markers.

## RESULTS AND DISCUSSION

**Typology of the surveyed farms.** In order to collect reliable information, a survey was conducted, which covers 180 agricultural holdings in the city of Plovdiv, Pazardzhik, Sliven, Haskovo, Kardzhali and Yambol. The period of the survey is from 10.02 to 30.05. 2022 The purpose of the survey is to collect information on the state of the innovation process in agricultural holdings.

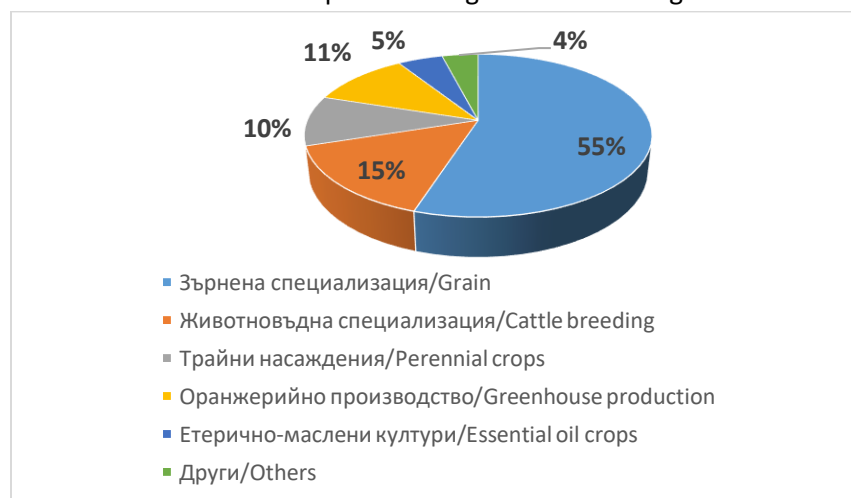


Figure 1. Specialization of the surveyed farms. Source: own survey among 180 farms, 2022.

The structure of the surveyed farms according to their specialization is given in Figure 1. The data show that 55% of the surveyed farms specialize in growing cereals, followed by farms with livestock specialization - 15%, farms with specialization in greenhouse production - 11% and farms with perennial crops - 10%.

Figure 2 shows the structure of agricultural holdings according to when they have existed as a business model on the market. According to the data, the predominant holdings are over 10 years of age (they occupy 35% of the total surveyed holdings), followed by the group of holdings under 5 years of age - 35% and finally those with 5 to 10 years of age, respectively - 30%.

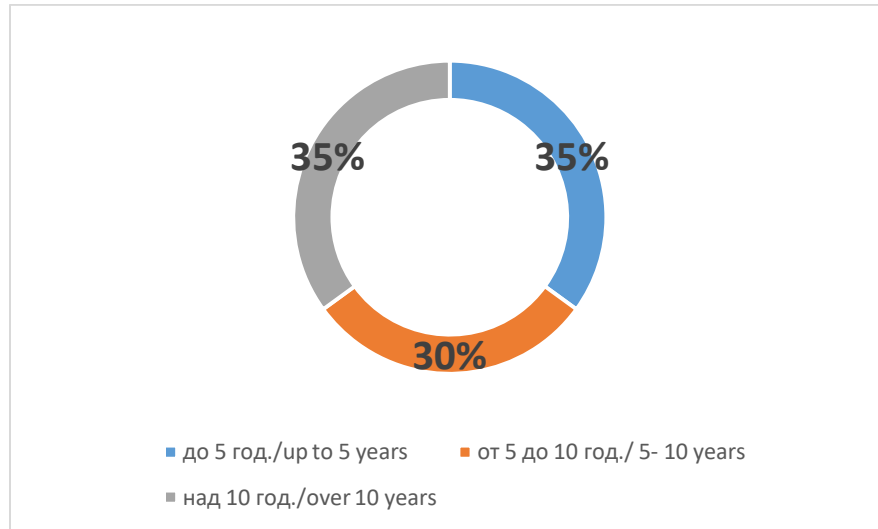


Figure 2. Maturity of agricultural holdings. Source: own survey among 180 farms, 2022.

In 2/3 of the surveyed farms, the farmers who manage the farm are for men. On ½ of the farms the number of permanent employees is less than 10 people.



Figure 3. Sources of financial assistance that farms use. Source: own survey among 180 farms, 2022.

85% of the surveyed holdings used financial aid under one of the schemes or measures set out in the CAP 2014-2020 (see Figure 3). Farmers on 10% of the farms surveyed say they have not used financial

assistance during the current CAP. The remaining 5% of farms use financial aid other than that provided by the CAP 2014-2020. All surveyed farms state that financial aid is vital for their future development and they rely on it to renew their assets.

**Innovation at the entrance to the farm system.** One of the reliable measures for the state of the innovation process in agricultural holdings is the cost of acquiring new assets. Figure 4 provides information on the dynamics of costs for the acquisition of new buildings and land on farms in the last 5 years. The data show that the costs of acquiring such assets are increasing - 38% of the surveyed farms declare this as a fact. This means that investments have been made in these farms for innovation, providing the building and land fund. In 31% of the farms the costs for acquisition of new buildings and lands do not change, and in 24% of the farms such costs have not been made in the last 5 years. Only 8% of farms reduce these costs. In general, it can be concluded

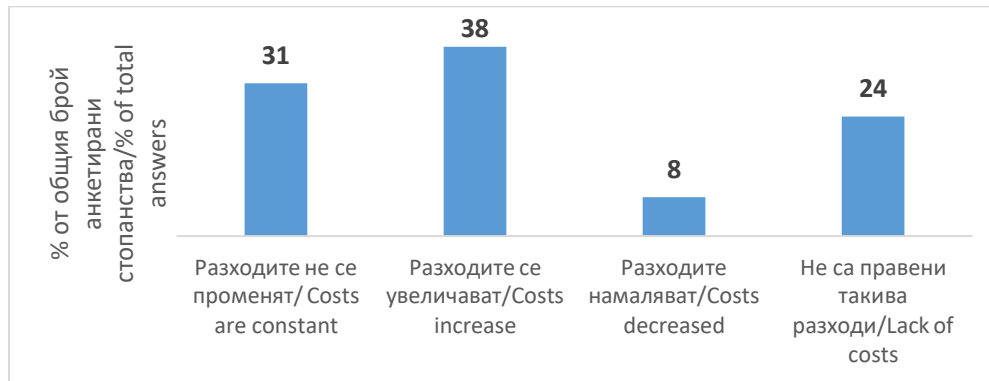


Figure 4. Change in the cost of acquiring new buildings and land. Source: own survey among 180 farms, 2022.

Figure 5 provides information on the dynamics of the costs of acquiring new machinery and equipment on farms. Of all 180 farms, 51% declare that the costs of renovating these assets have not changed in the last 5 years. In 42% of farms, the costs of acquiring new machinery and equipment increase, and in 6% no such costs have been incurred. In general, the renewal of machinery and equipment on agricultural holdings occurs at 93% of the surveyed costs, and in half of them they remain constant.

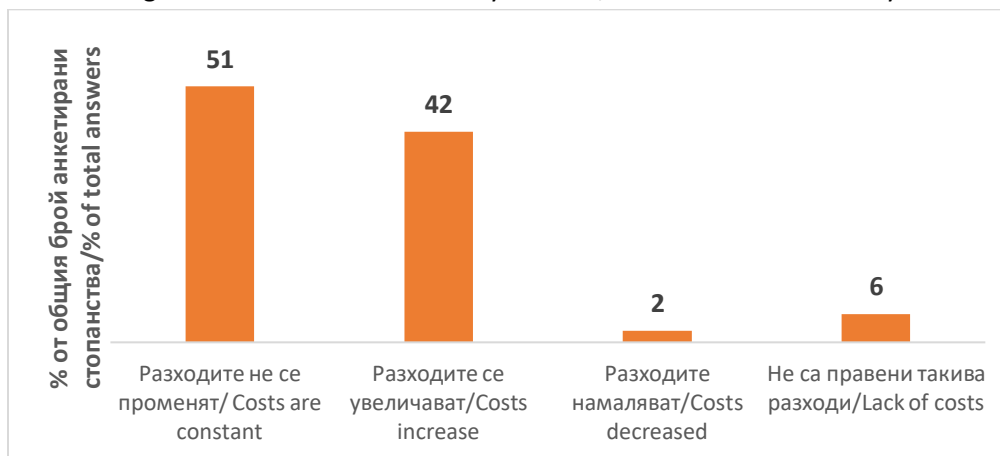


Figure 5. Changing the cost of acquiring new machinery and equipment. Source: own survey among 180 farms, 2022.

The data presented in the last two figures show that innovations in new physical assets exist, and the trend is the cost of their acquisition on farms is not to change over time.

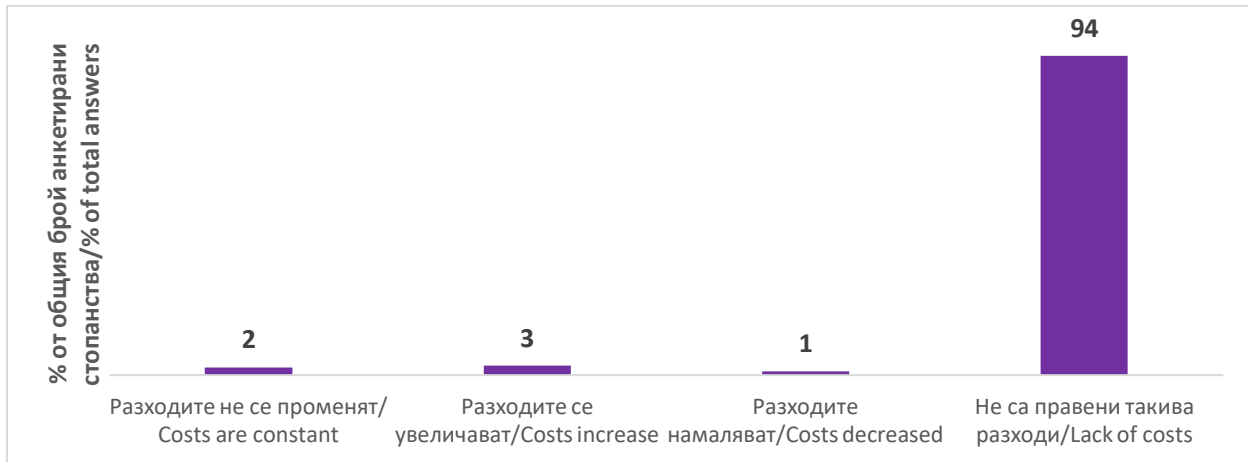


Figure 6. Changing the cost of acquiring new licenses and patents. Source: own survey among 180 farms, 2022.

Through patents and licenses it is one of the ways for technological renewal of agricultural holdings. Figure 6 provides information on the costs of acquiring these non-physical assets on farms. The presented data show that agricultural holdings are reluctant to incur expenditures for this type of innovation - 94% of the surveyed holdings have not incurred such expenditures in the last 5 years. Obviously, technological renewal happens in another way, which cannot be captured by an indicator - acquisition costs. This is evidenced by the data presented in the following figure 5. According to these data, agricultural holdings are updating their technological level - 53% of the surveyed holdings declare that this is a fact. The main supplier of new technology is the one who delivers the planting and / or seed material, or the supplier of preparations and fertilizers necessary for the organization of agricultural production. The supplier does not require payment for the transfer of technology on the farm, and the costs are most likely calculated in other resources and activities that he supplies to the farmer. Another part of the new technologies is supplied by specialized suppliers - as such services are defined digital services, which a part of agricultural holdings (only 33%) use in organizing and managing agricultural production. Such specialized providers are those that supply smart equipment (hardware and software) or typical mobile services (A1, Vivacom, Telenor).

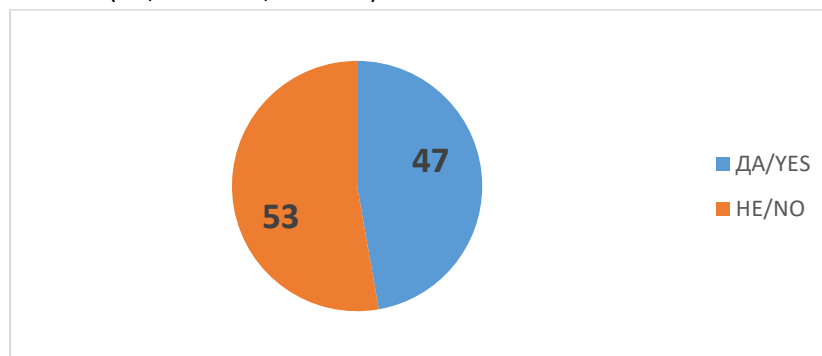


Figure 7. Acquired new technology farms. Source: own survey among 180 farms, 2022.

**Types of technological innovations that farms implement.** Technological innovations used by agricultural holdings aim to solve specific problems of farmers in organizing the production and trade of agricultural products. The following figure shows the directions of use of new technologies in the studied farms. From the data presented in Figure 8, it can be seen that in 31% of the farms, the new technology that has been introduced is one that allows to achieve higher quality of the produced products. In 25% of the farms, the new technology they have introduced in the last 5 years is one that allows them to penetrate new markets. In 25% of the farms the investments are in the direction of introduction of resource-saving technology. In 21% of the farms there is a new technology that allows to achieve diversification of products.

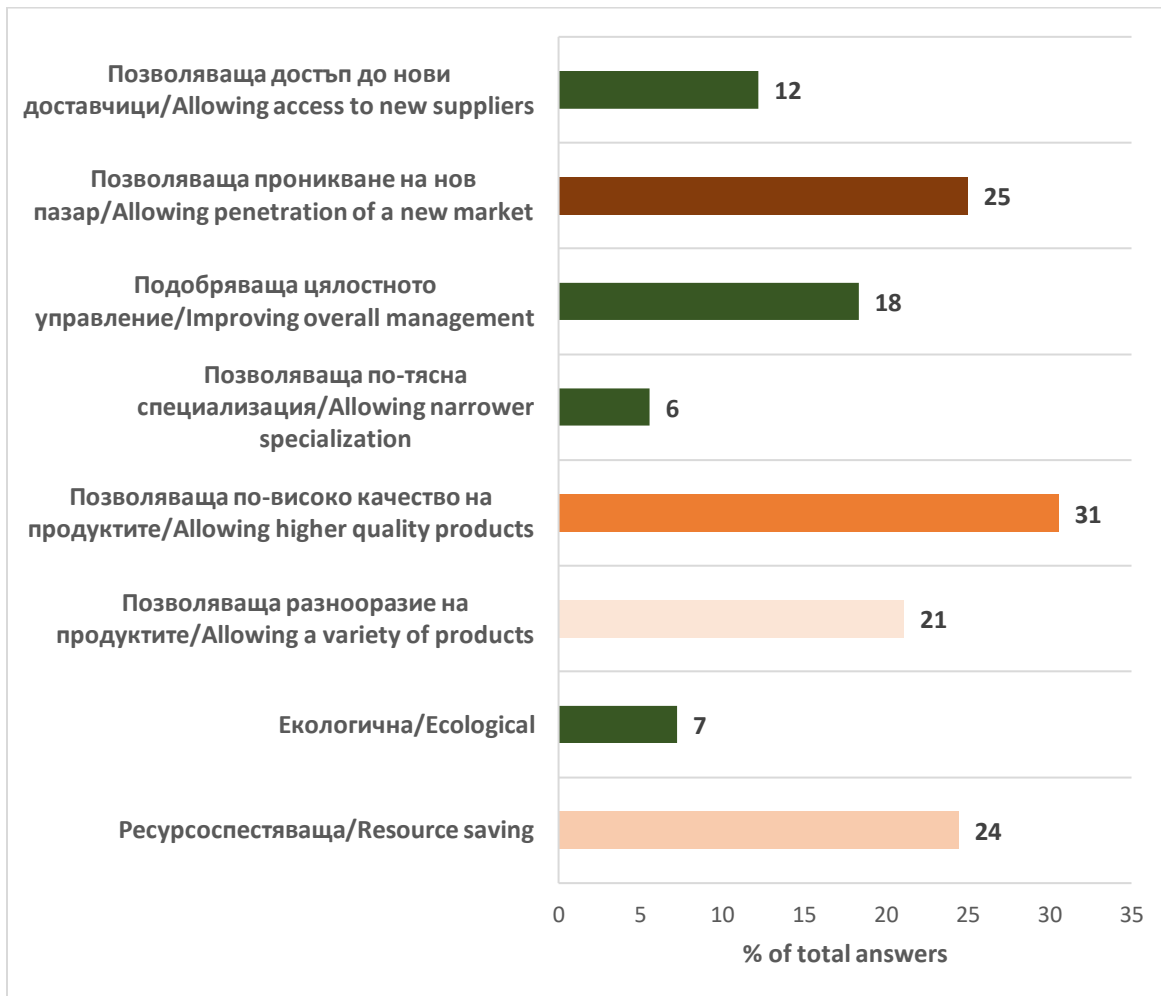


Figure 8. Types of new technologies that are implemented in agricultural holdings. Source: own survey among 180 farms, 2022.

**Change in the qualification of employees on agricultural holdings.** Technological renewal in agricultural holdings requires a change in the qualifications of those employed in production. In the event of a radical change in the technological level of the farm, the staff needs to undergo training and acquisition of new knowledge and new skills that will allow them to adapt to new technological

requirements. One of the questions in the survey is "How have the costs of staff training changed over the last 5 years?", Which aims to establish the existence of such practices on farms. According to the data in Figure 9, 44% of the surveyed farms do not incur expenditure on staff training. Overall, 50% of the holdings have incurred such costs, with 36% of the surveyed holdings increasing the costs of this activity, and at 14% they have not changed in the last 5 years. These data indirectly show that the qualification of those employed in production takes place, with farmers setting aside funds for this activity.

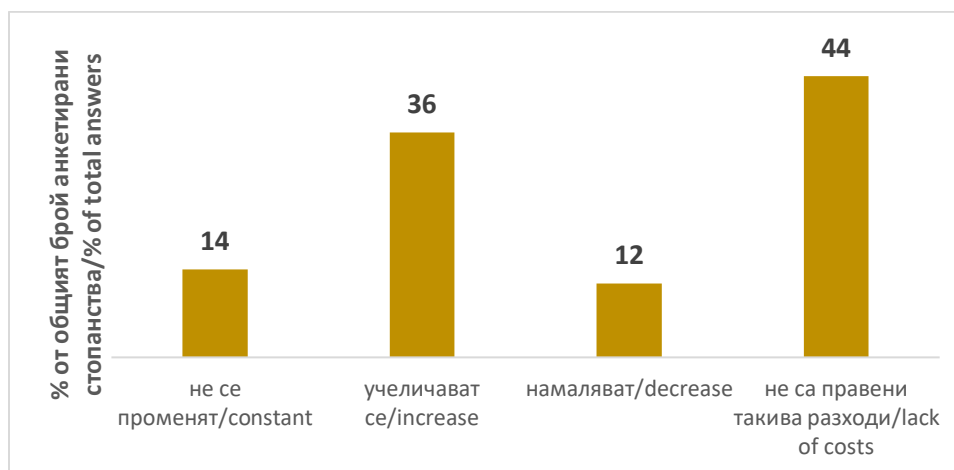


Figure 9. Expenditures of agricultural holdings for raising the qualification of the staff. Source: own survey among 180 farms, 2022.

From the conducted survey it is clear that the qualification of the staff is aimed at the formation of the following more important skills:

- Skills related to working with new machinery and equipment (50% of the surveyed farms say so);
- Skills related to the overall management of production - 35% of respondents give this answer;
- Skills related to working with specific software - 10% of the surveyed farms;
- Other skills (teamwork, financial management, human resources management, marketing management, etc.) - 5% of the surveyed farms.

The data from the conducted field research prove that farmers and other persons employed on the farm are improving their skills in the direction of using new machines and equipment, due to the application of a new technological level in production.

**Expenditures for research and development in agricultural holdings.** In the existing theoretical models for managing the innovation process in the economic sectors of the world, the level of spending on research and development (R&D) is a key factor in creating an innovation environment. In Bulgaria, according to NSI data, R&D expenditures in the last 10 years are traditionally borne by the state - 95% of these expenditures are incurred by the state (see Figure 10). The remaining 5% is made by the private sector, which defines it as a symbolic player in the formation of an innovation environment. The main representatives of the private sector who make R&D expenditures for business angels and companies whose main activity is the supply of products with a specific purpose, which are mainly consumed by the state.

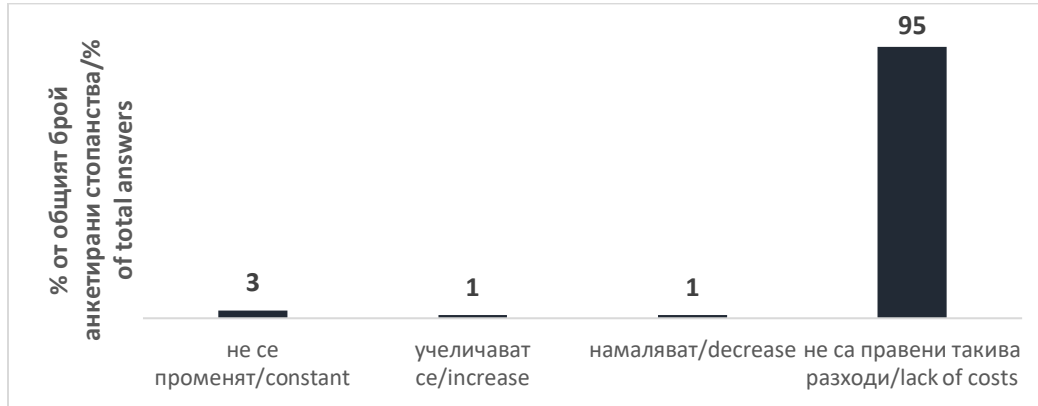


Figure 10. Expenditures for research and development in agricultural holdings. Source: own survey among 180 farms, 2022.

The state, as the main generator of R&D expenditures, supports the network of research institutes and universities through subsidized support, which must offer innovations for the needs of business. The next question in the survey aims to gather information on the state of R&D expenditures in Bulgarian agriculture. Figure 56 shows information reflecting the responses received from 180 farms. According to 95% of surveyed farms, R&D expenditures are not incurred. The main reasons for the lack of such costs are:

- Lack of understanding of the nature of R&D expenditure;
- Insufficient funds to be set aside for research and development;
- Lack of trust in R&D activities as a source of innovation.

It can be summarized that R&D expenditures are mainly concentrated in research organizations - institutes and universities, and farms should only be users of R&D results in these structures.

**Innovation at the end of the farm system.** The innovation process and its efficiency are measured by the state of the output of the farm system, namely what innovations the farm offers on the market and what effects are observed on the economic condition of this business structure.

**Changes in the specialization of agricultural holdings.** One of the effects observed in assessing the impact of the CAP on the innovation process in agriculture. This part of the dissertation analyzes the influence of the CAP on the specialization of the individual farm.

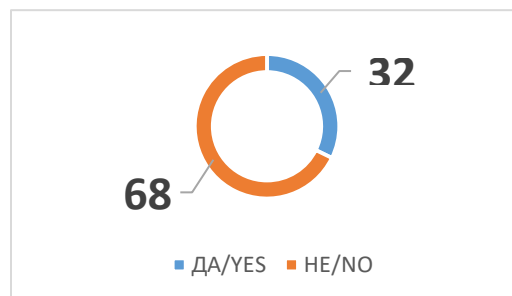


Figure 11. Change in the specialization of agricultural holdings. Source: own survey among 180 farms, 2022.



The results of the survey among 58 farms show that the majority of agricultural holdings (23% of the total of 58 surveyed holdings) have changed their specialization as a result of the application of the CAP (see Fig. 11). The main motive they point out for the conversion of production into another type is the financial aid provided for the organization of the new type of production. Almost 65% of the surveyed farms state that the choice for a new type of production is determined by a preliminary analysis of the crops and breeds of animals that are subsidized at the highest levels by the state.

Another important factor that is taken into account when changing the specialization of farms is market demand - 8% of surveyed farms say that this factor was key in their transition to another type of production in the last 5 years (see Fig. 12). Lastly, farmers indicate (15% of the total number of farms surveyed) that personal motives have been a major factor in the change in specialization over the last 5 years.

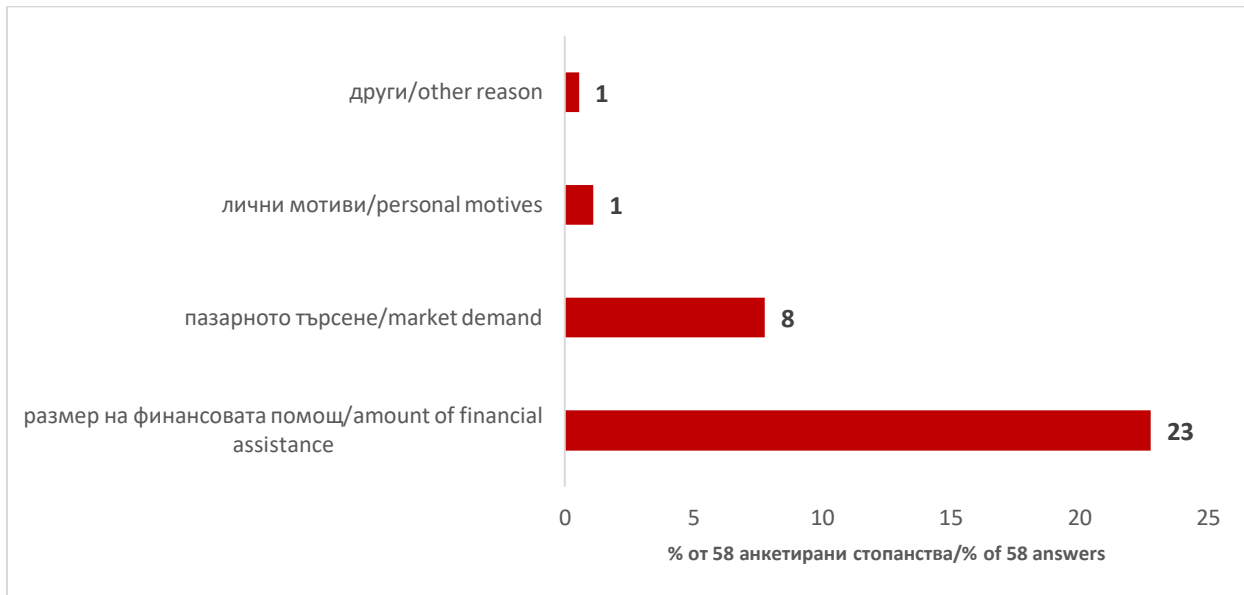


Figure 12. Factors determining the change in the specialization of agricultural holdings. Source: own survey among 58 farms, 2022. The total number of farms covered in the survey is 180, but only 58 farms answered the question in the survey, which aims to gather information about the factors determining the change in their specialization over the past 5 years.

Another important factor for the change in the specialization of the agricultural holding is the effective organization and management of the resource security of the production. With the rise in price of one basic production resource, the farmer seeks to replace it with another cheaper one and thus maintain his market competitiveness. Another reason for replacing more than one resource with another may be the state, which seeks to regulate a relatively smaller impact of the industry on the environment. Most often, the state resorts to financial incentives to motivate farmers to switch to another production specialization that puts less pressure on the environment and at the same time provides higher income from the activity.

**Change in the product range and business model of agricultural holdings.** Offering innovation to the market is a high-risk activity and few are willing to take the risk of offering an entirely new product that

currently has no close substitute. Agriculture has its own specifics, which determines the generally lower degree of innovation of the industry compared to other economic sectors in the country. In agriculture, the turnover of capital is lower, investments are slower to return, force majeure circumstances are more common in the organization of this type of production activity than in others. All this determines the rarer occurrence of real innovations on the part of farms.

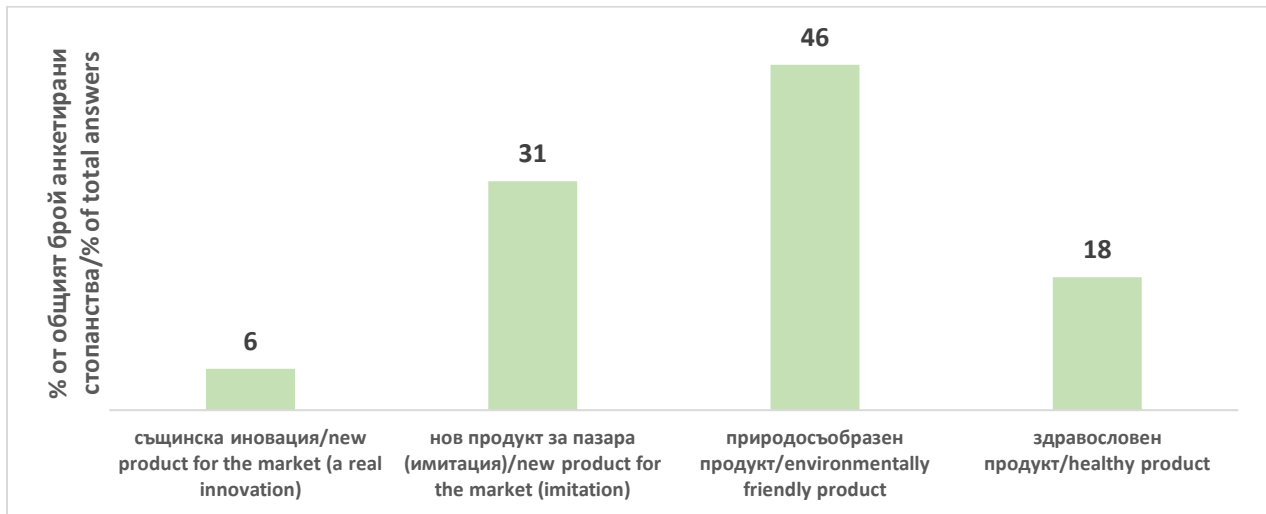


Figure 13. Types of innovations that farms offer to the end user. Source: own survey among 180 farms, 2022.

Figure 13 provides information on the types of innovations that farms offer to their customers. The data show that only 6% of respondents farms have launched a real innovation (a product that has no analogue on the market at the moment). Of all the surveyed farms - 31% have stated that in the last 5 years they are trying to impose a new product on the market, which is an imitation of an already established product on the market.

Farmers rely mainly on innovations that are environmentally friendly products - 46% of surveyed farms, indicate that their innovations are of this type (environmentally friendly) and those that are defined as a healthy product - 18% of total surveyed farms. From the data obtained, it can be concluded that farmers recognize the environmental friendliness and health of products as a source of innovation that has market value. The demand for environmental friendliness is motivated by the farmer's desire to receive additional income in the form of a subsidy paid by the state in exchange for the farmer's "green" practice. The healthy nature of the product produced is the farmer's goal, determined by his desire to provide a higher value-added product in demand on the market and thus increase sales revenue.

In addition to the change in specialization as a result of the application of the CAP and as an important sign of the existence of an innovation process in agriculture, it is sought whether the CAP puts pressure on the type and structure of the business model of the farm. The next question in the survey is to collect such information. Figure 60 shows the responses of farmers regarding the change in the business model over the last 5 years. The data show that farmers have been influenced by the application of the CAP and have changed their business model - 121 farms, point this out as a fact.

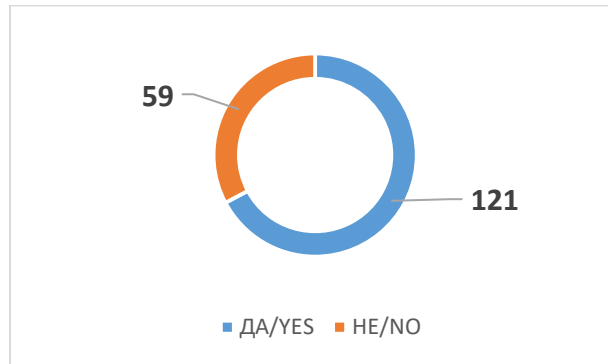


Figure 14. Change in the business model of the farm affected by the application of the CAP. Source: own survey among 180 farms, 2022.

Apart from the fact that the business model may change under the influence of the CAP, its structure, which determines its competitive advantage, may also be changed. Figure 61 provides information on the factors of the business model that farmers identify as critical in its restructuring. The data show that the received financial assistance is the most important factor that determines the type of business model - 49% of the surveyed farms indicate this factor. Another important factor determining the change in the business model is the access to new customers - 21% of the surveyed farms indicate this factor. In addition to customers, farms are restructuring their business model to reach new suppliers - 17% of farms indicate this factor.

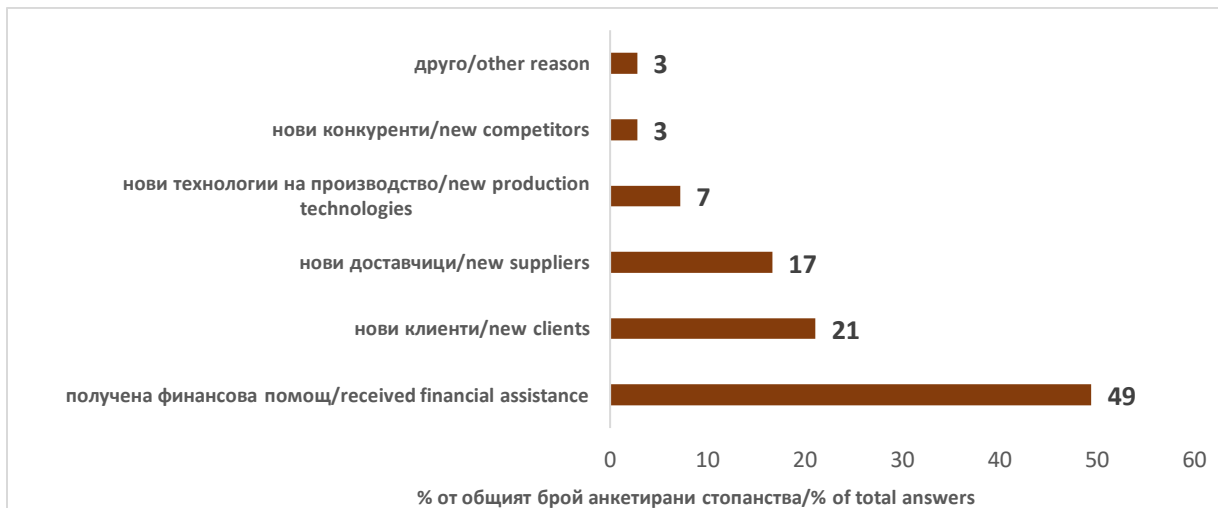


Figure 15. Important elements of the business model of agricultural holdings that form a competitive advantage. Source: own survey among 180 farms, 2022.

Taking into account the data in Figures 14 and 15, it can be concluded that financial assistance under the CAP is the most important factor that changes the business model in agriculture. Farmers are ready to change the business model in whole or in part so that they can receive even higher levels of subsidies and thus ensure their viability over time. This is evidenced by the data generated by the Agricultural Accounting Information System, according to which more than 2/3 of the income of farms is formed from the financial assistance received under the CAP.

**Changes in productivity and profitability of agricultural holdings.** Labor productivity is used as a key measure of the effectiveness of the outcome of the innovation process in agricultural holdings. Figure 62 shows information on the change in labor productivity in the surveyed agricultural holdings. The data show that in 59% of the farms labor productivity has increased due to the introduction of innovations in production. In 18% of the labor productivity remains unchanged due to the introduced innovations, and in 23% of the farms the labor productivity decreases as a result of rationalization through innovations in the production.

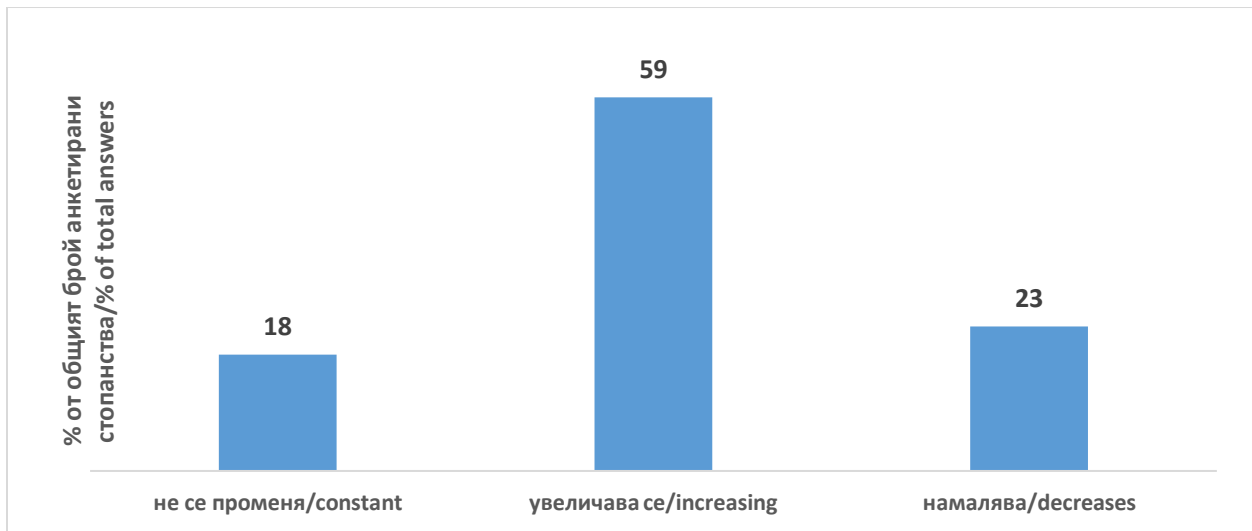


Figure 16. Change in labor productivity of agricultural holdings. Source: own survey among 180 farms, 2022.

As a result of the higher productivity of the implemented innovation, the revenues are expected to increase, and hence the income from the farm's activities.

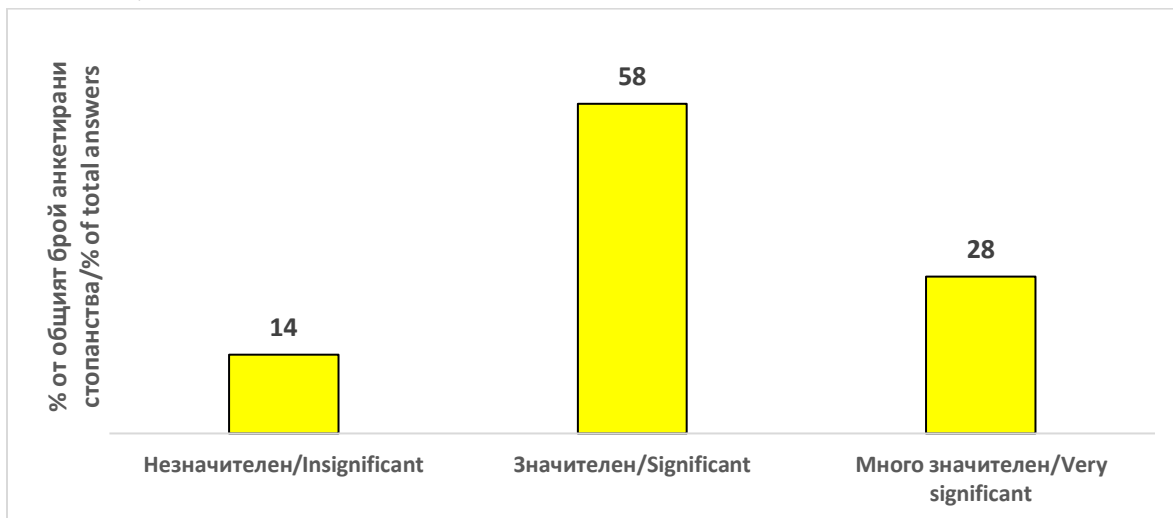


Figure 17. Contribution of new products to the total income from the activity of the farm. Source: own survey among 180 farms, 2022.

Figure 17 shows the contribution of new products to the total income from the activity of agricultural holdings. According to 58% of the surveyed farms, the contribution of new products to the total revenue generated is significant (ie they generate more than 30% of sales revenue). In 28% of the farms, the contribution is exceptional, ie the new products generate more than 50% of the sales revenues on the farm. The data obtained show that innovation has a significant impact on farm incomes. This defines the innovation process as having a positive impact on the farm's ability to generate revenue during the year. The profitability of the farm is also influenced by the level of production costs.

According to the survey, production costs increase with the introduction of innovations on the farm - 92% of farms say their costs have increased.

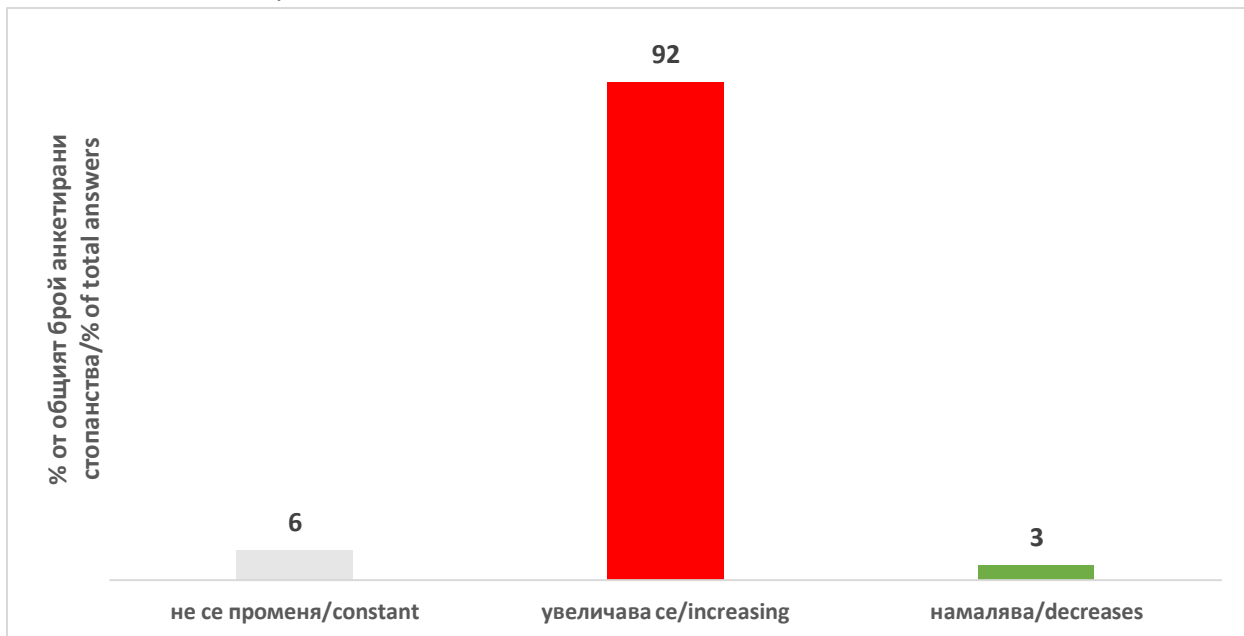


Figure 18. Change in the level of production costs on agricultural holdings. Source: own survey among 180 farms, 2022.

Only 3% of agricultural holdings show a reduction in production costs as a result of the introduction of innovations in production.

There are a number of factors that affect the level of production costs on farms during the year. According to the survey, the most critical factor influencing the amount of production costs on the farm is inflation - 56% of farmers indicate this factor. Inflationary processes that are currently observed in the Bulgarian economy are also present in agriculture, which is a country of higher prices of production resources - electricity, fertilizers, detergents and agronomic services. All this "swells" the farmer's account and he transfers the inflationary pressure to the end user. Another factor that puts significant pressure on the level of production costs is the amount of financial assistance received under the CAP - 34% of the surveyed farms. Farmers, tend to incur more production costs at higher levels of subsidies received. Motivated by the growth of revenues, they strive to follow good production practices and make higher costs by performing quality activities during the business year.

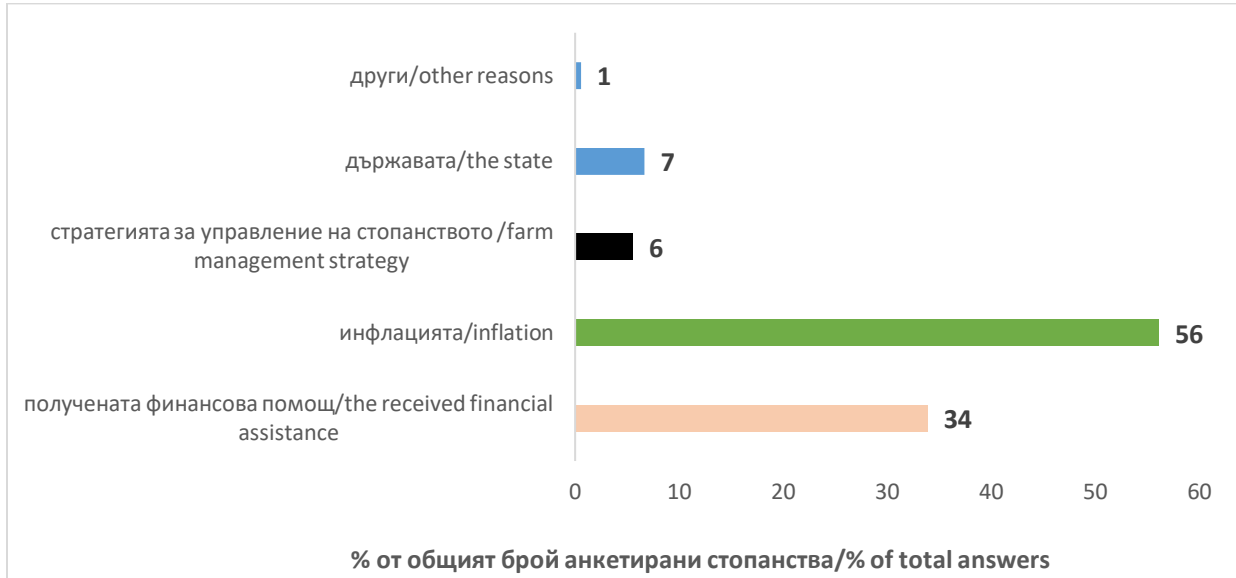


Figure 19. Factors having a significant impact on the level of production costs on farms. Source: own survey among 180 farms, 2022.

As a result of the increase in production costs in the last year, more than half of the surveyed farms point out that their profits have decreased, with 54% of the farms stating that their income has shrunk significantly.

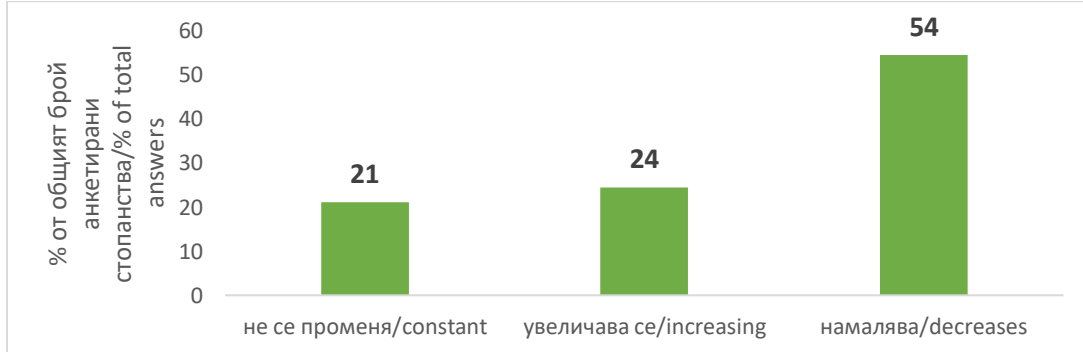


Figure 20. Changes in the profit of agricultural holdings. . Source: own survey among 180 farms, 2022.

**Change in agricultural investment.** One of the markers for the presence of an innovation process in agricultural holdings is the size and dynamics of their investments. The survey of 180 agricultural holdings shows that in 56% of agricultural holdings investments have increased in recent years (see Figure 21). In 28% of farms, the cost of investing in innovation remains unchanged. The data prove that the investment activity within the CAP 2024-2020 is increasing. Only 13% of the surveyed farms reported a decrease in the amount of investments made, and 3% lacked any investments at all in the last 5 years (see Fig. 21).



Figure 21. Dynamics of investments in agricultural holdings. Source: own survey among 180 farms, 2022.

Despite the reported increase in investment activity among more than half of agricultural holdings, it is necessary to analyze the factors that prevent farms from expanding their investments in the future. The figure below shows the main reasons why farmers cite their investment activity. According to the data, 31% of farmers say that the main obstacle to the investment process is the lack of new markets. Another important limiting factor is the lack of investment management skills - 25% of surveyed farmers cite this as the main reason. Of all respondents, 18% say they do not invest due to lack of enough financial resources. Apparently the lack of market and skills formed to the main, dominant factors limiting investment in agricultural holdings in the current CAP 2014-2020.

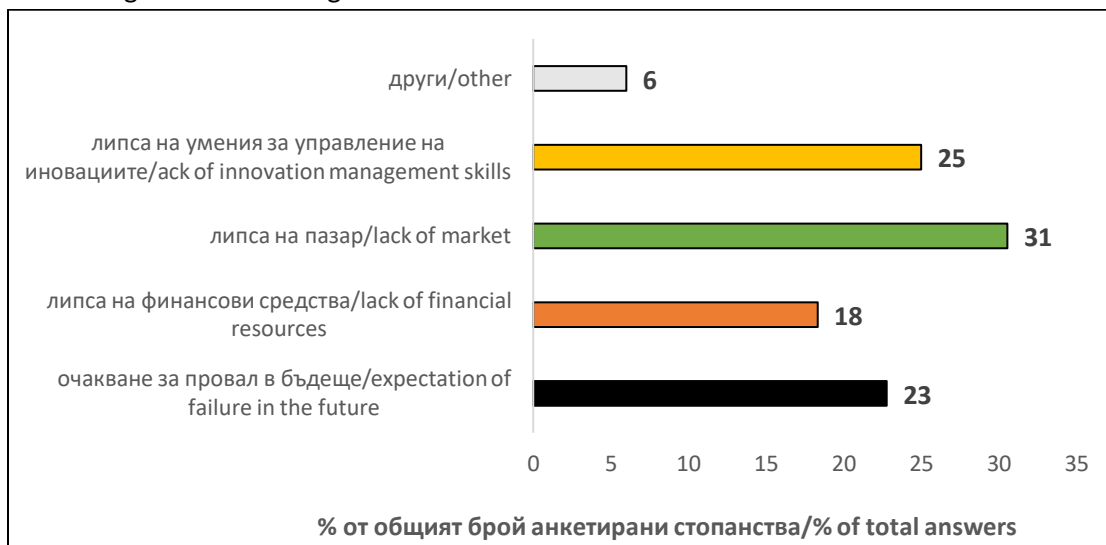


Figure 22. Factors limiting investment in agricultural holdings. Source: own survey among 180 farms, 2022.

The lack of skills for managing the investment process can be overcome by training farmers and disseminating good practices in this area among the farming community. Regarding the lack of sufficient finances, it could be considered to motivate stronger intervention in the sector by banking institutions, which would play a key role.



## CONCLUSIONS

- Leading technological innovations in agricultural holdings that allow the achievement of higher quality of manufactured products, penetration of new markets, saving resources, as well as allowing the achievement of diversification of manufactured products.
- The results of the conducted field research prove that farmers and other persons employed on the farm, increase their skills in the direction of using new machinery and equipment, due to the application of a new technological level in production;
- R&D expenditures are not observed in most farms. According to 95% of surveyed farms, R&D expenditures are not incurred. The main reasons for the lack of such costs are: (1) Lack of understanding of the nature of R&D costs; (2) Insufficient funds to be set aside for research and development; (3) Lack of confidence in R&D activities as a source of innovation. It can be summarized that R&D expenditures are mainly concentrated in research organizations - institutes and universities, and farms should only be users of R&D results in these structures;
- Financial assistance under the CAP 2020-2014 is the main reason for the conversion of production on farms;
- Farmers rely mainly on innovations that are environmentally friendly products - 46% of surveyed farms, indicate that their innovations are of this type (environmentally friendly) and those that are defined as a healthy product - 18% of total surveyed farms. From the data obtained, it can be concluded that farmers recognize the environmental friendliness and health of products as a source of innovation that has value in the market;
- In addition to the change in specialization as a result of the application of the CAP and as an important sign of the existence of an innovation process in agriculture, it is sought whether the CAP puts pressure on the type and structure of the business model of the farm. The data show that farmers have been influenced by the application of the CAP and have changed their business model;
- One of the markers for the presence of an innovation process in agricultural holdings is the size and dynamics of their investments. The survey of 180 agricultural holdings shows that in 56% of agricultural holdings investments have increased in recent years. The data prove that the investment activity within the CAP 2024-2020 is increasing;
- Subsidies have a significant impact on the formation of assets in agricultural holdings. This is evidenced by the correlation coefficient, which in the relationship of paid subsidies and acquired assets on average in one farm is 0.9703. When analyzing the relationship between subsidies and the profitability achieved on the farm from their use, the correlation coefficient is low, namely 0.167. Regression analysis does not prove the expected dependence that with the increase of subsidies in a farm, its profitability increases in direct proportion;
- The CAP has a crucial role in the acquisition of new assets in agricultural holdings in our country. With the increase of the aid in this direction it is expected to increase the value of the acquired new assets in the farms.

## REFERENCES

Borisov, P., R. Kolaj, S. Yancheva, C. Yancheva (2019). Influence of common agriculture policy on Bulgarian agriculture. *Bulgarian Journal of Agricultural Science*, 2019 vol. 25 (No.3), 439-447 pp.

Borisov, P., T. Stoeva, V. Dirimanova (2021). Methodology for Assessing the Competitiveness of Agricultural enterprises. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development* Vol. 21, Issue 4, 2021 PRINT ISSN 2284-7995, E-ISSN 2285-3952, p. 81-88. (Web of science)

Popova, Iv. (2022). The role of Bio-economy in regional development of Bulgaria. *Journal of bio-based Marketing*, vol.1/2022, 71-81.

Radev, T., P. Borisov, S. Miladinovski. (2019). Intervention Effects of Rural Development Programme on Landscape Management in Bulgaria. *Faculty of Business Economics and Entrepreneurship. International Review* (2019/3-4), 62-72.

Stoeva, T., V. Dirimanova, P. Borisov (2021). The Impact of Digitalization on Competitiveness of Bulgarian Agriculture. *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development* Vol. 21, Issue 4, 2021 PRINT ISSN 2284-7995, E-ISSN 2285-3952, p. 561-564.

## RELATIONSHIP AND INTERACTION BETWEEN ECONOMIC DEVELOPMENT AND EMERGENCY MANAGEMENT

Shyqeri Kabashi<sup>1</sup>, Nexhmije Kabashi<sup>2</sup>, Atdhe Kabashi<sup>3</sup>

<sup>1</sup> E-mail: shyqerikabashi@kolegijbiznesi.com, Kolegji BIZNESI, 29 Motrat Qiriazi, Prishtina, Republic of Kosovo

<sup>2</sup> E-mail: nexhmije.kabashi@kolegijbiznesi.com, Kolegji BIZNESI, 29 Motrat Qiriazi, Prishtina, Republic of Kosovo

<sup>3</sup> E-mail: atdhekabashi@kolegijbiznesi.com, Kolegji BIZNESI, 29 Motrat Qiriazi, Prishtina, Republic of Kosovo

### ABSTRACT

Economic development is necessary to make the citizens of the country happy. But in order to have secure economic development, we need to organize emergency management to perfection. In order to have an emergency management of value for development safety, the risks that can cause disasters in society and the environment must be carefully analyzed and assessed.

Determining such a goal requires a stable and willing policy and long-term development plans of the country. We must therefore know in the first place that a developed economy cannot be achieved by a policy of instability and clans and declarative campaign plans.

It is considered that -the highest risk seems to come from the weakening of economic growth...And this weakening makes us not have a solid economy, not to have a visible development, not to have a presence of advanced experiences of developed countries, not to have the opportunity to show what we are doing or where we aim to achieve. These phenomena cause us to become fragile, to become deceitful, to become unserious, to become unreliable, to become beggars, to become cleansers of the country from the youth and the capable work force, as well as to finally be left without desire.

**KEYWORDS:** Keyemergency, safety, development, management, relationship, development, interaction

### ABSTRAKT

Die wirtschaftliche Entwicklung ist notwendig, um die Bürger des Landes glücklich zu machen. Aber um eine sichere wirtschaftliche Entwicklung zu haben, müssen wir ein perfektes Notfallmanagement organisieren. Um ein für die Sicherheit der Entwicklung wertvolles Notfallmanagement zu haben, müssen die Risiken, die zu Katastrophen in Gesellschaft und Umwelt führen können, sorgfältig analysiert und bewertet werden.

Die Festlegung eines solchen Ziels erfordert eine stabile und willige Politik und langfristige Entwicklungspläne des Landes. Wir müssen daher in erster Linie wissen, dass eine entwickelte Wirtschaft nicht durch eine Politik der Instabilität und der Clans und deklarative Kampagnenpläne erreicht werden kann.

Es wird davon ausgegangen, dass -das größte Risiko von der Schwächung des Wirtschaftswachstums ausgeht...Und diese Schwächung führt dazu, dass wir keine solide Wirtschaft haben, keine sichtbare Entwicklung, keine Präsenz der fortgeschrittenen Erfahrungen der entwickelten Länder, keine Möglichkeit zu zeigen, was wir tun oder wo wir hinwollen. Diese Phänomene führen dazu, dass wir zerbrechlich, betrügerisch, unseriös, unzuverlässig, bettelnd, das Land von der Jugend und den fähigen Arbeitskräften säubernd und schließlich wunschlos werden.

**STICHWORTE:** Schlüsselnotstand, Sicherheit, Entwicklung, Management, Beziehung, Entwicklung, Interaktion

### RÉSUMÉ

Le développement économique est nécessaire pour rendre les citoyens du pays heureux. Mais pour avoir un développement économique sûr, il faut organiser la gestion des urgences à la perfection. Afin d'avoir une gestion des urgences de valeur pour la sécurité du développement, les risques qui peuvent causer des catastrophes dans la société et l'environnement doivent être soigneusement analysés et évalués.

La détermination d'un tel objectif nécessite une politique stable et volontaire et des plans de développement à long terme du pays. Il faut donc savoir en premier lieu qu'une économie développée ne peut être atteinte par une politique d'instabilité et de clans et des plans de campagne déclaratifs.

On considère que - le risque le plus élevé semble provenir de l'affaiblissement de la croissance économique... Et cet affaiblissement fait que nous n'avons pas une économie solide, que nous n'avons pas un développement visible, que nous n'avons pas la présence des expériences avancées des pays développés, que nous n'avons pas l'opportunité de montrer ce que nous faisons ou ce que nous voulons atteindre. Ces phénomènes nous amènent à devenir fragiles, à devenir fourbes, à devenir peu sérieux, à devenir peu fiables, à devenir des mendiants, à devenir des nettoyeurs du pays de la jeunesse et de la main-d'œuvre capable, ainsi qu'à rester finalement sans désir.

**MOTS CLÉS:** Urgence, sécurité, développement, gestion, relation, développement, interaction

### INTRODUCTION

The time we are living in, shows that one field is increasingly affecting on another, developing or stagnant, namely one field is becoming dependent on another field or is developing another field. The field of economics is increasingly connecting to the field of emergencies, respectively in its management, and this is occurring reciprocally. Safety is of great importance for economic development - depending on the field. If there is no safety, we can have no development. As development progresses, the role of emergencies is becoming greater.

**Relationship** - mutual links and cooperation, assistance and interaction between two or more people, parties, states, organizations, etc. in a field of political, social, economic activity or in various jobs.

**Interaction** - Relationships and interdependencies between beings, objects or phenomena; close relationships between two or more people who live or work together or who have the same thoughts or common goals.

Natural and convenient coordination between the parts of something, well-aimed and well-proportioned union of the constituent elements of something; complete reconciliation between two things, mutual concordance according to a certain proportion.

Mutual action that exerts two different things or phenomena on each other, interaction. Interaction of socio-economic factors. Interaction between variants of literary language.

**Development** - The degree of social awareness and mental abilities, education, culture, moral perfection, etc. that someone has achieved; the degree of progress achieved by each other from the various fields of social activity and society as a whole. (FGJSSH - Dictionary of Albanian Language, f. 2271) Development is

a multi-dimensional process that usually means change from a less desirable state to a more desirable state. Development is a normative concept, and there is not a single universally accepted definition of it. Some say that development must be time-related, place-based, and circumstantial, and cannot be simplified to an all-encompassing formula. Increasing economic effects, expanding the productive capacities of a country's economy and technological progress are generally accepted as necessary conditions for development to be a long-term and continuous phenomenon, as well as industrial diversity and adaptability to external shocks. Economic development can not be separated from other aspects of development, but its greatest value may be that it expands the range of human possibilities to choose from. (Kabashi, Shyqeri – Shehu and Kudus, 2015)

**Economic** - It has to do with the organization and management of the economy, which is related to the material and financial situation of a country, a province, a branch of social production, a production enterprise, etc.; relating to the economy of a country. (Dictionary of Today's Albanian Language, Tirana, 1980)

**Management** – The process of conscious orientation through which the management personnel organizes and orients the units of the emergency forces, according to the joint task for a common purpose, coordinating the different resources in the process of planning, organization, development and control ( Kabashi, Shyqeri – Shehu and Kudus, 2015)

**Emergency** - Critical situation, difficult period. Dangerous situations for people's lives and the property of citizens and the public, which is created as a result of the occurrence of a catastrophe and the consequences that it exerts on the lives of the citizens of the affected region; in which accelerated and multiple measures and actions are required to be taken to overcome the situation and restore normalcy in the life of the country. Immediate and coordinated response, of all resources and forces and means necessary or possible to restore normalcy. Activating all central and local capacities of a country to save the lives of citizens, protect material goods and public health or to avoid or reduce the consequences of disaster in any part of the country. Organize and act to face the consequences of the disaster and liquidate these consequences and restore normalcy to the life of the country.

## RESULTS AND DISCUSSION

***Economic development and emergency management.*** Economic development is necessary to make the citizens of the country happy. But in order to have secure economic development, we need to organize emergency management to perfection. In order to have an emergency management of value for development safety, the risks that can cause disasters in society and the environment must be carefully analyzed and assessed.

Determining such a goal requires a stable and willing policy and long-term development plans of the country. We must therefore know in the first place that a developed economy cannot be achieved by a policy of instability and clans and declarative campaign plans.

It is considered that -the highest risk seems to come from the weakening of economic growth...” And this weakening makes us not have a solid economy, not to have a visible development, not to have a presence of advanced experiences of developed countries, not to have the opportunity to show what we are doing or where we aim to achieve. These phenomena cause us to become fragile, to become deceitful,

to become unserious, to become unreliable, to become beggars, to become cleansers of the country from the youth and the capable work force, as well as to finally be left without desire.

In order to have a modern level of economic development, a stable domestic policy is required, without social tensions, so as not to hinder the progress of the implementation of structural reforms and the fiscal consolidation agenda. -Implementing reforms, including those to strengthen the rule of law, are key to economic growth in the medium term and the prospects for EU accession discussions.” But on top of that we need to pay extra attention to the risks, which can damage our economy and drop us to zero even when we may have climbed to high levels. It would be the same as having our house covered in straw and lighting a fire in the yard when there is a strong wind.

Thus, climatic conditions that do not depend on us can be devastating if the necessary risk assessment measures and other preventive measures are not taken to turn them into threats or disasters for the country, ruining economic development and the lives of citizens. Such may be high temperatures and droughts in summer; as well as heavy rains in spring and autumn, etc.

**Rainfall, costs and benefits in the economy.** We will always have consequences that will affect economic development from climate change in the economic and social life of the country in the coming years. And this is not just an announcement but it turns out to be completely true. Extreme climate change, with droughts and heavy rains, has the potential to bring both cost and benefit to the economy. The costs are related to the damage to the economies of flooded households and agricultural crops of the area and the benefits of energy production in the country, which is an added value with many positive impacts on the overall economy of the country, when we have hydro-power plants to produce energy. Just as catchments can be filled when we have one for irrigation.

The flood in early spring comes at a greater cost to agriculture. Because part of the land is already planted with spring crops and the rest was in preparation for the summer season meetings, which usually take place during this period. Agriculture experts calculate the damage in this incalculable sector, if floods also flood the land surface, creating situations of water spreading on planted areas. Agriculture in this period is significantly developed and represents a variety of crops, from vegetables, wheat, corn, etc. Rainfall in this period in addition will delay the planting of spring crops, will make the flooded soil unusable for some time. But the financial losses of these rains, in addition to agriculture, are also material in nature, for businesses and families in the flooded area. Therefore, it can be said that climate change is a serious threat and important problem for agriculture, water resources, food security, rural living and poverty reduction in Kosovo. Their impact will be reflected on the inhabitants in environments which are directly dependent on agricultural production. But at the same time, it is estimated that -according to the analysis of the World Bank, as a result of climate change, temperatures have increased, there is humidity deficit. - Forest fires are more frequent and there is a greater exposure to new pests and diseases of crops, forests and animals.- (Blerina, 2019)

**The role of the state in economy.** In all modern economies, the state has an indisputable and even often primary role in economic activity. The basic task of the state in relation to the economies of each country is the creation and well-being of the functioning of the legal and institutional platform on which economic activity takes place. Economists today distinguish several important factors that justify the state's participation in economic activity, such as:

***Improper functioning of the market.*** Recurring economic crises clearly dictate the need for state intervention to overcome the temporary failure in the functioning of the market mechanism.

***The need to provide public goods and services.*** The state generally undertakes to provide for its citizens those goods and services, which are equally benefited by all citizens and to a large extent, without direct payment.

***The functioning of the state as a producer agent of material goods and services.*** In addition to the irreplaceable role in the creation and maintenance of the legal platform on which economic activity takes place, for various reasons, the State is implicated in certain cases directly in the production of material goods or services operating like any other economic agent in the market. The education or health system, the supply of electricity or water, public transport or the production of weapons are just a few examples of areas in which the state has traditionally been active in providing relevant products.

***The functioning of the state as a buyer of material goods and services.*** The state is also a buyer of goods and services in the market, through the purchase of products, from paper, computers, office equipment, food for schools and hospitals, to aircraft and ships, the state directly influences the activity of the private sector, checks the demand for the products and services it offers.

***The functioning of the state as a market regulator.*** The state intervenes in the market to ensure sustainable economic growth, price stability and employment growth. The state influences the functioning of the private sector through: 1. Establishment and maintenance of a market regulatory system in order to protect consumers, employees, the environment and avoid non-competitive and discriminatory practices, 2. Taxes, subsidies and lending which apply to businesses, individuals and any other unit of economic activity, 3. granting the rights to use, exploit or develop the national assets of a country.

***The role of the state in revenue redistribution.*** The revenue redistribution function constitutes one of the earliest roles of the state. In modern economies, the redistribution mechanism is mainly based on the taxation system that enables the receipt of income from certain social groups, and their redistribution through social assistance, social and health insurance or education systems, etc.

***The legacy of public institutions.*** Even in the most liberal countries, it has been impossible for some state economic functions to be transferred to the hands of the private sector. One case to which all world economies obey, for example, is the functioning of central banks, which are entirely a public function of the respective states or their economic clusters.

***For a sustainable economic development.*** In the context of comparative analysis and judgments of economic development experts, there is a broad debate seeking answers to questions such as: why the economies of some countries perform better and develop at a high and stable pace compared to other countries? Why is the US economy running better than the European one? Why are some economic models, even in small or developing countries, influencing sustainable economic development, while in other countries, even larger ones, the results continue to be mediocre? The answers to these questions are turning into economic and financial policies for action, are becoming filters for choosing the most appropriate governance strategies and measures and a stimulating and supportive business climate.

Experts have identified several key factors that can serve as a reference manual for economic and financial policy makers of countries that aim to have high and sustainable economic growth, that seek employment growth, that aim for as much space as possible for new technologies and innovation etc. Of



these factors, as the most important are identified as follows: Improving the culture of entrepreneurship; Financial system that directly supports entrepreneurship; Qualitative research institutes and centers; Efficient labor markets; Culture and fiscal models that encourage quality and intensive employment; Sustainable energy sources; Constantly growing well-educated population and workforce; -Easy and efficient" state, etc. (Civici, 2019)

**State and economic development.** One of the facts that best proves the implantation of a socialist mentality in public opinion is the fact that successive governments, either side, are proud and praised in front of the voters with the budget expenditures made, and this is taken for granted as something useful and valuable to the economy and not challenged by anyone. So there is already an unchallenged and unwavering conviction that the main source of prosperity and increased state welfare is inevitably the state with its investments. Although three decades have passed since the fall of the Berlin Wall, our society has not yet realized that the real engine of economic development is private enterprise (entrepreneurship-private business) in the conditions of market economy, free competition and rule of law guaranteeing the contract and private property.

When one hears the rhetoric of the rulers about investing here and investing there, to create the impression that we are talking about a generous benefactor who is honoring and respecting us with his generosity. It is forgotten that in the case of budget expenditures it is about our money, i.e. our common bag, and it is understood that every time a hand is put there to make any expenditure, a large part of the amount of our common money is poured on the road to get into the pockets of these -generous rulers". Therefore, before rubbing their hands and expressing gratitude for investments in infrastructure by the government, the ordinary citizen should reflect on where the government would get this money.

The main sources of government spending are naturally taxes, borrowing or cutting money and each of these alternatives used to finance government spending has negative consequences.

Thus, for example, tax increases in themselves undermine the incentives that citizens have to engage in private enterprise, savings and investment.

It is understood that there are some budget expenditures that are beneficial and that have a direct positive effect on the development of the market economy. For example, increasing public spending on the justice system, while removing money from the productive private sector, still compensates for and outweighs it with the positive effect of improving the rule of law. This is because law enforcement, contract compliance and protection of private property are prerequisites for economic growth. The same can be said if one invests in improving and modernizing the public administration by increasing its efficiency, professionalism and integrity in providing the necessary services to citizens and businesses.

Thus, for example, one of the biggest costs of budget expenditures is that of market distortion because the funds invested in infrastructure make the construction sector more developed instead of investing money in the manufacturing sector or in agriculture and tourism which are more beneficial to the economy as a whole. Furthermore, it should be borne in mind that the state, being the main dominant consumer in the economy, obliges service and product providers to adapt. But if in order to convince a private consumer, the business needs to lower the price and increase the quality by competing with other actors, to win a government tender or contract, the business needs to corrupt or get its nose into politics and provide favors.

The solution to this problem that best fits are the words of Milton Friedman who said that -Our basic long-term need is to stop the explosive increase in government spending. I am convinced that the only effective way to do this is to reduce taxes - at any time for any excuse and in any way. The reason is that the government will spend whatever is collected from the tax system and even more. In addition to tax cuts, another very effective policy to reduce public debt is undoubtedly setting a budget spending ceiling and there are already 23 countries that in one way or another have imposed restrictions that prevent the galloping increase in government spending. Examples of the success of reducing government spending damage coming from Switzerland, Canada, Latvia, Lithuania, New Zealand, Ireland, Slovakia are really models to consider.

But at the same time, we must take into account the conclusion reached by the World Bank, that in order to eradicate monetary poverty, the poverty in education must be eradicated. It has therefore made global calls for the eradication of poverty in education. For this reason, it stresses the need for primary education to become a priority. Emphasizing that: By the age of 10, all children should be able to read and understand simple texts. -Primary education should be a priority. Such a serious undertaking would make the state take the safest action for the economic development of the country.

But in order for the tasks for economic development issues to be done well, all harmful phenomena must be prevented. Which can only be achieved if previously researched and studied comprehensively-. And this is done when we are clear that: The economy and economic system of a country are segments of vital importance of social life. -Based on the importance of the economy for social welfare, the state is committed to creating an economic policy that suits the needs and interests of society. This is exactly what is expected, and to create the conviction of the security of the future. But this becomes possible when the state is also confronted with economic crime, which -... has a direct impact on the decline of citizens' morale. This is due to the impoverishment of one stratum of the population versus the other stratum which is illegally enriched almost overnight, due to various financial affairs, government crises, etc., which the public follows with vigilance, but in most cases it is powerless to fight their causes. (Krasniqi, 2019)

***The combat against terrorism and organized crime is an element of development security.*** Without intending to deal with international terrorism and organized crime as phenomena, we want to prove that these are destructive and deadly forces, which are present everywhere and even we in Kosovo are not immune from their impact.

-It is clear to each of us that terrorism has changed our security environment, endangering it more and more, but at the same time it has raised the need to strengthen cooperation. And this cooperation should not be sought only in the international arena. But first and foremost in the sense of responsibility to look each other straight in the eye here in our country, in our state, in our society. And we say this because when we hear that a senior state official calls another official a terrorist, enemy, anti-Albanian, thief, criminal, trader of national interests, corrupt, forger, etc. The following tags are transferred to the numerous media analyzes, where even without any sense of responsibility, the responsibility is taken for journalists and analysts to simply turn into gossipers and accusers, taking over the powers of prosecutor, police officer, judge, guardian, etc., raises questions: How should the citizen act? Who to believe? Who to call a patriot and who an anti-patriot? Who to call a statesman and who an anti-statesman? Who to consider a thief and who is honest?

Such behavior in parliament, in election campaigns, in meetings, in media statements, in conversations, in media analysis, etc., make people feel very insecure and do not dare to take steps to invest and develop the economy, because you have no one to trust.

Under these conditions, crime will flourish because: -Terrorism and organized crime, of course, has its economic and financial basis. This is mainly in the phenomenon of smuggling, illegal trafficking, drugs, money laundering, tax evasion, developments in the informal economy, etc., which are widespread, especially in countries where the rule of law does not function, where the phenomenon of corruption in the bodies of justice and public administration exists, including the Balkan countries. Are we in this block? We want not to be, we want this destructive phenomenon not to approach us at all, but we doubt it.

-International organized economic crime includes activities related to economic crime, production and trafficking of drugs, trafficking in living beings, smuggling, production and distribution of counterfeit money and forged documents, cyber crime, money laundering, etc.- We can not even think of staying out of these phenomena. But what is valuable in this case is to make an uncompromising fight against these scenes of crime, not to become part of it.

But for this, it is good to have a clear fact that: -International organized economic crime is a precondition for corruption and its spread in problematic regions endangers not only regional institutions and regional security, but poses a threat to international security in general. -International organized economic crime is one of the main threats to international security, as well as to the security of its citizens and to the foundations of a democratic society.- We can not raise a war front against them, but be a serious part of the world army in the fight against these criminal phenomena that make our lives and future uncertain, making a better governance; consolidating and functionalizing as well as enabling the democratic institutions in the country; working hard for the economic and financial development and progress of the country; strengthening and consolidating public administration up to modern standards; achieving the maximum limitation of corruption, smuggling, drugs, tax evasion, informal economy, etc.; developing vigorously and unabatedly the fight against illegal trafficking and trafficking in human beings; developing uncompromisingly the fight against corruption, etc.

Once we have achieved the above, let us be clear, however that: Terrorism and organized economic crime is an issue that does not belong only to one state or one society. No country and no society can win the battle against terrorism or international economic crime alone. But together, we can!"

***Economic development and the state of the market economy.*** -If you ask the citizens of Kosovo who is an obstacle to economic development, I believe that a large number of them will answer -the state"". And there is some truth here. But the truth is contrary to what citizens and in some cases even intellectuals think. This answer comes as a result of citizens accustomed to the state that owns everything, the state that owns the land, agriculture, livestock, industry, trade, import and export, pricing, finding work for citizens aged 16 and over until retirement age, etc., think that the state has the power that the state of the centralized economy had.

The market economy state lives with taxes. And when the state lives with taxes, it has neither the capacity to develop the economy nor the opportunity to employ citizens. Therefore, when the state takes on responsibilities that are beyond its capacity, despite goodwill, it becomes an obstacle to developing the economy. And here two wrong mentalities are united: First, that of the citizens, who seek employment

solution from the state; and, secondly, that of the state, which, having no power, makes promises that run counter to its functionality. And both sides do not seem to know the market economy, as they do not know how to find their position, and as a result we are remaining poor, we are remaining economically underdeveloped and keeping an eye on the development of other countries and quite a few cases contributing to that development instead of developing our country.

In a market economy, -it is usually corporations that are 'close friends' with the tax authorities. With this level of corruption in Kosovo, it would not be surprising if in reality the number of corporations paying taxes is very small. -As a result, the need to cover taxes is removed from the rich who have corporations to the poor who are ordinary workers, whose lack of ties to power makes it impossible for them to protect their income." (Badrhyl, 2010). This is an issue that attracts attention, that has been done and is becoming the subject of public debates every day, but that no one is stopping to take the necessary measures, so that everyone becomes equal before the law. Consequently, it is seen today that the one who can not solve the problems that arise is the citizen; the one who has little income is the citizen; the one who is facing a disaster can not find a way out of the situation is the citizen; the one who is getting sick must die that there is no possibility of recovery is the citizen; the one punished by law is the citizen; the one fined by the police is the citizen; he has to wait in queue for a document at state offices indefinitely is a citizen; the one who has to pay taxes is the citizen etc. While others stand out less because they are not fined on the street; do not wait in queue; do not pay taxes; do not stay in the corridors of hospitals, because they are treated in specialized clinics, mainly abroad; they do not have problems to solve, because others solve them; do not face the law, that the law stays away from them, etc. This is exactly the problem that the state should solve, and not deal with finding work for some, leaving everyone else in oblivion.

Another issue that deserves attention in the way of development of the country, is that of establishing acceptable relations between the export and import of goods. We know that: -In the most primitive stages of humanity, individuals have aimed to produce for themselves the goods and services they need. But during social development, they realized that this was almost impossible and that they needed another economic system. -With the evolution of human action, the individual has a tendency to produce good for others, to then exchange them for the good he needs." But how should and can this exchange be done, so that everyone has a commodity for exchange and money to buy the commodity they do not produce. And for this is the trade both domestically and internationally, which -is nothing but the trade of individuals across borders, from country A to another country B-. But here there is a difference, as our country does not produce money. If an opportunity were created to produce only money, it would be a good thing. But money usually is produced by the goods. Only when you have merchandise can you earn money, which of course you will exchange for merchandise again. Therefore, when it comes to international trade, the monetary value of exports should cover all costs for imports. This is because -it is necessary for the country to end not only as a -buyer" but also as a producer, ...". What is the situation in Kosovo today? How much are we working to be a competitive manufacturer in the international market? How much is the state paying attention to this problem, forcing us to leave the cafes and produce? Is it the duty of the state to plan the future of the country, which is not safe without production, without production quality, without creating a level of production development where local producers have the opportunity to face the competition of foreign producers? It is to these issues that the

state must provide answers and solutions, so as not to become an obstacle to development, but to become its instigator.

-It is impossible to buy if you do not have money, and it is impossible to have money if you do not produce. (Bardhyl. 2019). It is very backward the idea, that working in emigration, to import money in Kosovo and exporting this money from Kosovo, to buy the goods we need, although we could have produced these goods much safer and more abundantly ourselves. Therefore, what is needed for the economic development of the country is the orientation of the business to use all the capacities of the country, to produce material goods, competing in the international market, where the state should not hinder the production and exchange of goods, but control and open up areas of business activity to balance exports with imports. And for this, it is not required in Kosovo to create new ways to find the well-functioning of the elements of economic development of the country, but simply to recognize and apply the experiences of developed countries, which, what we want to achieve, we have now achieved a few decades ago.

Therefore, it is required to be an open field, to have as many competitors as possible, the state should not monopolize accreditations and licenses. Everyone should have access to doing business, because such a practice will force existing businesses to increase the level of work, production quality and technology, to stay in the market, as the youth or young people who come, can turn out to be more successful.

Every economic action is a human action of individuals who use means to fulfill the desires and needs in an attempt to improve their lives. But not every action is good. When a company is privatized to be operational and destroyed and alienated, this is not a good move. When a mine is bought and not invested in at all but simply exploited, leading to both accidents and catastrophes that threaten or take the lives of people, this is not a good action. When a business company is set up and the workers are paid simply enough, with a salary not minimal, but ridiculous, even this can not be said to be a good move. When the forest is set on fire to reduce its value to be bought at almost just a formal price, we do not know how this can be called a good deed. When the environment of the country is destroyed on all sides, creating centers for the production of stones, sands, marbles, etc., without considering that the citizens have rights over that environment and the air that pollutes it, we do not know how this action can be called good. And all these and many others are under the eyes of the state. Thus, it seems that economic development requires a lot of work to create security for the implementation of human, civic, social, health, labor, environmental, etc. laws, so that in the end everyone is satisfied. But this is what the citizen state does. This can not be done by the vagabond and criminal state, which imposes conditions on businesses for personal, family and clan interests, nor does it care about the civic interests, the development of security and what has been achieved with the aim of moving forward with confidence.

Therefore, the risks are defined. External and internal risks, faced with all the potential of the state to have political stability, to have an organized force to protect the freedom, independence and territorial integrity of the state; as well as to have an organized and professional force to ensure order, peace and security and to stand strong in the face of any act that violates the laws of the state, regardless of who is the offender, ordinary citizen, strong criminal or dome governor.

***On the necessity of recognizing and utilizing Emergency Management.*** Having addressed some issues of economic development, for which we make efforts to train students who claim to be future

specialists for Kosovo, we will address some of the following elements of Emergency Management, as we consider them necessary to be studied by students, institutions, intellectuals and citizens, because only in this way we manage to create a clearer picture of the disasters that occur in social life and that cause damage to the lives of citizens and their property, as well as social wealth and in the living environment.

Emergency management is considered as the broadest and most comprehensive field for the future of social activity, because it undertakes to present in general the theory and practice of emergency situations and their management.

In the modern world, the emergency service has expanded to a very large extent, taking steps towards taking over the entire spectrum of society's activity in specific situations.

Emergency Management studies the basic knowledge of space, environment, society and the main activities of society, which produce disasters and damage to people's lives and property, as well as damage to the environment and social property, etc.

In the programs that we conduct in the College with the students of Emergency Management, the disasters that produce emergency situations are recorded and the necessary spaces are created to determine the characteristics of those disasters that constitute emergencies and for which it is required to compile plans and establish operational force and leadership structures.

Through the provision of knowledge for emergency management, we seek to recognize and train staff and managers for serious situations that may create for citizens, citizens' property, public property and the environment, such as Earthquakes; Floods; Blockages from snow and frost; Landslides; high temperatures and Fires; Industrial and technological accidents; Terrorist attacks; Major land, air and sea accidents; Epidemics; Fighting conflicts; Social causes and cyber warfare etc.

Recognizing the sources of disasters for the society, life and property of citizens, arises the need to get acquainted with the ways to be followed to prevent, alleviate and manage these disasters, through the process of emergency management. Just like the need to take and implement measures to prevent disasters for citizens and the environment and their assets, as well as during the management of situations created, when despite preventive measures disaster has already hit citizens and their properties and our environment, which we have tried to make as suitable as possible for a normal living for people by making efforts to reach the standards of the time.

It is known that emergency management is a difficult task. Emergency operations are complex. Within them are included a series of activities that need to be coordinated, realizing the cooperation of forces, which come from different directions, tasks and professions. Taking responsibility for running an operation as well as managing an emergency therefore requires strong and consistent character. Precisely, to make clear this great responsibility and special burden are these programs, which open the horizon and create a vision for coping with these burdened and combined situations, in the interest of the safety of life of citizens and their property, as well as for the protection of the environment and social property.

In today's world, emergency management is treated as a priority field of knowledge of specialists, in all branches of government and institutions. It seems to us that it has not yet been treated to the proper extent. Biznesi College with the programs it provides is making an attempt to lay the foundations to create a portrait of theory and practice to obtain the necessary knowledge to have staff in this field, which is considered the field that creates responsible people for the moments when everyone is in need, in stress, in adversity, under the effects of injuries, of material losses, of the loss of family members, of insecurity, of the continuance of blows from secondary disasters and more, of being under the impact of the crime that comes to life in cases of disasters, the appearance of elements of terrorism, the threat to the lives of the leaders and managers themselves, excessive fatigue, mass confrontation with people who have lost hope, etc. In such a view, the emergency manager must maintain calm, provide solutions, find ways to save people, ensure the livelihood of homeless citizens, move and relocate families, treat the injured, provide and protect those who have lost their minds, prevent crime, liquidate the consequences and keep their balance for themselves, without losing for a moment the focus on priority tasks even when people cry, when they scream, when they threaten, when they run away, even when they do not obey, even when the employees who are in operation are hidden, even when the side effects of the disaster arise, even when there are dozens of deaths, even when the hospitals are hit by the disaster, even when the phones do not work, even when the media jokes or accuses, even when superiors do not respond, even when help is not there, etc.

Based on all these features, it seems that the emergency manager is a personality who is responsible for setting in motion all those organizations that work to prevent disaster, coping with it when it happens, maintaining public order and calm in situations such as saving people's lives, saving the wealth of citizens and society, protecting the environment, detecting and preventing crime, ensuring the integrity and independence of the country in a situation of disaster, healing the injured, sheltering the homeless, education of children and young people, burial of the dead, cleaning and disinfection of the environment, return of hope to citizens and normalization of the situation, etc. With such an important task, this manager must do an efficient and especially good management to be successful and to build trust among citizens in need.

For the emergency manager, disaster prevention always remains a priority. Therefore, in any planning it is always required that the first and most important chapter be the chapter of intensive managerial, administrative, political, strategic, organizational, operational and security activity, then plan the other response chapters, but only after we have planned all possible preventive measures. For this reason, the responsibility of permanent security structures remains the basis of success.

The content of the programs (of Biznesi College) for emergency management is based on the latest scientific achievements in the world as far as we have come to know, but also in our country, as well as the experiences that we and others have created while dealing with natural and man-made disasters. In these programs we have made efforts to create a field of vision which will present and clarify the basic concepts needed to operate the disaster management system, which includes the work of managers, operations leaders, operational forces, and at all times the support of the political will of the country.



Attempts have been made to reason that you can have everything you need, but if we do not have an emergency manager, smart, brave, good professional, determined, strong-willed, agile, communicative, emotionless, loving, strict, fair and humane person, we can not have a successful emergency operation. So, the manager is the basis of success in an emergency situation. Just as Emergency Management is the basis of security of the achieved level of economic development of Kosovo.

### CONCLUSIONS

Based on the above on the economy, on the development of the economy as well as the reports of the economy in emergency management and the impact on each other, professional experts in these two fields (especially those who are not related to power) can draw and have drawn numerous and clear conclusions.

Therefore, we can say that the state must first create a legal infrastructure (and not just a formal one) and support those who want to work-invest, both locally and those who live and work abroad (that their number is large) - to return to their homeland and open businesses to meet the needs of the country but also for export.

The state must take care of emergency management, because emergencies have a direct impact on the development of the economy, for example a safe and sustainable environment - Emergency management is the basis of security of the achieved level of economic development.

For the emergency manager, disaster prevention always remains a priority. Therefore, in any planning it is always required that the first and most important chapter be the chapter of intensive managerial, administrative, political, strategic, organizational, operational and security activity, then plan the other response chapters, but only after we have planned all possible preventive measures. For this reason, the responsibility of permanent security structures remains the basis of success.

Through the provision of knowledge for emergency management, we seek to recognize and train staff and managers for serious situations that may create for citizens, citizens' property, public property and the environment, such as Earthquakes; Floods; Blockages from snow and frost; Landslides; high temperatures and Fires; Industrial and technological accidents; Terrorist attacks; Major land, air and sea accidents; Epidemics; Fighting conflicts; Social causes and cyber warfare etc.

### REFERENCES

- Adrian Civici, Çfarë kërkon një zhvillim ekonomik i qëndrueshëm, botuar në Panorama, 12 shtator 2019,
- Fjalor i gjuhës së sotme shqipe, Tiranë më, 1980, faqe 418 – 419
- Hoxha Blerina, <https://www.monitor.al/reshjet-kostot-dhe-perfitimet-ne-ekonomi/> (21.09.2019)
- Kabashi Dr, Shyqeri – Shehu Dr. Izet – Lama Dr. Kudus, Fjalor shpjegues i termave të menaxhimit të emergjencave, Kolegji BIZNESI, Prishtinë më, 2015,
- Krasniqi Mr.sc.Armand, Ekonomia dhe kriminaliteti ekonomik,
- Salihu Bardhyl, Kush po e pengon zhvillimin ekonomik të Kosovës? (Analizë e pasojave negative të shtetit në ekonomi),<https://analizaekonomike.wordpress.com/2010/11/14/kush-po-e-pengon-zhvillimin-ekonomik-te-kosoves-analize-e-pasojave-negative-te-shtetit-ne-ekonomi/> (20.09.2019)

## DIGITALIZATION PROCESSES IN PRECISION FARMING AND THEIR ROLE IN SECTORAL COMPETITIVENESS

Pavel Chervenkov<sup>1</sup>

<sup>1</sup>E-mail: pavel4erven@abv.bg, Agricultural University of Plovdiv, bul. "Mendeleev" 12, 4000 Trakiya, Plovdiv, Bulgaria

### ABSTRACT

In the modern global world, where with the help of the achievements of science, which has reached an exceptional height in its development, the penetration of digital systems, devices and technologies in almost all spheres of human activity is everywhere. The so-called "artificial intelligence" successfully and with great precision replaces human mental and physical labor. The applications of digitalization in practice can be many and varied. Digitalization in its essence is a process of conversion / conversion / of information to analog media / text, audio and video signals, telephone pulses and others / in digital form. This is done through electronic devices by the scanning method, which covers the very processes of converting analog data into digital. This allows the information to be processed, stored and transmitted in digital environment via computer networks, satellite, internet, social networks, etc. The term comes from the English language - digital 'digital'.

The purpose of this article is to define the processes of digitalization in agriculture as well as the prerequisites for the implementation of the approach of precision farming in Bulgarian agriculture.

At EU level, agriculture is approached as a way of life that has many socio-economic and environmental functions that need to be managed in a sustainable way. In this context, digital technologies and precision farming tools are considered to be generally applicable management tools, regardless of the specialization and location of the farms.

The digitalisation of agriculture as a process to be managed raises significant legal and socio-ethical issues. They concern in particular the conditions for the protection of sustainable agricultural production, the conditions under which data relating to farmers are collected and processed, and the role of the individual farmer in this system.

Precision farming and digitalisation are now seen as a panacea that can cope with the growing pressure on ecosystems posed by agriculture. The gradual implementation of precision farming should not replace the need to continue designing and implementing measures to protect and promote biodiversity. From an ecological point of view, for example, it is clear that precision farming can indirectly affect the design of land plots and landscapes. In fact, the design and implementation of measures to protect and promote biodiversity, in particular by integrating agri-environmental principles into the various agricultural systems, will need to be continued or even improved due to the side effects of precision farming.

**KEYWORDS:** digitalization, precision farming, competitiveness, agriculture

### ABSTRAKT

In der modernen globalen Welt, in der mit Hilfe der Errungenschaften der Wissenschaft, die in ihrer Entwicklung einen außergewöhnlichen Höhepunkt erreicht hat, das Eindringen digitaler Systeme, Geräte

und Technologien in fast alle Bereiche menschlicher Tätigkeit allgegenwärtig ist. Die so genannte "künstliche Intelligenz" ersetzt erfolgreich und mit großer Präzision die menschliche geistige und körperliche Arbeit. Die Anwendungen der Digitalisierung in der Praxis können sehr vielfältig sein. Die Digitalisierung ist in ihrem Wesen ein Prozess der Umwandlung / Konvertierung / von Informationen in analoge Medien / Text, Audio- und Videosignale, Telefonimpulse und andere / in digitale Form. Dies geschieht durch elektronische Geräte durch die Scan-Methode, die die sehr Prozesse der Umwandlung von analogen Daten in digitale umfasst. Auf diese Weise können die Informationen in einer digitalen Umgebung über Computernetzwerke, Satelliten, Internet, soziale Netzwerke usw. verarbeitet, gespeichert und übertragen werden. Der Begriff stammt aus dem Englischen - digital 'digital'.

Der Zweck dieses Artikels ist es, die Prozesse der Digitalisierung in der Landwirtschaft sowie die Voraussetzungen für die Umsetzung des Ansatzes der Präzisionslandwirtschaft in der bulgarischen Landwirtschaft zu definieren.

Auf EU-Ebene wird die Landwirtschaft als eine Lebensform betrachtet, die viele sozioökonomische und ökologische Funktionen hat, die auf nachhaltige Weise bewirtschaftet werden müssen. In diesem Zusammenhang werden digitale Technologien und Instrumente der Präzisionslandwirtschaft als allgemein anwendbare Managementinstrumente betrachtet, unabhängig von der Spezialisierung und dem Standort der Betriebe.

Die Digitalisierung der Landwirtschaft als ein zu steuernder Prozess wirft erhebliche rechtliche und sozialetische Fragen auf. Sie betreffen insbesondere die Bedingungen für den Schutz einer nachhaltigen landwirtschaftlichen Produktion, die Bedingungen, unter denen Daten über Landwirte gesammelt und verarbeitet werden, und die Rolle des einzelnen Landwirts in diesem System.

Die Präzisionslandwirtschaft und die Digitalisierung werden heute als Allheilmittel angesehen, um dem wachsenden Druck auf die Ökosysteme durch die Landwirtschaft zu begegnen. Die schrittweise Einführung der Präzisionslandwirtschaft sollte jedoch nicht die Notwendigkeit ersetzen, weiterhin Maßnahmen zum Schutz und zur Förderung der biologischen Vielfalt zu konzipieren und umzusetzen. Aus ökologischer Sicht ist beispielsweise klar, dass sich die Präzisionslandwirtschaft indirekt auf die Gestaltung von Grundstücken und Landschaften auswirken kann. Die Konzeption und Umsetzung von Maßnahmen zum Schutz und zur Förderung der biologischen Vielfalt, insbesondere durch die Integration von Agrarumweltgrundsätzen in die verschiedenen landwirtschaftlichen Systeme, muss aufgrund der Nebeneffekte der Präzisionslandwirtschaft fortgesetzt oder sogar verbessert werden.

**STICHWORTE:** Digitalisierung, Präzisionslandwirtschaft, Wettbewerbsfähigkeit, Landwirtschaft

## RÉSUMÉ

Dans le monde global moderne, où avec l'aide des réalisations de la science, qui a atteint une hauteur exceptionnelle dans son développement, la pénétration des systèmes, dispositifs et technologies numériques dans presque toutes les sphères de l'activité humaine est partout. La soi-disant "intelligence artificielle" remplace avec succès et avec une grande précision le travail mental et physique de l'homme. Les applications de la numérisation dans la pratique peuvent être nombreuses et variées. La numérisation dans son essence est un processus de conversion / conversion / de l'information sur des supports analogiques / texte, signaux audio et vidéo, impulsions téléphoniques et autres / sous forme numérique. Cela se fait par le biais d'appareils électroniques par la méthode de numérisation, qui couvre les processus

mêmes de conversion des données analogiques en numériques. L'information peut ainsi être traitée, stockée et transmise dans un environnement numérique via des réseaux informatiques, le satellite, l'internet, les réseaux sociaux, etc. Le terme vient de la langue anglaise - digital 'numérique'.

L'objectif de cet article est de définir les processus de numérisation de l'agriculture ainsi que les conditions préalables à la mise en œuvre de l'approche de l'agriculture de précision dans l'agriculture bulgare.

Au niveau européen, l'agriculture est abordée comme un mode de vie ayant de nombreuses fonctions socio-économiques et environnementales qui doivent être gérées de manière durable. Dans ce contexte, les technologies numériques et les outils d'agriculture de précision sont considérés comme des outils de gestion d'application générale, indépendamment de la spécialisation et de la localisation des exploitations.

La numérisation de l'agriculture en tant que processus à gérer soulève des questions juridiques et socio-éthiques importantes. Elles concernent notamment les conditions de protection de la production agricole durable, les conditions de collecte et de traitement des données relatives aux agriculteurs, ainsi que le rôle de l'agriculteur individuel dans ce système.

L'agriculture de précision et la numérisation sont aujourd'hui considérées comme une panacée permettant de faire face à la pression croissante exercée par l'agriculture sur les écosystèmes. La mise en œuvre progressive de l'agriculture de précision ne doit pas remplacer la nécessité de continuer à concevoir et à mettre en œuvre des mesures de protection et de promotion de la biodiversité. D'un point de vue écologique, par exemple, il est clair que l'agriculture de précision peut affecter indirectement la conception des parcelles et des paysages. En fait, la conception et la mise en œuvre de mesures de protection et de promotion de la biodiversité, notamment par l'intégration de principes agri-environnementaux dans les différents systèmes agricoles, devront être poursuivies, voire améliorées, en raison des effets secondaires de l'agriculture de précision.

**MOTS CLÉS:** numérisation, agriculture de précision, compétitivité, agriculture

## INTRODUCTION

In the modern global world, where with the help of the achievements of science, which has reached an exceptional height in its development, the penetration of digital systems, devices and technologies in almost all spheres of human activity is everywhere. The so-called "artificial intelligence" successfully and with great precision replaces human mental and physical labor. The applications of digitalization in practice can be many and varied. Digitalization in its essence is a process of conversion / conversion / of information to analog media / text, audio and video signals, telephone pulses and others / in digital form. This is done through electronic devices by the scanning method, which covers the very processes of converting analog data into digital. This allows the information to be processed, stored and transmitted in digital environment via computer networks, satellite, internet, social networks, etc. The term comes from the English language - digital 'digital'.

The purpose of this article is to define the processes of digitalization in agriculture as well as the prerequisites for the implementation of the approach of precision farming in Bulgarian agriculture.

## RESULTS AND DISCUSSION

**Digitization of agriculture.** Digitalization and digitization are considered close concepts. Digitization is a term that generally means the conversion of information, usually from the natural environment to digital format. The main goals of digitalization are the preservation of analog information resources and their long-term storage in the form of digital copies, as well as providing access to these copies through digital devices and networks and their collection in digital libraries. Digitization is seen not only as a process of digitization of traditional information flows, but also as an environment that integrates digital resources, services and professionals with the necessary knowledge and skills at the level of technology in this environment related to creation, storage, access, use, distribution, security and protection of information.

According to I.Kovács, I.Hustiwith Agriculture can significantly increase its efficiency and competitiveness by taking advantage of digitalisation. The digitalisation of the sector allows the use of GPS services, machine-to-machine data transfer (M2M) and Internet of Things (IoT) technologies, sensors and big data to optimize harvest yields and reduce waste in the environment.

According to Sciforce, digitalisation allows the use of approaches and technologies to manage the quantity and quality of agricultural products in real time. Armed with all possible tools, farmers can monitor the conditions of the field without even going to the field and making strategic decisions for the whole farm or for one unit.

According to Elizabeth Gasiorowski-Denis farms need to increase food production while preserving the environment, but they cannot do it alone and they cannot do it using traditional agricultural practices today. And while mechanized agriculture in the developed world has significantly increased production per unit of land, more is needed tomorrow to meet sustainable food needs. Fortunately, however, the Internet of Things (IoT) - essentially the art of connecting and integrating objects, people, information and smart manufacturing systems and services - is now set to take the future of agriculture to the next level.

According to SPECIAL REPORT EURACTIV, digital technologies and their application in agriculture allow the production of "more with less". The use of natural resources, agrochemicals, antibiotics and energy will be reduced for the benefit of both participants in agricultural production - farmers and the environment, so society benefits from this approach. New technologies would help farmers increase their productivity by applying the right amount of input materials at the right time, while protecting the environment.

According to the Ministry of Agriculture, Food and Forestry, the accelerated digitalization of Bulgarian agriculture and rural areas, including public administration in the person of the Ministry of Agriculture, Food and Forestry (MAF), State Fund "Agriculture", regional and municipal directorates and services is necessary process to reduce bureaucratic burdens, optimize production processes, increase farmers' incomes and yields, achieve a sustainable bio-industry, maintain food safety in conditions of increased industrialization and new unproven technologies, drastically increase competitiveness and the increased demand for Bulgarian products on the single European market and on world markets. Digitalisation allows the agricultural economy to realize its high potential and reap the same successes as high-tech areas of the economy: increase productivity, add value, improve quality and safety, and thus income and quality of life, drastically reduce of pollution to sustainable levels, flexible and fast response to market trends.

According to Klerkx L., Jakku E., Labarthe P., digitalisation, the socio-technical process of implementing digital innovation, is a growing trend. Digitalization includes phenomena and technologies such as big data, Internet of Things (IoT), augmented reality, robotics, sensors, 3D printing, system integration, ubiquitous connectivity, artificial intelligence, machine learning, digital twins and blockchain, among other algorithms and technologies. Digitization implies that on-farm and off-farm management tasks (in the wider value chain and food system) focus on different types of data (location, time, behavior, phytosanitary status, consumption, energy use, prices and economic information, etc.) using sensors, machines, drones and satellites to monitor animals, soil, water,

According to Lorenzo AM, Del Aguila Obra A, R, Padila-Melendez A., Plaza-Angulo JJ. the digitalisation of activities makes agriculture a more efficient and sustainable economic activity. For example, drones help farmers control and optimize the amount of nitrogen used to fertilize their crops, or eliminate pests accurately by using the minimum amount of pesticides or robots used for cartographic activities that improve nutrient quality and expand the capacity of farmers in order to control and manage large and large crops. New technologies, such as robotics, are changing agriculture, transforming it and creating new business opportunities and developing new business models.

According to Popova, LI, Demina, ID, Stepanenko, YS, Tran, QN, Meshkova, GV, & Afonasova, MA agriculture has shown growth in production and is on the rise in the era of digitalization. The targets set in the Food Security Doctrine have already been achieved through many indices. This is largely due to a significant increase in productivity and efficiency of agriculture. The proposed platform, which would provide a breakthrough in the further technical modernization of production, can only be created if the technologies are improved on the basis of their digitalization and user-orientation. The introduction of digital technologies in agricultural production confirms the high efficiency of complete innovative technical modernization.

According to Walter A., in the future, farmers are likely to consult devices other than their mobile phones when they decide that digitalisation is vital to their daily activities. Just as we have been fascinated by our smartphones in recent years, watching fun videos and sharing photos in the future, young farmers are likely to consult daily devices that will help them analyze their activities and make management decisions. This data can be collected from self-piloted multicopters or other drones, which study the state of the field according to empirical formulas and effectively give specific cultivation advice for individual crops to answer the important questions of the day.

In the agricultural and food industries, digital technologies are being actively introduced by industry and politicians are promoting this process in response to growing social and environmental crises. For example, the Canadian government is currently investing in smart climate and "precision" technologies that will help Canada take the lead in clean agricultural technology, helping farmers develop new and efficient energy uses while protecting environmental resources and mitigates the causes of climate change. The Canadian government's argument is that combining digital tools (such as GPS, sensors and data modeling software) with automated technologies (such as smart tractors, drones and robots) will help farmers be more precise with their input.

According to Yiyang C., Cunjin L., Ye L., with the progress of science and technology, the practical application of digital and blockchain technologies in agriculture creates conditions for the democratization of the sector, thus laying the foundations for promoting the concept of " digital democratization of

agriculture ". This framework will allow the blockchain to track and adjust the chain of values. The blockchain network automatically collects and uploads data through various types of smart devices, which expands the set of information that can be used for sharing. This approach can solve problems such as the asymmetry of market information, the effectiveness of government intervention and improve the traceability of "gray" practices.

According to Bashev H., the stimulation and sharing of knowledge, innovation, digitalization and promotion of their use is largely defined as a strategic goal in the new programming period 2021-2027. on the implementation of the EU CAP (European Commission, 2018). Despite their importance, with very few exceptions (Bashev and Mihailova, 2019; Nikolov et al., 2018; MAF, 2019), in Bulgaria there are no in-depth analyzes of digitalization (digitalization) of the agricultural sector and in rural areas. The reason for this is the lack of sufficient official statistics and others. information and sufficient public interest in the development of this important system. The use of the Internet and information technology and applications is rapidly entering agriculture and rural areas.

According to Simon Fielke, Robert Garrard, Aysha Fleming, the digitalisation of agricultural systems involves the growing impact of digital technologies on agricultural performance, which is currently satisfied by networks of human and technological actors within the traditional concept of agricultural innovation systems. At some point, the digitalisation of agricultural innovation systems will raise existential issues for agricultural stakeholders worldwide by redefining labor, democracy and humanity.

According to Andrea Knierim, Maria Kernecker, Klaus Erdle, digitalisation in agriculture is considered the fourth revolution in this sector, which is reflected in the wide range of available digital technologies and data applications. Politicians and experts believe that smart farming technologies have a strong potential to increase the economic performance of agriculture and will contribute to the sustainability of the sector, as they can increase the precision of investing in crops and farmland. Quantitative and qualitative data show that although there are generally positive attitudes, farmers are less enthusiastic about the expected positive effects of smart farming technologies on the environment. Also, there are still a number of barriers to adoption at the technological level,

According to Mobasshir Mahbub, with the exponential growth of the human race, today's agriculture will not be able to ensure food balance. Therefore, approaches and methods are needed to achieve a sustainable diet for the global population. Today's farmers are still dependent on traditional farming methods, thus reducing the efficiency of the use of productive resources over the years. Monsoons are unpredictable and the uneven access of farmers to irrigation water throughout the year is a significant problem. All this leads to insufficient growth of agricultural crops and low productivity. The application of digital technologies in agriculture can dramatically increase crop productivity,

According to Astill, Dara, Fraser, the use of intelligent farm management systems is a benchmark in increasing production. They allow to minimize the costs and use of resources on the farm.

According to Colezea, Musat's digitalization in agriculture arose from the need to produce more with less effort. Digitalization allows to integrate modern technologies in conventional agriculture with innovations in order to increase the quality and quantity of agricultural products. Digitalisation allows the farmer to take advantage of cloud computing benefits such as flexibility, availability or security and can be accessed anytime, anywhere using only an internet connection. It allows users to find and effectively manage their farms, providing access to various types of statistics and forecasts.



**Precision farming (PF).** Although there are more complex definitions, the simplest and most logical description of precision farming is a way to "apply the right treatment in the right place at the right time" (Gebbers and Adamchuk, 2010). This is an agricultural management concept based on monitoring, measuring and responding to the variability of agricultural crops or livestock populations. The first actual definition of precision farming (FAR) was the work of the US House of Representatives (1997), which defined PF as "an integrated farming system based on the use of digital information aimed at increasing the long-term efficiency of farm-wide production, as well as its productivity and profitability, while minimizing the negative impact on the environment.". This definition focuses on the idea that the PF is an 'entire farm' management strategy using information technology, highlighting potential improvements in production, while aiming to reduce the impact on the environment. The approach based on digitalisation of crop management data is "a form of agriculture in which resource implementation decisions and agronomic practices aim to improve the impact of agricultural crops, taking into account that each farm operates under different conditions. production and implements a different strategy for specialization '. The actual implementation of PP began in the 1980s, when farmers applied newly developed fertilizers based on data from "variable speed technology maps". which show the spatial variability of the chemical properties of the soil where the crop is located. FP as a management approach is also related to the application of new approaches related to measuring sustainability and climate change, such as Climate Smart Agriculture (CSA), aimed at developing a technical, political and investment framework for sustainable agricultural development and food security in climate change forecasting (FAO, 2013). From the definitions discussed so far, the idea is clear that precision farming is an approach to better management decisions that provide a wide range of additional benefits. A literature review of a number of publications from 1988 to 2005 examining the economic efficiency of the application of PZ in farms shows that that this approach has led to increased operating profits (Griffin and Lowenberg-DeBoer, 2005). The highly competitive agricultural market, where there are many players, is characterized by declining gross margin and profitability for each newcomer and market position. That is why farmers are motivated to look for technologies that allow them to reduce costs without reducing production volumes (Nikolov, Fidanska and Borisov, 2021). These market conditions lead to the intensive application of PP in farms located in the United States and Western Europe. However, it can be said that market conditions are not the only factor for the widespread introduction of IP in the world. In fact, the application of PP in large agricultural areas in the eastern EU countries is primarily aimed at increasing production, only then to seek economic and environmental benefits from the application of the approach. The joint digitalization of agriculture allows the widespread use of PA methods, which undoubtedly lead to great benefits in optimizing production efficiency, improving product quality, minimizing the impact and pressure on the environment. Today, PF is seen as "an environmentally sound system solution that optimizes the quality and quantity of the agricultural product while minimizing costs, human intervention and variations caused by unpredictable nature" (Stoeva, Dirimanova and Borisov, 2021). Obviously, all the considered definitions of the nature of PF include terms related to risk, environmental impact and degradation, as they are key issues in the late 20th and early 21st century. PF is becoming a management practice with growing interest because it aims to quickly address global issues such as sustainable agriculture and food security (Gebbers & Adamchuk, 2010). There is a body of evidence from research showing that environmental degradation is reduced when PF methods are applied, including increasing the efficiency of fuel use by agricultural

machinery, which leads to a reduction in the carbon footprint of nature farming (Borisov, 2021). Some other examples of successful application of PF methods include minimizing the amount of nitrates in agricultural systems, reducing groundwater pollution and reducing erosion when the right soil treatments are carried out at the right time. The PF is therefore seen as a way to support the implementation of the measures set out in environmental legislation present in countries such as the US and the EU. Precision farming can also generate benefits that make social and working conditions in agriculture easier and more attractive to those employed in the sector. For example, automatic control systems integrated in different tractor models can make work less tiring for the operator. Also, the development of precision dairy technologies provides great opportunities to improve the supply of automatic individual cattle management applications and thus reduce labor requirements, and there are arguments for increased animal welfare. defined in environmental legislation present in countries such as the US and the EU. Precision farming can also generate benefits that make social and working conditions in agriculture easier and more attractive to those employed in the sector. For example, automatic control systems integrated in different tractor models can make work less tiring for the operator. Also, the development of precision dairy technologies provides great opportunities to improve the supply of automatic individual cattle management applications and thus reduce labor requirements, and there are arguments for increased animal welfare.

***Basic technologies and components of precision farming.*** The application of PF has become possible thanks to the development of sensor technologies combined with standardized procedures for linking mapped variables with appropriate algorithms for managing agronomic activities such as cultivation, sowing, fertilizing, herbicide application and harvesting. Today, the modernization of the PF is in full swing. This progress has been made possible by the rapid development of miniaturization and the improved accuracy of Global Navigation Satellite System (GNSS) technology since 1999. In fact, GNSS technology (of which GPS is the most commonly used today) is now widely used by many farms in performing geo-positioning tasks (eg automatic control systems) and preparing geo-referenced information (eg yield mapping). GNSS makes it possible to expand the scope of machine routing, automatic control and controlled traffic management (CTF) systems. Such methods allow agricultural machinery to move on repetitive tracks with precision, reducing operator errors, reducing fatigue and allowing greater timeliness of operations. Another important element is the use of variable speed technology (VRT), which allows precise sowing, optimizing planting density and improving the efficiency of application of herbicides, pesticides and nutrients in crops, which leads to reduced costs on the farm and to reduce the impact on the environment. Many sensors are currently available on farms, which are used to collect data or provide information necessary for the purposes of the application of the IP. These sensor devices are designed both for recording positioning data and for recording movement and location data of machines, machinery and equipment as well as personnel employed in production. There are sensory devices for assessing the condition of the soil, such as sensors for apparent electrical conductivity (ECa), gamma-ray radiometric soil sensors and devices for monitoring soil moisture, and others. Other sensors record meteorological information or microclimate data (such as thermometers, hygrometers, etc.). Particular importance is given to sensors designed to quantify the physiological status of crops (eg nitrogen sensors). These sensors are based on remote sensing principles aimed at collecting data based on points or spaces where the spatial resolution, ie. the size of the digitally displayed pixels can vary from less than 2 cm to

more than 10 meters. Detection of different wavelengths (visible, near infrared light, thermal) using multispectral and hyperspectral cameras on board air and satellite platforms to determine vegetation indices that determine the condition of agricultural crops (eg content of chlorophyll, stress level) and its variability in space and time. Recently, special interest in PF is devoted to the use of cheap light drones (UAVs), often referred to as unmanned aerial vehicles or more properly called remote-controlled air systems (RPAS), originally developed for military purposes and now used in the industry. RPAS are now available and operational, which allows the generation of very high resolution images (2 to 10 cm) at the farm level. The availability of satellite platforms is usually lower resolution (0.5 to 10 m) and is usually a more expensive alternative. Today, the application of modern software requires knowledge and skills on how to transform data collected by various sensors and geo-referenced into maps through geographic information systems (GIS) in order to provide information on the physiological status of the crop and soil condition. Additional skills and knowledge are needed on how to use large, diverse data sets and information collected to assess the effects of climate, soil properties on agricultural production and to develop management plans to increase efficiency and adjust inputs in the coming years (Borisov, Radev and Nikolov, 2019). In particular, models are needed to understand the causes and relationships between plants, soil and climate before spatial inputs can be adjusted. These farm management systems are available to farmers through consultations, advisory and training services and / or directly through special software products. Table 3 shows an overview of precision farming technologies and applications. Finally, the most important element in the application of precision farming technology is the farmer. In the early 1990s, the most business-oriented farmers embarked on the application of PF with initial enthusiasm, followed by a certain level of discouragement due to the lack of state support and the relatively low profitability of the activity. The application of this approach currently relies almost entirely on the private sector, offering devices, products and services to farmers.

**Table 1. Overview of technologies and applications for precision farming. Source: Own**

Technology	Development goal	State of the art
Man-machine interface tools	Terminal suitable for all software applications	Standalone terminals for each individual application
Data ownership	Facilitate the exchange of information between farmers, between farmers and contractors or suppliers and between government and farmers	The data must be the property of the machine owner, but the machine manufacturers use it for internal evaluation
Machine manual	Avoiding automatic overlap of the same tracks for each field operation, relieving the driver, reducing the use of chemicals and fuel in agriculture	Driver help automatic driving management maintains
Controlled agriculture	Use the same tracks to minimize soil compaction.	Driver help automatic driving management maintains
Recording of the movement of agricultural machinery	Machine monitoring, ensuring safe working conditions, optimization of work and production processes	Data is needed for measurement and storage of machine operations

Sampling site	Offline determination of soil quality, determination of the condition of the soils in the farm (pH value, phosphorus, nitrogen, magnesium, etc.), mechanical composition of the soil	Detailed information on soil fertility and transmitted diseases for optimal management and implementation of legislation
Biomass monitoring	Mapping the state of plant growth and the amount of nitrogen needed to feed them	Location-specific continuous or discrete phenological observations of crops, optical sensors for canopy condition and nitrogen content
Development of sensor and fusion sensor	Automatic merging of data of different information from the sensor for real-time solutions based on multilayer data sets	Sensors for measuring several parameters, which are later integrated into the products.
Digital tracking systems	Ensuring food safety and security. Combining this data with the manufacturers' performance records (eg when, where and what type of chemicals were sprayed, what kind of fertilizer was applied)	Monitoring and classification
Remote Monitoring Techniques (RS)	Linking these images to potential, nutrient deficiencies and plant stress in crops	Synthesis of aerial and / or satellite images
Application of variable speed technology	Application of sowing, fertilizing and spraying according to accurate mapping of soil and plant information	Allows specific treatment of areas within a plot with a harvest with variable levels of production.
Harvest monitoring	Localized information on the status of the harvesting process and the condition of the yield improvement machine	Information on harvesting (immediate wet and dry readings, crop density, collection and extraction of yield information)
Individual tracking of livestock on a small scale	Information on the health status of animals and their behavior on pasture, virtual fence, understanding of grazing pressure	Animal surveillance systems using GNSS receivers, storing location data at regular intervals
Tracking the transport of livestock	Compliance with animal welfare legislation	Record the movement of vehicles
Electronic submission of area aid applications	Compliance with legal provisions	GNSS receivers allow the measurement of the area as well as changes in the area of the farm for which financial assistance is required
Farm management and decision support	Software solution for farmers allowing automatic documentation, telemetry, solution support, machine and equipment management	Existing data management solutions and decision support from machinery manufacturers and precision farming service providers

***Use of techniques based on PF in the management of arable land*** is the most common practice among farmers advocating this approach to management. Perhaps the most successful example of using the method of precision farming is in the management of tillage in the production areas of the farm. Farmers in Australia and the United Kingdom (Tullberg et al., 2007); (Bowman, 2008) through the application of this method have managed to reduce the cost of machinery and raw materials, increasing yields. Precision farming is a holistic farming approach that aims to avoid unnecessary damage to crops caused by agricultural machinery and implements, as well as to avoid soil compaction by heavy machinery, reducing the costs imposed by standard methods. Controlled agriculture uses controlled trafficking methods,



machine. Additional components such as DGPS - receiver, computer, VR software and controller are integrated to operate the VRA system optimally.

Precision farming is also an effective approach in the development of agricultural industries such as vegetable production and viticulture. PF allows manufacturers in these industries to classify products and monitor their quality and health. By using automation systems, parameters related to product quality are monitored and recorded. These parameters include color, size, shape, external defects, sugar content, acidity, and other internal properties (Njoroge et al., 2002). In addition, tracking agro-technical operations such as the application of plant protection chemicals and fertilizers helps to optimize production costs. This information may be disclosed to consumers for risk management and food tracing, as well as to precision farmers, to obtain higher quality and higher yields with optimized raw materials. In the conventional cultivation of fruit crops, methods based on spraying constant volumes of plant protection mixtures are applied, without taking into account the actual variability in the size and density of the fruit in the plantation. With this type of organization of production, it is not possible to take into account the density of the orchard, which often leads to a significant loss of plant protection products and fertilizers, which reflects on the level of production costs. In recent years, the application of precision farming in the industry has significantly reduced resource wastage and reduced production costs as the chances of protecting the environment have increased (Doruchowski et al., 2009).

The adoption and application of PF technologies and methodologies in viticulture (also called precision viticulture) leads to lower production costs, which allows farmers to compete in terms of market price (Ojeda et al, 2005; Mazetto et al. , 2010); (Ferreiro-Arman et al., 2006); (Petrov and Borisov, 2021). Grape quality and yield levels maps are important during harvesting to avoid mixing grapes with different potential wine qualities.

Irrigation, as well as the overall management of water resources used in agriculture, is increasingly becoming an important issue in achieving sustainable agriculture. In the case of vine crops, which consume significant amounts of water resources in France and Spain, precision farming methods are rapidly being used to save water, while looking for ways to increase yields and product quality. In the precision viticulture of these countries in the last 20 years there have been three main stages of development: 1) development of sensor systems and their application in the management of specialized viticulture equipment in the plantation; 2) building systems, which collect digital information with high resolution on the condition of the plantation and 3) creation and management of a database of the received information flows from the observation of the vineyards. Precision irrigation is rapidly entering the industry, as farmers must meet public demands to reduce water wastage and improve the efficiency of its application in viticulture. Over the years, several strategies for managing vine irrigation have been tested in France and Spain - Regulated Deficit Irrigation (RDI), Partial Root Drying (PRD) and Sustainable Deficit Irrigation (SDI). The successful use of RDI in fruit trees and vineyards demonstrates not only an increase in the efficiency of water resources, but also in the profits of farmers (Ferreeres & Soriano, 2007). In recent years, Europe (especially the south-west) has been hit hard by climate change, which has increased the frequency and duration of droughts. This is a prerequisite for the rapid implementation of precision irrigation methods in this part of the continent.



***Use of PF-based techniques in animal husbandry management.*** Precision Livestock (PL) is defined as the management of livestock, using the principles and technologies of digitalization. The so-called integrated management system seeks to identify each individual animal in the herd and is usually used for more intensive pig and poultry farming and in dairy farming. Tracking of each individual animal aims to gather information about its biological status, health status, diet and veterinary practices. Advances in pancreas monitoring and control systems have led to the development of automatic milking machines and systems, fertilizer belts, robotic refrigeration baths and other innovations. These innovations are expensive on the one hand, but on the other hand they provide exceptional economic and environmental benefits for the farm in the long run. New systems have been set up to collect and monitor data on feed and water consumption by farm animals. Other systems are used in the diagnosis and early detection of infections in the herd, which reflects on the better application of veterinary care for the animal. There are also systems that include herd growth monitoring that measure weight gain of each individual animal in real time. In this way the use of fodder in the feeding of the animals in the herd is specified, by optimizing the costs for fodder, which are structurally determining in the branch. The application of acoustic sensors makes it possible to monitor respiratory infections in the herd. Recent studies in France and Spain show that the application of PF in the industry increases productivity in dairy cattle breeding, while increasing the life expectancy of cattle. Higher yields and longer herd life contribute to reducing methane emissions in agriculture by almost 30%. New systems monitor the fertility and fertility of the herd on the farm, thus the farmer has a better opportunity to optimize the turnover of the herd and derive additional economic benefits from this process.

The use of GNSS technology has made it possible, by marking cattle in the herd, to generate information characterizing the behavior of animals. Monitoring behavior is important for detecting fertility or disease in cattle. Another important problem that PA systems solve effectively is pasture management. Monitoring systems collect information on the density and utilization of pastures on the farm. The development of the technology for geo-location of the herd in the pasture allows to manage it effectively. One example is the E-Track project ([www.etrack-project.eu](http://www.etrack-project.eu)), which is based on the approach to remote monitoring and management of animals in pastures. Through the application of virtual, GNSS-based animal geo-location system in combination with a sound or electrical stimulus restricts the animal's access to a predetermined area of pasture. Other examples of precision livestock systems are related to the transport of animals.

***The role of digitalization in managing the competitiveness of agricultural holdings.*** Summarizing the literature review of the publications of researchers on the problem of competitiveness of the economy, it becomes clear that the main problems in the management of competitiveness are the following:

- Increasing the productivity of production factors (Rezear, Borisov, Radev and Osmani, 2019);
- Realization of economies of scale (Salam & Karabiyik 2019);
- Improving the quality of manufactured products (Latruffe, 2019);
- Strengthening the adequate reaction of the farm to the environment (Popov, 2013);
- Creating new values along the chain (new business models) (Nikolov, Borisov, Radev and Boevski (2020);
- Increasing the profitability of the activity (Borisov, 2021);



- Promotion of innovation and marketing activities (Nikolov, 2020);
- Promoting technology transfer and valuing new knowledge (Borisov and Miladinovski, 2022).

Digitalization and artificial intelligence can make a significant contribution to solving these problems. Through the Internet of Things and database management, farmers can have access to objective data and algorithms that enable them to optimize production processes on farms (Salam, 2019). The potential benefits of using digital technologies in agriculture can contribute to increasing crop yields and animal productivity, optimizing input processes and labor, all of which increase competitiveness (Shepard, 2020). Another important aspect of productivity is achieving economies of scale. Here again, the digitalization of information flows of data characterizing technological processes can help are the formulation of optimal solutions, concerning economies of scale. There is a clear trend of mass application of artificial intelligence in the management of product quality in high-tech farms. The use of databases and intelligent systems monitors the quality of production. Digitalization is one of the main tools for imposing total quality management, which is a prerequisite for achieving competitiveness of the economy. By digitizing data, standardization of production can be easily achieved, and thus economies of scale can be realized, and quality parameters in production can be achieved (Terpstra, 1994). The use of databases and intelligent systems monitors the quality of production. Digitalization is one of the main tools for imposing total quality management, which is a prerequisite for achieving competitiveness of the economy. By digitizing data, standardization of production can be easily achieved, and thus economies of scale can be realized, and quality parameters in production can be achieved (Terpstra, 1994). The use of databases and intelligent systems monitors the quality of production. Digitalization is one of the main tools for imposing total quality management, which is a prerequisite for achieving competitiveness of the economy. By digitizing data, standardization of production can be easily achieved, and thus economies of scale can be realized, and quality parameters in production can be achieved (Terpstra, 1994).

The digitalization of the agricultural sector is a prerequisite for easier forecasting of market prices of both production resources and the final product. This enables farmers to have objective information about market trends when planning the activities of their farms. Digital technologies have a positive impact on agricultural activities and reduce the pressure of crop production on the environment (Popov, 2013). This is done by measuring the negative impact of agricultural production and seeking regulatory action by the state to reduce the negative impact on the environment without compromising the profitability of farms. Digital technologies have numerous advantages in the production of agricultural products with potentially great economic impact. It is believed that they can improve the efficiency of production operations by reducing raw materials such as seeds, fertilizers, pesticides, etc., thus minimizing the cost of input resources for production. There are studies on specific digital technologies that consistently increase net returns on farms (Smith et al, 2013; Shockley et al, 2012; Shockley et al, 2011). According to Schieffer and Dillon (2015), producers using precision in agricultural technology have the opportunity to reduce their impact on the environment while increasing productivity and financial performance. The digital transformation in agriculture is also leading to an increase in co-creation agreements between producers and supply chain partners,

Despite the advantages of digital technologies and the application of artificial intelligence, there are a number of obstacles that hinder their application in the agricultural sector. Database management and artificial intelligence require specific knowledge and skills on the part of farmers. This requires their

training to acquire this knowledge. Digital technologies as required by specialized equipment to be installed on the farm. This type of equipment is expensive and absorbs large initial investments that farmers have to make in order to implement the digital management approach on their farms. Another significant barrier is that access to certain databases is paid, which increases the fixed costs of farm management. All these obstacles hinder the accelerated digitalisation of the sector.

## CONCLUSION

At EU level, agriculture is approached as a way of life that has many socio-economic and environmental functions that need to be managed in a sustainable way. In this context, digital technologies and precision farming tools are considered to be generally applicable management tools, regardless of the specialization and location of the farms.

The digitalisation of agriculture as a process to be managed raises significant legal and socio-ethical issues. They concern in particular the conditions for the protection of sustainable agricultural production, the conditions under which data relating to farmers are collected and processed, and the role of the individual farmer in this system.

Precision farming and digitalisation are now seen as a panacea that can cope with the growing pressure on ecosystems posed by agriculture. The gradual implementation of precision farming should not replace the need to continue designing and implementing measures to protect and promote biodiversity. From an ecological point of view, for example, it is clear that precision farming can indirectly affect the design of land plots and landscapes. In fact, the design and implementation of measures to protect and promote biodiversity, in particular by integrating agri-environmental principles into the various agricultural systems, will need to be continued or even improved due to the side effects of precision farming.

## REFERENCES

- Andrea Knierim, Maria Kernecker, Klaus Erdle 2019 Smart farming technology innovations - Insights and reflections from the German Smart-AKIS hub, NJAS-Wageningen Journal of life sciences, volume 90-91
- Astill, Dara, Fraser 2020 Smart poultry management: Smart sensors, big data, and the internet of things, Computers and electronics in agriculture, Volume 170
- Bashev H. Prof. 2019: DIGITALIZATION OF AGRICULTURE AND REGIONS IN BULGARIA (Digitalization of Bulgarian Agriculture and Rural Areas)
- Borisov, P. (2021). Analysis of The Profitability of Crop Farms Under The Conditions of CAP in Bulgaria. Journal of Bio-Based Marketing, vol.3/2021, 56-63 ISSN 2683-0825
- Borisov, P., D. Miladinovski (2022). Competitiveness of agricultural enterprises – theories and determinants. Journal of Bio-Based Marketing, vol.1, 2022, 58-70, ISSN 2683-0825
- Borisov, P., T. Radev, D. Nikolov (2019). Young Farmers and New Entrants in Bulgarian Agriculture - Profiling their Challenges and Needs. Agriculture Economics and Management 64 (2), 60-71
- Bowman, K., (2008), Economic and environmental analysis of converting to controlled traffic farming, In 6th Australian Controlled Traffic Farming Conference, pp. 61-68

Colezea, Musat, Pop 2018 CLUEFARM: Integrated web-service platform for smart farms, Computers and electronics in agriculture, Volume 154

Doruchowski, G., Balsari, P., Zande, JC van de, (2009), Precise spray application in fruit growing according to crop health status, target characteristics and environmental circumstances; Proc. of 8th Fruit, Nut and Vegetable Production Engineering Symposium, 5-9.01.2009, Concepcion-Chile, INIA 2009, pp. 494-502.

Elizabeth Gasiorowski-Denis 2017 Standards for sustainable agriculture

Fereres, E., Soriano, A., (2007), Irrigation deficit for reducing agricultural water use, Journal of Experimental Botany, Vol. 58, no. 2, pp. 147–159.

Ferreiro-Arman, M., Da Costa, JP, Homayouni, S., et al., (2006), Hyperspectral image analysis for precision viticulture, In Image Analysis and Recognition, pp. 730-741, Springer Berlin Heidelberg

Fidanska, B., P. Borisov, D. Nikolov (2021). Demand of Digital Services in Agriculture. Bulgarian Journal of Agricultural Economics and Management - Sofia. Vol. 65, issue 4, 40 – 49.

Gebbers, R. and Adamchuk, VI, (2010), Precision farming and Food Security, Science Vol. 327 no. 5967, pp. 828-831, DOI: 10.1126 / science.1183899

Griffin, T., D. Lambert, J. Lowenberg-DeBoer, (2005), Economics of Lightbar and Auto-Guidance GPS Navigation Technologies, in Precision farming '05, JV Stafford, ed. Wageningen Academic Publishers, Wageningen, Netherlands

Klerkx L., Jakku E., Labarthe P 2019: A review of social science on digital agriculture, smart farming and agriculture 4.0: New contributions and a future research agenda

Kovács, I. Husti 2018: THE ROLE OF DIGITALIZATION IN THE AGRICULTURAL 4.0 - HOW TO CONNECT THE INDUSTRY 4.0 TO AGRICULTURE

Latruffe, L. (2019). Competitiveness, productivity and efficiency in the agricultural and agri-food sectors.

Lorenzo AM, Del Aguila Obra A, R, Padila-Melendez A., Plaza-Angulo JJ 2020: Digitization of Agri-Cooperatives in the Smart Agriculture Context. Proposal of a Digital Diagnosis Tool Department of Economics and Business Administration, Faculty of Social Sciences and Work, University of Málaga, Campus Teatinos s / n 29071, Málaga, Spain

MAF 2019: Project STRATEGY FOR DIGITALIZATION OF AGRICULTURE AND RURAL AREAS OF THE REPUBLIC OF BULGARIA

Mobasshir Mahbub 2020 A smart farming concept based on smart embedded electronics, internet of things and wireless sensor network, Internet of things, Volume 9

Nikolov, D., P. Borisov, T. Radev, Iv. Boevski (2020). Formation of public goods by agriculture in Smolyan district, Bulgaria. Journal of Bio-Based Marketing, vol.1, 2020, 4-12, ISSN 2683-0825

Nikolov, D., Iv. Boevski, P. Borisov, T. Radev. (2020). Opportunities for joint bio-based marketing of farmers from the region of Smolyan. Bulgarian Journal of Agricultural Economics and Management, vol.1/2020, 70-77

Njoroge, JB, Ninomiya, K., Kondo, N., et al., (2002), Automated fruit grading system using image processing, In SICE 2002. Proceedings of the 41st SICE Annual Conference (Vol. 2, pp. 1346-1351), IEEE.

Ojeda, H., Carrillo, N., Deis, L., et al., (2005), Precision viticulture and water status II: Quantitative and qualitative performance of different within field zones, defined from water potential mapping, in XIV International GESCO Viticulture Congress, Geisenheim, Germany, 23-27 August, 2005, pp. 741-748, Group of the Study of the Conduit de la Vigne (GESCO).

Petrov, K., P. Borisov (2021). Prospects for strategic development of viticultural enterprises in Bulgaria. Scientific Papers Series – Management, Economic Engineering in Agriculture and Rural Development, vol. 21, Issue 1, 2021, 583 – 594. ISSN 2284-7995, E-ISSN 2285-3952

Popov V., 2013. Partnership of organic farming, eco-tourism and wilderness conservation - experiences of the pilot project "New Thracian Gold" in Bulgaria. Practitioners' Track, IFOAM Organic World Congress 2014, 'Building Organic Bridges', 13-15 Oct., Istanbul, Turkey. Available online at: [orgprints.org/23363/7/23363.pdf](http://orgprints.org/23363/7/23363.pdf)

Popova, LI, Demina, ID, Stepanenko, YS, Tran, QN, Meshkova, GV, & AfonasoVA, MA (2019). Regional aspects of sectoral digitalization: problems and prospects. International Journal of Economics & Business Administration, 7 (2), 176-188.

Rezezar, K., P. Borisov, T. Radev, A. Osmani (2019). Social and Climate Changes in Agriculture: Challenges as Opportunities for Adaptation. New Knowledge Journal of science, vol.8 (4), 2019. 41-47.

RotzS.,GravelyE.,MosbyJ.,DuncanE.,HorganM.,LeBlancJ.,MartinR.,TaitNeufeldH.,NixonA.,PantL. 2019 Automated pastures and the digital divide: How agricultural technologies are shaping labor and rural communities

Salam, A., & Karabiyik, U. (2019). A cooperative overlay approach at the physical layer of cognitive radio for digital agriculture.

Shepherd, M., Turner, JA, Small, B., & Wheeler, D. (2020). Priorities for science to overcome hurdles thwarting the full promise of the 'digital agriculture' revolution. Journal of the Science of Food and Agriculture, 100 (14), 5083-5092.

Simon Fielke, Robert Garrard, Aysha Fleming 2019 Conceptualizing the DAIS: Implications of the 'Digitization of Agricultural Innovation Systems' on technology and policy at multiple levels

SPECIAL REPORT, EURACTIV 2017: EU FARMING GETTING SMARTER

Stoeva, T., V. Dirimanova, P. Borisov (2021). The Impact of Digitalization on Competitiveness of Bulgarian Agriculture. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 21, Issue 4, 2021 PRINT ISSN 2284-7995, E-ISSN 2285-3952, p. 561-564.

*Terptsra, DEHRM: A key to competitiveness. Management Decisions 32, (9), 1994 pp.10-14.*

Tullberg, JN, Yule, DF, McGarry, D., (2007), Controlled traffic farming — from research to adoption in Australia, Soil and Tillage Research, 97 (2), pp. 272-281.

1Walter A. 2016: How will digitalization change agriculture, International Trade Forum Geneva, Iss2 28-29

Yiyan C., Cunjin L., Ye L., 2020 Electronic agriculture, blockchain and digital agricultural democratization: Origin, theory and application

Yosifov, T. (2019). Competitiveness through innovation. Socio-Economic Analysis, (2), 187-197.

## TRADITIONAL PROBLEMS OF THEORY AND PRACTICE OF PERSONNEL MANAGEMENT IN TRANSITION ECONOMIES

Bairam Hasani<sup>1</sup>, Haik Garabedian<sup>2</sup>

<sup>1</sup>E-mail: bajram.hasani1982@gmail.com, University of Tirana, Sheshi Nënë Tereza 4, Tiranë 1010, Albania

<sup>2</sup>E-mail: haik.t.garabedian@gmail.com, Agricultural University of Plovdiv, bul. "Mendeleev" 12, 4000 Trakiya, Plovdiv, Bulgaria

### ABSTRACT

The successful development of the company is associated with a significant increase in the productivity of production resources and an increase in labor productivity. Managers must be armed with different methods for assessing the effectiveness of various resources and, first of all, the personnel of firms. The above determines the relevance of the topic. Working effectively means achieving great results with less labor, time and money. And in order to judge how effective the personnel management system is, it is necessary to develop an assessment methodology that allows you to determine the actual situation in the enterprise in the field of personnel management, identify weaknesses and give recommendations for improving it.

The purpose of the current article is to point the traditional problems of personnel management for the statistical assessment of the effectiveness of personnel management in firms operating in a transition period.

**KEYWORDS:** personnel management, efficiency, labour productivity, firm performance

### ABSTRAKT

Die erfolgreiche Entwicklung des Unternehmens ist mit einer deutlichen Steigerung der Produktivität der Produktionsmittel und der Arbeitsproduktivität verbunden. Die Manager müssen über verschiedene Methoden verfügen, um die Effizienz der verschiedenen Ressourcen und vor allem des Personals der Unternehmen zu bewerten. Daraus ergibt sich die Relevanz des Themas. Effektiv arbeiten bedeutet, mit weniger Arbeit, Zeit und Geld gute Ergebnisse zu erzielen. Um beurteilen zu können, wie effektiv das Personalmanagementsystem ist, muss eine Bewertungsmethodik entwickelt werden, die es ermöglicht, die tatsächliche Situation im Unternehmen im Bereich des Personalmanagements zu ermitteln, Schwachstellen zu identifizieren und Empfehlungen zur Verbesserung zu geben.

Ziel des vorliegenden Artikels ist es, die traditionellen Probleme des Personalmanagements für die statistische Bewertung der Effizienz des Personalmanagements in Unternehmen, die sich in einer Übergangsphase befinden, aufzuzeigen.

**STICHWORTE:** Personalmanagement, Effizienz, Arbeitsproduktivität, Unternehmensleistung

### RÉSUMÉ

Le développement réussi de l'entreprise est associé à une augmentation significative de la productivité des moyens de production et à une augmentation de la productivité du travail. Les gestionnaires doivent être armés de différentes méthodes pour évaluer l'efficacité des diverses ressources et, en premier lieu, du personnel des entreprises. Ce qui précède détermine la pertinence du

sujet. Travailler efficacement signifie obtenir de bons résultats avec moins de travail, de temps et d'argent. Et pour juger de l'efficacité du système de gestion du personnel, il est nécessaire de développer une méthodologie d'évaluation qui permette de déterminer la situation réelle de l'entreprise dans le domaine de la gestion du personnel, d'identifier les faiblesses et de donner des recommandations pour l'améliorer.

L'objectif du présent article est de pointer les problèmes traditionnels de la gestion du personnel pour l'évaluation statistique de l'efficacité de la gestion du personnel dans les entreprises opérant dans une période de transition.

**MOTS CLÉS:** gestion du personnel, efficacité, productivité du travail, performance des entreprises

## **INTRODUCTION**

The planned economic system operating for many decades limited the possibilities of enterprises, and also imposed certain requirements on their personnel. The economic reform, which provides for a change in the forms of ownership, the right of firms to economic independence and the disposal of labor results, creates objective economic conditions for the application of management in the activities of firms.

It goes without saying that the market economy often imposes higher requirements on the qualifications of specialists than the planned one. Thus, managers must develop and recommend an effective strategy focused on market criteria, ensure continuous product innovation, and create a favorable organizational culture.

Managers must constantly monitor the changes taking place in the external environment, as well as evaluate the changes taking place in the firm's activities.

The successful development of the company is associated with a significant increase in the productivity of production resources and an increase in labor productivity. Managers must be armed with different methods for assessing the effectiveness of various resources and, first of all, the personnel of firms. The above determines the relevance of the topic.

The purpose of the current article is to point the traditional problems of personnel management for the statistical assessment of the effectiveness of personnel management in firms operating in a transition period.

## **RESULTS AND DISCUSSION**

Personnel management is a vital strategic function formed, under the influence of many factors, into an independent structure.

F. Taylor's "scientific organization of labor" strongly influenced the management of the organization in general and human resources, in particular...

Trade union intervention has led to the creation of national social insurance systems, minimum wages, and the limitation and reduction of working hours. Compliance with these requirements fell on the personnel management services.

D. McGregor's work has had a significant impact on management practice. In them, he criticized the main provisions of the theory of "scientific management" (McGregor, 1986) A great contribution was made by the school of "human relations", the formation of which is associated with E. Mayo's theories of motivation. The principles of people management developed by her proclaimed the consideration of people's expectations and interpersonal relations.

Due to the economic crisis in the 80s, the issues of human resource planning became of paramount importance, their solution also fell on the personnel management services.

Enterprises have nothing to boast about in mastering and developing modern methods of personnel management. We are at a transitional stage of economic development from a directive-planned to a market one.

The chosen path of transition to the market did not justify the hopes placed on it. The main results of several years of carrying out a radical economic reform are more than well known: the decline in production, the impoverishment of the people; unemployment, strikes, unfavorable demographic shifts, especially in the central regions of Russia, etc. The rupture of the usual economic ties further enhances the manifestation of all the above and other negative processes.

The evolution of the management system that took shape at the first stages of economic reform takes place in the specific conditions of the transition period. Its important features are:

- instability of relations between enterprises and insufficient coordination of their activities;
- freedom of economic activity due to the existing legal system;
- instability of regulatory and economic policies.

Add to this the lack of information in virtually all areas of economic life. As a result, an atmosphere of uncertainty has arisen, when the activities of enterprises are aimed mainly at everyday survival. Therefore, in these conditions, effective management of the enterprise and human resources, in particular, becomes especially important. In order not to repeat the mistakes of the past, it is very important to make a significant adjustment to the economic strategy and implement a number of organizational and structural decisions.

After some numbness, which was determined by centralized leadership and totalitarian ideology, organizations began to face fundamentally new tasks. The main ones are: stimulating the work of hired personnel, preventing the "brain drain" (Dadaev, 1997), indexation of wages in the context of inflation, ensuring that the level of qualifications of personnel meets the strict requirements of the modern economy and, finally, strengthening the sense of belonging to the company among personnel, etc.

But even now there are contradictions between the proclaimed goals and functions of personnel management departments, so the list of responsibilities includes actions for accounting, monitoring, motivating personnel, regulating relations between the management and personnel, but in reality, the functions of personnel management services, judging by the facts, are rolled up. The heads of these services assess their role in the management of social personnel processes as secondary, considering that everything depends on the management of the enterprise. (Aleksandrov, 1997)

It is known that the successful development of production in modern conditions depends to a large extent on the competitiveness of personnel (Borisov and Behluli, 2020). And it is achieved by constant training of personnel, improving their qualifications and strategic determination of their number and professional orientation at the moment and in this production. But the current state policy in the field of human resources in Russia turned out to be ineffective: the vocational school is significantly weakened, there is no system for the development of personnel at enterprises, and the previous links between vocational education and professional labor have been destroyed. The market of professions and the market of educational services in Russia are practically not connected.

The narrowness of the skills of the management corps, especially of its top echelon, negatively



affected the transition to market relations from the very beginning of the reforms. It turned out that "many managers were unable to organize the work of their subordinate institutions in general and to orient it towards studying and meeting consumer demand in particular. It was also a great difficulty for them to determine the directions of resource use, first of all, this applies to such important resources as personnel, fixed assets, financial resources " (Haykazyan A., Nisevich, 1997).

This gives grounds to assert that the key problem for the vast majority of enterprises is the problem of ineffective personnel management. Right now the time is coming when it is necessary to pay more attention to systematic training and, especially, retraining of qualified specialists. This will make it possible to react faster and more effectively to changes in the country, to strengthen the elements of stability, solidity, representativeness, sober calculation, and rejection of an excessively risky speculative game in market activities.

Nevertheless, there are still very few Russian commercial firms that prioritize personnel training and continuing education. In most cases, in this matter, enterprises continue to live one day, focusing all their attention on solving current problems. Without a doubt, the question of talent is strategic, for large successful firms as well as for small firms.

The educational services market turned out to be practically unbalanced with the real needs of the skilled labor market. The quality level of employees of enterprises is significantly inferior to the requirements of the international labor market.

The personnel management system at most enterprises does not correspond to the strategy of market reforms, which largely hinders the possibility of implementing programs for sustainable stabilization, revitalizing production and restructuring the economy, improving the quality and competitiveness of Russian products (Fatkhudinov, 1997).

The existing practice of work in the field of personnel management does not provide a high-quality renewal of personnel, specialists and managers. The frequency of professional development of almost all categories of personnel continues to grow and currently for managers and specialists is on average 7-8 years, while in Western Europe and Japan it is 3-5 years and 3-6 years. Training programs for employees at enterprises are focused mainly on obtaining primary qualifications in the form of simplified requirements.

It is necessary to train and significantly improve the qualifications of the governing body in management, marketing, innovation, personnel management and a number of other disciplines, taking into account the specifics of the current economic situation and the Russian market. The formation of the business services industry must become one of the primary problems of structural and investment policy. (Hayman, 1995)

The set of programs used in the process of training and retraining of managers must correspond to the changed and increased requirements for managers. Programs should guide managers to assess management effectiveness and, as a result, increase competitiveness by maximizing the use of human resources at work, as opposed to economic growth achieved through additional capital investment (Behluli, Qerimi, Borisov and Atanasov, 2019).

Despite the fact that many US firms have their own production organization services, they often prefer to invite consultants from firms in the business services industry for a while, rather than resolve the relevant issues on their own. For us, this practice is more than relevant. It would not be an

exaggeration to say that the organization of production in any production link - at an enterprise, in a shop, at a site, essentially remains a "blank spot".

Over the past two years, unemployment has become a major macroeconomic phenomenon in transition economies, turning into an independent factor in the development of the economy. Unemployment also inflicts considerable damage on the vital interests of people. Not allowing them to apply their skill in the kind of activity in which a person can express himself the most, or by depriving them of such an opportunity, because of which people endure serious psychological stress (Ismayilov, 1993)

"One of the root causes of the rise in unemployment is the growing differentiation of the population by income. The elite strata of the population, in favor of whom the national income is redistributed, cannot form a strong demand for consumer goods of domestic production, which contributes to its stagnation and, as a result, unemployment " (Andreev, 1997)

The situation in the age structure of personnel management services is alarming, where 20-25% of people who will enter or already have retirement age in the next five years. This indicates slow renewal and insufficient inflow of young workers to these units.

Based on the foregoing, it is obvious that the problem of unemployment is a key issue in the context of economic reforms, and without solving it, it is impossible to establish effective economic activity. The problem of unemployment is especially acute now in Russia, which is not surprising, since the state of the Russian economy is now depressing. A huge economic downturn, having ruined the industry, could not help but affect the labor market (Nikiforova, 1991)

Among the most acute problems, it should also be noted such as: the departure of qualified specialists, low performing and labor discipline of personnel, insufficient qualifications of personnel and individual managers, unsatisfactory moral and psychological climate, low level of employee motivation, and as a result, insufficient initiative of workers in solving production problems, confrontation between administration and staff (Behluli, Qerimi, Borisov and Hajdari, 2020)

The structure of personnel management services, the qualitative composition and level of remuneration of their employees do not correspond to the tasks of increasing the efficiency of personnel management. There is an obvious shortage of professionals, and employed workers do not have high prestige and appropriate incentives for work (Utkin, 1996)

It should also be noted the erosion of traditional values, which leads to serious disorders of personal beliefs and values. Stress, pressure and uncertainty are increasingly present in most forms of life in organizations. This significantly complicated the system of motivation and incentives for employees, primarily in connection with hiring on short-term contracts, the setting of various preconditions (including a probationary period), strict linking of material incentives with the profit received and other factors.

There is no uniform system of work with personnel at the enterprises, first of all, the system of scientifically grounded study of abilities and inclinations, professional and job promotion of workers. Personnel management functions are dispersed among various services, departments and divisions of the enterprise, one way or another involved in resolving personnel issues. Lack of the necessary coordination does not allow effective personnel management.

Because of this, as a rule, personnel management departments are not yet able to assume the role of services that would provide, for example, the whole range of measures that guarantee the quality of selection and placement of personnel at all levels. Their practical impact on the efficiency of the enterprise

is minimal, and the prestige among other services is extremely low. "They are actually the services of accounting, control and registration of personnel documentation and only to a weak extent can claim the role of personnel management tools" (Emelyanov, 1993).

There is, therefore, a serious contradiction between the growing objective need for the provision of personnel management functions and the real state of the services responsible for this. The real state of personnel management services in our country today hardly gives grounds for optimism. And here it is not enough just to change the regulations on the personnel management department - a radical restructuring is needed, affecting the change in the functions, structure and composition of this service.

All these problems have to be addressed against the backdrop of political instability and widespread unemployment, which are putting increasing pressure on labor collectives.

Moving on to the issue of attitudes towards personnel innovation, we can say that the reasons that prompt us to be careful, cause fear, provoke rejection and resistance, all the time when faced with something new that changes the usual life stereotype (Ushanova, 1986)

When revising personnel management methods that do not correspond to the state of the external environment, management may face a conflict generated by the rejection of new methods by the organizational culture of the company due to the conservatism and inertia of some part of the team. Such a conflict can be quite painful and destructive in its consequences.

So K. Davis identified three groups of reasons for resistance to innovations (Davis, 1995). The basis of all economic reasons is the fear of loss in earnings, which forms the employee's anti-innovation attitude.

Regarding the reasons of a personal nature that induce people to resist the innovation process, we can say that the main one is the personality's resistance to devaluation, which very often brings with it the innovation process.

In the group of anti-innovation barriers, which are of a socio-psychological nature, most of the reasons are based on a person's reaction to the innovative processes accompanying in many organizations, a kind of encroachment on his psychological comfort (Vaisman, 1977).

These and some other problems raise the question of improving the personnel management system for managers. However, we often have to deal with the fact that, trying to put the work with personnel in the company at the proper level, managers make a number of mistakes that do not allow achieving the goals for which, in fact, work with personnel was started.

To eliminate such deficiencies, personnel development planning is necessary. First of all, this is planning the natural movement of personnel - retirement, dismissal due to illness, in connection with studies, military service, etc. This is not difficult to do, but it is important to timely prepare an equivalent replacement. Another is more difficult - to strengthen the potential of the team, to increase its competitiveness.

There are several ways for this, including: careful selection of personnel, systematic improvement of their qualifications, creation of conditions for the most effective manifestation of their abilities and development of methods for assessing the actual effectiveness of the team's work.

Many commercial structures in Russia are now taking a different path. Instead of intensifying the work on the adaptation of collectives to the conditions of economic reforms, taking care of ensuring a painless psychological restructuring of each person, especially experienced specialists, workers are

sometimes mercilessly dismissed as having not adapted to the new requirements. This approach is a manifestation of a short-sighted policy. After all, any replacement of an employee is an economically expensive undertaking. This damages the reputation of the firm.

The problem of "obsolescence" occupies a special place in the process of professionalization of management. "Obsolescence" occurs when an individual uses points of view, theories, concepts and methods that are less effective in solving a problem than others currently in existence (Travin, 1997). Of course, not every example of ineffectiveness in personnel management of a firm is associated with "obsolescence." Laziness, lack of understanding, and overloading with other responsibilities can also lead to inefficiency. But the costs of developing and making second-rate solutions to emerging problems for a firm are likely much greater than the costs required to overcome the obsolescence of their staff.

Psychological research shows that in conditions of group isolation, having a "good immediate boss" is the most necessary factor for effective team leadership (Krichevsky, 1997).

Disorders in relations with the immediate boss often lead to psychological breakdowns, which causes neuroses in employees (Kempinski, 1975)

Management practice also shows that in any company, as a result of a combination of different reasons, the presence of conflicts is inevitable. Conflicts arise, often, due to staff dissatisfaction with the assessment of their work by the manager. In the case of very serious conflicts, there may even be a shift in organizational goals.

It is indicative that in the activities of the leader himself, as the main subject of management, there are various contradictions associated with undesirable tendencies in people's behavior. The difficulty in assessing these phenomena lies in their heterogeneity.

In an effort to improve the efficiency of personnel management, it is useful to refer to the experience of other countries, to study and generalize the achievements of foreign scientific thought and economic practice. It is vitally important for Russia to generalize the experience of Western firms in the field of personnel management, to provide domestic managers with conditions for obtaining high-level management knowledge. But the failure of attempts to mechanically copy foreign experience is noted by foreign researchers themselves, in other words, they do not quite fit Russian conditions.

It is necessary to analyze the materials published in the press on the problems of personnel management. In these materials, on the one hand, social goals and objectives are reflected, and on the other, various kinds of shortcomings and suggestions for improving the effectiveness of personnel management are highlighted.

As B. Aikes and R. Rieterman note, "the main problem of reforming the economy in Russia is that the authors of the reform program did not foresee and did not take into account the formation of a new type of enterprises, which is characteristic only of the transition period. Such enterprises are neither socialist nor market-oriented. They are rather focused on survival and try to ensure the continuation of their activities in an extremely unstable institutional environment." (Ikes, 1994)

It should be noted that recently in our country a certain amount of work has been carried out to train high-class management personnel, various business schools are being organized, and a lot of specialized literature by domestic and foreign authors is published, albeit of different quality.

However, in the literature on management topics, as a rule, publications of an educational and educational-methodological nature prevail, considering mainly the history and foundations of

management, special management issues (financial management, personnel management, situational and systemic approaches to management, sociology of organizations, marketing). In this sea of publications on management problems, there is clearly a lack of literature for specialist managers, top management.

Speaking about economic reforms, one should bear in mind not only the general trend of the development of the situation, but also those specific conditions and peculiarities that are inherent in the current conditions of activity of Russian enterprises at this particular stage. Ignoring specific historical conditions can lead to the adoption of strategic management decisions, which may not only turn out to be ineffective, but also have negative consequences, as the leading Russian economists have repeatedly warned about.

Thus, the well-known economist, corresponding member of the Russian Academy of Sciences L.M. Gatovsky, analyzing the course of economic reforms, notes "... a number of negative aspects: the mechanical copying of the practice of foreign developed countries and the transfer of methods completely unsuitable for our specific conditions, the use of not the best, and often the worst, foreign business practices, often in a distorted form, ignoring or extremely insufficient use the positive experience of developed countries, the imposition of vicious economic methods of "home-made". The continuing negative influence of the legacy of the past, as well as direct and covert resistance to the reform on the part of its opponents, including among officials of the state apparatus in the center and at the local level, was manifested to a considerable extent. " (Gatovsky, 1994)

Problems of increasing labor efficiency have their own characteristics for different groups of managers (managers, specialists, technical employees). But at the same time, they have a lot in common, since, ultimately, most of these problems, one way or another, are connected, on the one hand, with the specifics of a particular type of enterprise with its inherent production processes and, on the other hand, with the real economic situation that forms the "external environment" of the enterprise (Qerimi, Behluli, Borisov and Hajdari, 2020).

There are also problems of the lower level of personnel management, which have their own aspects and characteristics. "An important point in their assessment is that in terms of their mentality and roles, lower managers belong to managers, and vice versa, the position contributes to the fact that their psychology is closer to the workers. This duality of position in the firm often leads such leaders to a stressful state. " (Rozanova, 1997)

Much has been said lately that the roots of the problems of most Russian enterprises lie in ineffective management. What is effective management, each of the enterprises that have managed to adapt to new conditions understands in its own way. Everyone finds their own levers of management, implements their own principles of management. But until now the valuable experience developed by each of the enterprises remained only his experience.

At the same time, there is a positive experience that should be studied, refined and recommended for implementation. The results of the activities of many enterprises and the accumulated experience of their work with personnel show that the formation of production teams, the provision of high quality personnel potential are decisive factors in production efficiency and product competitiveness.

Problems in the field of personnel management and daily work with personnel, according to experts, in the near future will constantly be in the focus of management. In the future, with the

development of scientific and technological progress, the content and working conditions will become more important than material interest.

To solve these and other problems of personnel management, it is necessary to constantly improve the statistical methodology, to analyze more deeply the processes and phenomena occurring in the field of personnel management. There is no small amount of work to be done to improve the organization of labor at all levels of production and management. It is more important to improve the efficiency of personnel management in the context of economic reforms, this determines the tasks of statistics.

The most important task of firm statistics is to study the number, composition, distribution, movement and dynamics of personnel, to identify reserves for increasing the efficiency of its use, which are necessary to ensure income growth with the same or less number of employees.

The task of statistics is to expand and deepen the analysis of labor productivity, to improve the methodology for measuring it. The statistics of firms should help to uncover the reserves for the growth of labor productivity, determine the ways of a more complete and efficient use of personnel and working time, eliminate downtime and non-production costs, improve labor and production discipline, reduce staff turnover, and enhance the role of material and moral incentives to work.

Statistics investigates the stimulating role of wages, the dependence of the income of each employee on his personal labor contribution and the contribution of the team to the development of the company. Statistics are faced with the task of studying the composition and dynamics of wages and material incentives, and their use, the ratio of growth rates of labor productivity and wages. She justifies the wages of workers and employees by profession and position, examines the results of increasing wages and salaries.

In general terms, the tasks of statistics in personnel management can be represented as the following table:

**Table 1.** The tasks of statistics in personnel management. Source: Own.

Complexes of tasks	Local tasks
Staff composition and dynamics statistics	<ul style="list-style-type: none"> <li>- study of the composition of employees;</li> <li>- determination of the number of employees by category;</li> <li>- study of the movement of personnel;</li> <li>- study of staff turnover and development of measures to reduce it.</li> </ul>
Working time statistics	<ul style="list-style-type: none"> <li>- accounting of actually worked time;</li> <li>- analysis of the use of office hours and overtime;</li> <li>- accounting for downtime and absenteeism;</li> <li>- compilation and analysis of the balance of working hours.</li> </ul>
Labor productivity statistics	<ul style="list-style-type: none"> <li>- measuring the level and dynamics of labor productivity;</li> <li>- determination of the degree of fulfillment of production standards;</li> <li>- identification of reserves for the growth of labor productivity.</li> </ul>
Payroll statistics	<ul style="list-style-type: none"> <li>- study of the structure of the payroll;</li> <li>- study of the level and dynamics of wages;</li> <li>- study of the material incentive fund.</li> </ul>

Labor conditions and safety statistics	<ul style="list-style-type: none"><li>- the study of production and technical factors;</li><li>- study of sanitary and hygienic factors;</li><li>- study of general working conditions.</li></ul>
--	---

An important task of statistics is to develop and improve the methodology for calculating indicators of the use of working time. At the present stage of economic development, the compilation of the balance of working time is of great importance. Its correct construction and in-depth analysis make it possible to identify losses in the form of absenteeism, in-shift and whole shift downtime, to outline ways for the further use of working time, and to identify reserves for increasing the efficiency of personnel management.

Responsible tasks for statistics are in the field of improving labor rationing, accelerating the implementation of technically sound production rates and service standards, especially in auxiliary and time-paid jobs. Improving the efficiency of personnel management largely depends on the successful solution of this task.

Statistics are designed to investigate new phenomena in the development of society and show their impact on the effectiveness of personnel management. The statistics are faced with the problems of studying the relationship of the firm's personnel, great importance is attached to working conditions and labor protection, on which the increase in the efficiency of personnel management largely depends.

"Monitoring the implementation of decisions in the field of personnel management is the most important task of statistics. The presented statistical material should help to uncover unused reserves and prevent the possibility of imbalances. " (Nazarov, 1981). For this purpose, it is required to constantly improve the system of indicators characterizing the development of the company. Statistics is an integral part of the personnel management system, its information is deeply scientific in nature and is the basis for making important management decisions.

A comprehensive study of the phenomena and processes occurring in the field of personnel management requires further improvement of the statistical methodology of the system of indicators for studying the effectiveness of personnel management, labor organization, its regulation and payment, for measuring labor productivity.

Considering the issue of assessing the effectiveness of personnel management, it should be noted that in recent years, work on this topic has been carried out both by scientific organizations and by individual scientists. In particular, research in this area is carried out in a number of research institutes and universities: Research Institute of Labor, VNIPI Labor in Construction, the Russian Economic Academy named after V.I. G.V. Plekhanov, State Academy of Management. S. Ordzhonikidze, Moscow, St. Petersburg, Nizhny Novgorod universities, St. Petersburg Financial and Economic Institute and other organizations.

Working effectively means achieving great results with less labor, time and money. And in order to judge how effective the personnel management system is, it is necessary to develop an assessment methodology that allows you to determine the actual situation in the enterprise in the field of personnel management, identify weaknesses and give recommendations for improving it.

One cannot but agree with J.M. Ivantsevich and A.A. Lobanov who determined that "assessing the effectiveness of personnel management is a systematic, clearly formalized process aimed at measuring the costs and benefits associated with programs of personnel management activities and for correlating



their results with the results of the base period, with competitors and with the goals of the enterprise" (Ivantsevich, 1993)

Evaluation of the effectiveness of personnel management is based primarily on information about employees: promotion, their professional, qualification, gender and age characteristics, medical and psychological parameters, productivity and innovative activity.

#### **CONCLUSION**

Evaluation should be carried out throughout all phases of management activities. It is closely related to other stages of the management process and, by its results, is capable of prompting the manager to make the necessary adjustments to it. At the same time, the assessment ensures the functioning of the firm with uninterrupted feedback.

It should also be noted that when assessing the effectiveness of personnel management, one should take into account the costs of achieving these goals, the real effectiveness of the personnel management system can be determined only by comparing the degree of implementation of goals with the funds spent on it. It is necessary to evaluate the effectiveness of personnel management on the basis of the performance of the whole firm.

#### **REFERENCES**

- Aleksandrov, A. (1997). Is the personnel sheepskin worth the dressing? // Personnel Service, 1997, No. 11- p.12-15
- Andreev S.V. (1997). Human resources: preservation, use of development. //Abstract of dissertation for the degree of Doctor of Economics. M.: 1997. -14 p.
- Behluli, A., F. Qerimi, P. Borisov, D. Atanasov. (2019). Identification of the Human Resource Management Model in Kosovo Agrobusiness. Multidisciplinary Scientific GeoConference SGEM, Volume 19, Issue 3.2, 2019.
- Behluli, A., F. Qerimi, P. Borisov, M. Hajdari (2020). The Impact of the Job Characteristics on Employees' International Motivation. A Case Study into Kosovo's Agribusinesses. Conference: 20th International Multidisciplinary Scientific GeoConference Proceedings SGEM 2020, 33-41, DOI: 10.5593/sgem2020/5.2/s21.073 (SCOPUS)
- Borisov, P., A. Behluli (2020). Strategic orientation of business organization – step by step. Journal of Bio-Based Marketing, vol.2, 2020, 5-20, ISSN 2683-0825
- Dadaev, O. (1997). Isn't it time to stop the " brain drain "// Man and Labor 1997, No. 5, - p. 91.
- Davis, K. (1975). A. Kempinski, Psychopathology of Neuroses, Warsaw, 1975, pp. 57-63), the reasons for the resistance of people to organizational innovations can be threefold - economic, personal and socio-psychological.
- Emelyanov O. (1993). How to manage personnel in market conditions. // Man and Labor, 1993, No. 1, p.34
- Fatkhudinov R. (1997). Management as a tool for achieving competitiveness. //Economic Issues No. 5, 1997, pp. 118-127.
- Gatovsky L.M. (1994). On overcoming economic obstacles to reforms in Russia." // Economic Issues, 1994, No. 1, - p. 107-1 16.

- Haykazyan A., Nisevich E. In search of management perfection. //Economic Issues, 1997, No. 2, p. 154.
- Hayman S. (1996). Strategy of organizational and structural decisions // Economic Issues, No. 5, 1996, p. 108
- Ikes B., Rieterman R. (1994). From enterprise to firm: notes on the theory of an enterprise in transition. // Economic Issues, 1994, No. 8, - pp. 31-39.
- Ismayilov L.E. (1993). Factors of supply and demand in the labor market, unemployment and forms of its manifestation. IE RAS, A., 1993, Head of Department. in INION RAN, no. 48284, p. 1.
- Ivantsevich J.M. Lobanov A.A. (1993). Human resources management, M.: "Delo", 1993, p. 274.
- Krichevsky R.L. (1996). If you are a leader – Elements of management psychology in everyday work. M.: "Delo", 1996.
- McGregor, D. (1985). The Human Side of the Enterprise, p. 300.
- Nazarov M.G., Parteshko N.S., Rumyaentsev V.N. Labor statistics, M. (1981). Finance and statistics, 1981, -p. 15.
- Nikiforova, A. (1991). "Labor market: employment and unemployment", Moscow: 1991.
- Qerimi, F., Behluli, A., Borisov, P., Hajdari, M. (2020). The significance of efqm model in fostering the quality of higher education in Kosovo. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, vol. 2020 – August, issue 5.2, pages 879-886. ISSN 13142704
- R.S. Vaisman. (1997). The relationship of interpersonal relationships with group efficiency. //Questions of psychology. 1977. No. 4 p.34-38
- Travin V.V., Dyatlov V.A. (1997). Fundamentals of personnel management, M.: "Delo", 1997, p.16.
- Ushanova Yu.A. Management innovations in the USA: implementation problems. Moscow: 1986
- Utkin, E.A. (1996). With tight planning and central funding, HR departments were limited to executive functions. (Utkin E.A. Management of the company, M.: "Aklis", 1996, p. 240).
- V.A. Rozanova. (1997). Difficulties of management and their psychological reasons, // Personnel Management, 1997, №3- p.33-38.

## METHODOLOGICAL APPROACH TO CATEGORIZE BULGARIAN FESTIVALS AND HOLIDAYS

Stefan Videv<sup>1</sup>

<sup>1</sup>E-mail: videv\_stefan@abv.bg, Agricultural University of Plovdiv, bul. "Mendeleev" 12, 4000 Trakiya, Plovdiv, Bulgaria

### ABSTRACT

The article is an attempt to categorize the festival events in Bulgaria by using the method of analysis of the content of Internet-based information arrays containing data on over 1000 festivals. The data obtained are classified on the basis of 15 evaluation criteria. The summarized results are grouped in several clusters, which allows to reveal the main parameters of the festival events.

**KEY WORDS:** *content analysis, clusters, festivals, folklore and cultural events*

### ABSTRAKT

Der Artikel ist ein Versuch, die Festivalveranstaltungen in Bulgarien zu kategorisieren, indem er die Methode der Inhaltsanalyse von internetbasierten Informationsreihen verwendet, die Daten zu über 1000 Festivals enthalten. Die gewonnenen Daten werden auf der Grundlage von 15 Bewertungskriterien klassifiziert. Die zusammengefassten Ergebnisse werden in mehreren Clustern gruppiert, die es ermöglichen, die wichtigsten Parameter der Festivalveranstaltungen zu erkennen.

**STICHWORTE:** Inhaltsanalyse, Cluster, Festivals, Folklore- und Kulturveranstaltungen

### RÉSUMÉ

L'article est une tentative de catégoriser les événements de festivals en Bulgarie en utilisant la méthode d'analyse du contenu des tableaux d'information sur Internet contenant des données sur plus de 1000 festivals. Les données obtenues sont classées sur la base de 15 critères d'évaluation. Les résultats résumés sont regroupés en plusieurs clusters, ce qui permet de révéler les principaux paramètres des événements festivaliers.

**MOTS CLÉS:** analyse de contenu, clusters, festivals, événements folkloriques et culturels

### INTRODUCTION

The present work has as its object the festival events and the folklore holidays in our country. The objectives of the study are: counting and structuring according to certain criteria of festivals and holidays in Bulgaria, revealing such important characteristics as: time parameters, organization, functions, subjects, audiences, territoriality and scope, thematic focus, commercialization, etc. To characterize these variables, we used the empirical indicators frequency, theme, organizer, duration, venue, territorial scope of participants, level of organization, mode of participation of visitors (as participants and / or audience), mass / elitism, free / controlled access, commercial / non-commercial, competitive / non-competitive,

In this publication we have used several publicly available databases containing information on festivals held in our country, namely:

a) <https://fest-bg.com/festivals/>- contains information about most of the festivals and folklore festivals in Bulgaria;

b) <https://ruralnet.bg/praznici-i-festivali/>- specialized array of data on the folklore festivals held in Bulgarian villages;

in)[https://www.sabori.bg/folk\\_fest\\_sub.html](https://www.sabori.bg/folk_fest_sub.html)- contains information about the fairs held in the country.

The three sources of information were used as complementary. In total, over 1000 festivals and holidays have been counted. The method used for collecting and subsequent analysis of empirical information is content analysis or content analysis in which the available texts for the studied event are analyzed in order to extract data according to predefined criteria, which act as a kind of "sieve" through which "Arrays of information. The criteria themselves are checked for presence and repeatability in the available texts and those that are insignificant, for which there is no information in the text or which do not vary are removed. When selecting the criteria, it is particularly important that they fully describe the phenomenon under study, do not overlap with each other, are empirically relevant to the text, meaningful in content, to meet the objectives of the study, etc. As it is extremely time consuming and expensive to search for such information in the field, we use the method to capture the "traces" that the event has left on the information source. In this way, using publicly available data, we are able to reconstruct the studied event based on the documentary sources that we find for the event itself.

The data thus collected are comprehensive for the whole population. Subsequently, the information is summarized and analyzed by groups of criteria and an attempt is made to differentiate typical clusters, consisting of festival events with similar parameters. These clusters are composed of one or more of the following criteria.

## **RESULTS AND DISCUSSION**

Practically all festivals are annual, and a small part of them do not have fixed dates and duration. Some of them are said to have been held since time immemorial. Others have a starting and ending date that changes over the years. Due to the anti-epidemic measures from the beginning of 2021, a large part of the festivals will not be held.

Nearly 60% of the festivals are of folklore and entertainment nature, ie. are national holidays, including performances of authentic Bulgarian folk songs and dances, restoration of customs and crafts, accompanied by national festivities with consumption of typical food and drinks. Just over 1/3 of the festivals are profiled in the field of arts. In essence, they are performances in which professional performers and audiences are clearly distinguished.

The typical duration of the festival events is up to 3 days (90% of them), and the most common duration is 1 day. A small part of the festivals lasts up to one (6%) and more than one week (2%).

80% of the festivals are financed and organized (most often with the help of local community centers) by the local municipality. The state hardly funds such events (2.5%), excluding subsidies to some foundations (21.5%) established for the purpose of organizing a holiday, which apply for funding from the Ministry of Culture. Private patronage in the field of festival events is a rare phenomenon (13.5%).

The participants in the festival events are most often residents of the municipality (42%) and the village (14.5%) where the festival is organized. 19% and 14.5% of the festivals are national and international, respectively, and these events are most often concentrated in the capital and major cities. In other words, almost 2/3 of the festivals are local events, most often folklore festivals in which amateur ensembles participate and which are open to the public.

The issue of the specialization of the festivals is interesting. Most of them 66% are specialized events - e.g. tourist films, ballet, theater, piano or symphonic music, mummery, culinary, etc., while a third of them (34%) perform more functions or do not specialize in a single field, integrating songs, dances, folk festivities, processions, carnivals, concerts, competitions with prizes, chants, reconstructions of customs, bazaars, meetings - talks with the authors, lectures, talks, literary readings, theater productions, etc.

In terms of the degree of organization, the festivals can be categorized into three conditional groups:

a) amateur (18% of festivals), ie those organized by the participants themselves and the local public with some help from the local authorities. Such are mainly the folklore festivals in the villages. These festivals are done voluntarily and gratuitously by the community for the community.

Here is one such typical case:

"The twenty-eighth edition of the traditional for the Municipality of Veliko Tarnovo holiday of folk art "That spring has broken" is held in April in the village of Ledenik, Veliko Tarnovo. The organizer of the holiday is the Municipality of Veliko Tarnovo, and this year the host is the National Chitalishte in the village of Ledenik, Municipality of Veliko Tarnovo. The participants show the typical for the region folk-ritual activity and authentic song folklore. All ensembles receive a gift souvenir and diplomas for participation in the celebration of folk art and life "That spring has broken." The holiday is not competitive. "

b) partially organized (32.5%) - such are the folklore festivals in small towns, which are organized by local authorities with the active help of the participants and the local public. These festivals are made free of charge by the communities and the local government for the local community.

Here is such a typical case with the Youth Theater Festival "Ocean of Love" - Pazardzhik: "Performances at the festival go through a preliminary selection. They can be part of the "Festival Poster" - performances included in the official selection of the festival. The festival program also includes a "Round Table" - discussions of performances with professional actors, directors and other theater professionals, "Workshop" - theater workshops with qualified teachers and "Perspectives" - a presentation of universities that study theater.

c) fully organized (49.5%) are the festivals with art and culture, which are held in big cities. Participants in such forums are usually professionals, and the audience has strong special interests in the field (literature, cinema, theater, music, etc.), most often does not participate directly in the festival event and in most cases pays an entrance fee. These festivals are made for a fee by the organizers for the audience, ie. have a commercial character.

Here is a typical case: "PPIANISSIMO is unique as a concept worldwide and for years has been the only forum in Bulgaria entirely dedicated to contemporary music. Focused mainly on the inexhaustible possibilities of the piano not only as a keyboard but also as a percussion instrument, the festival is a kind of laboratory for new art - a creative space for established and debuting performers exploring the complex processes of modern piano aesthetics. PPIANISSIMO is a generator of new artists and a stimulator for new creativity. So far, more than 310 performers from nearly 30 different countries have taken part in the festival's 22 editions, and works by more than 430 artists from more than 50 countries have been performed.

The participation of visitors in the festival events is another important criterion that divides the festivals into:

(a) festivals in which visitors are only audiences but not participants. Such festivals (33% of all) are most often international and national art festivals held in big cities. They are more about cultural events with the participation of professional performers than about folk festivals with the participation of amateur ensembles. They are aimed at a specialized audience that pays for their right to attend the event.

A typical example in this regard is "Master of Art" - the only international film festival in Bulgaria and Eastern Europe, for a documentary film dedicated to the arts. This is also the largest international documentary film festival in Bulgaria. In April, the fifth edition of "Master of Art" will be held in Sofia, which will show over 65 premiere for Bulgaria documentaries of art from around the world. The festival will welcome dozens of guests from abroad, including an international jury, lecturers, directors and producers who will present their films.

b) mixed participation festivals are those in which the roles of participant and spectator change (62% of all) - in some events the person is a spectator, while in others he changes his role and becomes a participant. Such are mainly the mass folklore festivals in which the whole village participates, in which there is no visible difference between a participant and a visitor (at one moment you are a participant, at the next - a visitor). Such a change of roles is possible in events involving groups (choirs, troupes, ensembles, orchestras, etc.), which are participants during their performance during the rest of the time play the role of audience.

A typical example of such a festival is:

"Municipal folklore holiday" Before Easter on the square "in Krivodol. It is good to observe the Christian holidays and to respect the Bulgarian customs and in the order of thoughts it is even better to popularize, to find like-minded people and to become a tradition!

"Red, red Easter! Green, green St. George's Day..." - how nicely the Bulgarian said it! These are some of the best Christian holidays, loved and revered by young and old! Holidays that make us more human and open our souls and hearts to goodness!

And you can't go on a holiday without fun and emotions - songs were sung and people were shouting - before Easter on the square. "

c) Festivals that are not intended for the public, and only performers participate in them are extremely rare - only 2%.

The vast majority of festivals (77%) do not discriminate against potential visitors by placing barriers between them and performers that prevent or restrict access. With few exceptions (15% are partially mass and 8% - elite) holidays and events are designed for all citizens. In some cases, due to the nature of the event, a financial barrier is opened, and in others access is limited by the number of passes.

An example of one of the few elite festivals:

"MEET THE FAMILY is a unique opportunity to meet nearly 15 heirs of legendary wine families from the Old and New Worlds. Among them with the longest line is the Friscobaldi family from Florence with 1000 years of history and 30 generations in heritage. Family ancients from Bulgaria also take part. "

In 94% of cases, the organizers guarantee free access to each visitor. In a small number of cases (6%) the festival events are organized by and aimed at some minority groups (Roma, Kazalbashi, sexual

minorities, etc.), which naturally contributes to restricting access to the event for others, but this should not be the case. to be considered as discrimination.

An example of a minority holiday can be seen in the so-called neurosis holiday:

"The Allies (Kazalbashi) from the Silistra region gather in the village of Chernik to celebrate Nevruz. It is associated with spring and new life. The ritual dance "Semah" is performed, in which men and women dance side by side. A rooster is slaughtered like a sacrifice for the holiday. Boiled eggs are distributed, with which the celebrants knock for luck. Pies fried in butter (cakes) are eaten. In the evening there are gatherings (jam). "Nevruz celebrates winter and spring."

Bulgarian festivals are still poorly commercialized (81% of them do not pursue financial gain). Practically only 6% of them are aimed at making profits from them for the organizers, and 13% rely on separate commercialized activities as part of the festival event: entrance fees, participation fees, inclusion of commercial activities as part of festival events - bazaars, restaurants, folk crafts, food and beverages, etc.

An example of a fully commercial festival can be seen below:

"The eighth edition of Balkan Rakia Fest offers an exhibition-tasting of several hundred types of brandy and other spirits from around the world. The traditional exhibition presents producers and importers of all types of brandy - plum, grape, fruit, anise and other spirits.

Here's what you need to know about Rakia and Spirits Fest Sofia.

- Tasting of more than 400 types of brandy and other drinks from the Balkans and the world.
- More than 30 distilleries from Bulgaria, Serbia, Greece, Northern Macedonia, Montenegro, Turkey, China, Brazil and other countries.
- There will be sales of additional tokens only for premium and exclusive drinks.
- There will be master classes for those who want to learn more about the process of distillation of brandy.

- Cocktail area with homemade syrups and hot brandy.

- Food area with appetizers for everyone.

"A shopping area where you can buy your favorite drinks at producer prices."

The typical non-commercial festival event looks like this:

"Municipal review of the city song" Zasmiana Prolet "will be held on April 1 in Debelets. The celebration will start at 6 pm in Saglasie Chitalishte. 170 performers will perform on its stage, and 47 city songs will be played. Some of them are favorite hits, and others - new songs.

In the next edition of the holiday, the best performing participant will receive an incentive cash prize from the mayor of Debelets, and the other performers will be awarded diplomas and souvenirs.

The holiday marks the beginning of the traditional festivals of amateur arts - song, dance and theater, organized by the Municipality of Veliko Tarnovo annually in April and May. Admission is free.

The commercialization of a holiday is also related to the payment of an entrance fee by visitors. Most commercial festivals require the purchase of a ticket, unlike non-commercial ones. Revenues from ticket sales partially finance the costs incurred, with other revenue items being direct sales, sponsorship revenues, advertising, government / municipal subsidies. The vast majority (86.5%) of the festivals do not rely on ticket revenues, as funding is provided by the local municipality or the state, and the participants themselves are amateurs who do not receive payment for their participation. This is not the case with



professional performers at commercial festivals, whose pay very often cannot be covered by ticket revenues,

A typical event where we do not have to pay an entrance fee from visitors looks like this:

"The Surva Zemen Festival is held throughout the year and has become an event demonstrating the ethnographic traditions of the region in their original form. 30 Survakar groups will take part in the parade at this year's edition. Among them are the groups from the town of Zemen, the village of Peshtera, the village of Divlya, the village of Gorna Vrabcha, the village of Elov dol, the village of Gabrov dol, the village of Berende. Survakar groups from the villages of Noevtsi, Chepino, Dolna Sekirna, Lobosh, Sirishtnik, Kovachevtsi, Kalishte, Dragichevo and others will also visit.

The municipal Survakar holiday immerses in the magic of the Bulgarian language and promises unforgettable emotions throughout the day. "Surva Zemen" is a celebration of all who love the positive side of life - starting at 11 am, and from 14:00 is transferred to the Youth Center in Zemen.

The festival was established on the initiative of the Municipality and the mayor of Zemen. Admission is free.

An example of a typical festival event in which there is a requirement to pay an entrance ticket can be found here:

The ninth edition of the International Festival of Illusion Art the Magic Encounter "Golden Cat" returns to Gabrovo, Vazrazhdane Hall. The festival is organized by the Municipality of Gabrovo and Quick Hands Project.

Magicians from the country and abroad will fight for the statuette of the bronze cat without a tail.

This year we will have a diverse program with many magicians from the country and abroad and masters of circus and variety art. This festival is for all children and adults who continue to marvel as young children at the numbers of the masters. And even if you're not surprised anymore, come and laugh and try to unravel the numbers of the magicians. Entrance with tickets. "

A Bulgarian festival usually relies on the local audience of the village in which it is organized (91% of the festivals are such) and only with the exception of the local population and guests of the village (8%) in cases of tourist settlements. during the tourist season. Of course, modern technologies and the opportunities provided by social networks allow the event to be broadcast live in some online media or watched later in cases where a video of the event is uploaded on the Internet.

A typical festival, which is aimed more at the guests of the village, we can see below:

"Strandja sings and dances - International Festival of Performing Arts

The festival is multi-genre and is included in the cultural program of Primorsko, is held with the kind assistance of the municipality. In addition to creating a festive mood, our goal is: to attract young people to empathy for the preservation of customs, lifestyles, customs, ancient traditions, cultural heritage that preserves our identity in the European family; to give a chance for expression to a significant number of children and young people and to contribute to increasing their motivation to engage in constructive creative activity. Exchange of creative information and development of achievements in the given dance styles and musical directions. "

## CONCLUSIONS

1. Using the criteria of organizing institution, participation of visitors, mass, commercialism, paid / free access we can group the festivals into 3 major clusters:

a) a type of mass folklore holiday, organized most often by the local municipality in which everyone participates both as an audience and participants, and the local folk art is presented in its entirety. Typical representatives of this type of festival are folk festivals;

b) a type of specialized most often national amateur holiday in which there is a strict division between participants and visitors, with local visitors being only an audience that does not pay entrance;

c) type of commercial exhibition, most often organized by a private company or foundation with paid admission, where visitors pay admission and participate in the event exclusively as buyers and audience, etc.

2. In general, festivals can be divided into two major clusters: folklore festivals with an additional entertainment function and those in the field of arts and culture.

The former is of course mass, non-commercial, with free access, in which visitors are most often participants, are most often held in smaller villages - villages, small towns, funded by the local municipality and are aimed at residents of the village or the small municipality. They are usually amateur in nature, as the organization of the event depends to a large extent on the participants themselves, and can be both competitive and non-competitive. The festival events within these folklore festivals are most often performed by amateur groups and include: re-creation of folk customs and local traditions, very often mummers' carnivals, parades with folk costumes, folk dances, performance of folk orchestras, bazaars where they sell master craftsmen, culinary exhibitions, competitions for typically Bulgarian products,

Conversely, those festivals that have a thematic focus on arts and culture are usually held in the capital and major cities, mainly funded and reorganized by the local municipality, but more often by foundations, private companies and foreign organizations. They are more often specialized commercial forums that have paid admission, are most often pre-organized, and their visitors participate in the event only as audiences and buyers. In a small number of events observed a certain elitism in the access of visitors to the exhibition. This type of festivals is thematically oriented towards arts such as: choral singing, theater, literature, painting, cinema, symphonic music, rock, jazz and others.

## REFERENCES

1. <https://fest-bg.com/festivals/>
2. <https://ruralnet.bg/praznici-i-festivali/>
3. [https://www.sabori.bg/folk\\_fest\\_sub.html](https://www.sabori.bg/folk_fest_sub.html)
4. <https://fest-bg.com/event/%d0%bf%d1%80%d0%b0%d0%b7%d0%bd%d0%b8%d0%ba-%d0%bd%d0%b0-%d0%bd%d0%b0%d1%80%d0%be%d0%b4%d0%bd%d0%be%d1%82%d0%be-%d1%82%d0%b2%d0%be%d1%80%d1%87%d0%b5%d1%81%d1%82%d0%b2%d0%be-%d0%b8-%d0%b1%d0%b8%d1%82-2/>
5. <https://fest-bg.com/event/xv-%d0%bc%d0%bb%d0%b0%d0%b4%d0%b5%d0%b6%d0%ba%d0%b8-%d1%82%d0%b5%d0%b0%d1%82%d1%80%d0%b0%d0%bb%d0%b5%d0%bd-%d1%84%d0%b5%d1%81%d1%82%d0%b8%d0%b2%d0%b0%d0%bb-%d0%be%d0%ba%d0%b5%d0%b0%d0%bd-2/>

6. <https://fest-bg.com/event/x%2d1%85%2d1%96%2d1%96%2d1%96-%2d0%bc%2d0%b5%2d0%b6%2d0%b4%2d1%83%20%2d0%bd%20%b0%2d1%80%2d0%be%20%b4%2d0%b5%2d0%bd-%2d1%84%2d0%b5%2d1%81%2d1%82%2d0%b8%2d0%b2%2d0%b0%2d0%bb-%2d0%b7%2d0%b0-%2d1%81%2d1%8a%2d0%b2%2d1%80%2d0%b5%2d0%bc-2/>
7. <https://fest-bg.com/event/v-%2d0%bc%2d0%b5%2d0%b6%2d0%b4%2d1%83%2d0%bd%2d0%b0%2d1%80%2d0%be%20%2d0%b4%2d0%b5%2d0%bd-%2d1%84%2d0%b8%2d0%bb%2d0%bc%2d0%be%2d0%b2-%2d1%84%2d0%b5%2d1%81%2d1%82%2d0%b8%2d0%b2%2d0%b0%2d0%bb-master-of-art-2/>
8. <https://fest-bg.com/event/%2d1%84%2d0%be%2d0%bb%2d0%ba%2d0%bb%2d0%be%2d1%80%2d0%b5%2d0%bd-%2d0%bf%2d1%80%2d0%b0%2d0%b7%2d0%bd%2d0%b8%2d0%ba-%2d0%bf%2d1%80%2d0%b5%2d0%b4-%2d0%b2%2d0%b5%2d0%bb%2d0%b8%2d0%ba%2d0%b4%2d0%b5%2d0%bd-%2d0%bd%2d0%b0-%2d0%bc%2d0%b5-2/>
9. <https://fest-bg.com/event/meet-the-family-bibendum-first/>
10. <https://fest-bg.com/event/%2d0%bd%2d0%b5%2d0%b2%2d1%80%2d1%83%2d0%b7-%2d1%81-%2d1%87%2d0%b5%2d1%80%2d0%bd%2d0%b8%2d0%ba-3/>
11. <https://fest-bg.com/event/rakia-and-spirits-fest-2021/>
12. <https://fest-bg.com/event/%2d0%be%2d0%b1%2d1%89%2d0%b8%2d0%bd%2d1%81%2d0%ba%2d0%b8-%2d0%bf%2d1%80%2d0%b0%2d0%b7%2d0%bd%2d0%b8%2d0%ba-%2d0%bd%2d0%b0-%2d0%b3%2d1%80%2d0%b0%2d0%b4%2d1%81%2d0%ba%2d0%b0%2d1%82%2d0%b0-%2d0%bf%2d0%b5%2d1%81%2d0%b5%2d0%bd-2/>
13. <https://fest-bg.com/event/%2d1%84%2d0%b5%2d1%81%2d1%82%2d0%b8%2d0%b2%2d0%b0%2d0%bb-%2d1%81%2d1%83%2d1%80%2d0%b2%2d0%b0-%2d0%b7%2d0%b5%2d0%bc%2d0%b5%2d0%bd/>
14. <https://fest-bg.com/event/%2d0%BC%2d0%B5%2d0%B6%2d0%B4%2d1%83%2d0%BD%2d0%B0%2d1%80%2d0%BE%2d0%B4%2d0%B5%2d0%BD-%2d1%84%2d0%B5%2d1%81%2d1%82%2d0%B8%2d0%B2%2d0%B0%2d0%BB-%2d0%BD%2d0%B0-%2d0%B8%2d0%BB%2d1%8E%2d0%B7%2d0%B8%2d0%BE%2d0%BD%2d0%BD%2d0%BE%2d1%82-3/>
15. <https://fest-bg.com/event/%2d1%81%2d1%82%2d1%80%2d0%b0%2d0%bd%2d0%b4%2d0%b6%2d0%b0-%2d0%bf%2d0%b5%2d0%b5-%2d0%b8-%2d1%82%2d0%b0%2d0%bd%2d1%86%2d1%83%2d0%b2%2d0%b0-%2d0%bc%2d0%b5%2d0%b6%2d0%b4%2d1%83%2d0%bd%2d0%b0%2d1%80%2d0%be%2d0%b4%2d0%b5%2d0%bd-%2d1%84/>

The Journal of Bio-based Marketing is not – profit organization situated in town of Plovdiv, Bulgaria.

The prime goal of the journal is to support the publishing activity and career development of young professionals in the field of bio-based marketing. The target are young experts, advisory agents, students and academic staff who is involved in the marketing process of bio-based products.

**Managing Board**

Associate professor Petar Borisov, PhD

Associate professor Teodor Radev, PhD

Professor Ivan Boevski, PhD

Assistant professor Fidan Qerimi, PhD

---

**Adress:** Osvobojdenie str. 33 Entr. A, Plovdiv, Bulgaria, 4000

**E-mail:** journalbiobasedmarketing@gmail.com

**Phone number:** +35932894627260

**www.journalbbm.wordpress.com**