

The state of agriculture in Bulgaria – PESTLE analysis

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Abstract

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In this research we are identifying the processes that are key factors for change in the agricultural environment. The PESTLE analysis is used to sort the state of every of the panels and find which one has the most impact. In our case we are identifying macroeconomic factors that have influence on the future development of the sector of agriculture in Bulgaria. In Bulgaria this kind of research has not been done using the PESTLE and will help future researchers to identify strengths and weaknesses in Bulgarian political, economic, sociocultural and technological environments. The legal framework and environmental factors are particularly important for agriculture and have been added in this order because the legal framework carries a higher importance.

Keywords: PESTLE analysis; agricultural environment; framework; environmental factors

Introduction

The state of agriculture in the Republic of Bulgaria is examined with the help of PESTLE analysis. Due to dynamic changes at national and European level, Bulgarian agriculture has undergone many changes. This article aims to examine all the factors shaping the environment for the functioning of agriculture as a primary sector in Bulgaria. Due to the special characteristics of the industry, we have chosen the extended version of the PEST analysis. The PESTLE analysis was implemented for the sector of agriculture, in order to examine the environment in which the industry and its sub-sectors in Bulgaria are developing. The earliest known reference to tools and techniques for “Scanning the Business Environment” appears to be by Aguilar (1967) who discusses ETPS – a mnemonic for the four sectors of his taxonomy of the environment: Economic, Technical, Political and Social. Sometime after its publication, Arnold Brown for the Institute of Life Insurance (in the US) reorganized it as STEP (Strategic Trend Evaluation Process) as a way to organize the results of his environmental scanning. Arnold Brown: In the early 1970s, Brown focused on “STEP” (Strategic Trend

Evaluation Process) and outlined the environmental factors as STEPE (Social, Technical, Economic, Political and Ecological). In the 1980s, several other authors including Fahey (1986), Narayanan, Morrison, Renfro, Boucher, Mecca and Porter included variations of the taxonomy classifications in a variety of orders: PESTEL or PESTLE which adds legal and environmental factors PEST, PESTLE, STEEPLE (Schmieder- Ramirez, 2015) etc. as the last two letters show which of the factor is more important for the analysis. PESTEL is an important tool used for market and environmental analysis and to support strategic decision making (Narayanan & Fahey, 2001). The legal framework and environmental factors are particularly important for agriculture and have been added in this order because the legal framework carries a higher importance for us. The abbreviation PESTLE arranges the individual factors in importance, and for us the political factor has the strongest influence.

So far, there is no PESTEL analysis of the state of agriculture in Bulgaria, and because of this/thus the researcher allows himself to draw attention to the relevance of the model and the benefits of its application for the Bulgarian environment. So far, there is no PESTEL analysis of agri-

culture in Bulgaria, as the researcher allows himself to draw attention to the relevance of the model and the benefits of its application for the Bulgarian environment. This gives the research not only relevance, but creates an opportunity for critical reading among the scientific community, which is an expected creative meeting of the author with colleagues from the research community and, in particular, from this field of research. PESTLE analysis enables a manager to identify the key macroeconomic factors that may have an impact on the future development of the business (Marmol, 2015). In our case we are identifying key macroeconomic factors that have influence on the future development of the sector of agriculture in Bulgaria.

Material and Methods

PEST analysis is an analysis of the influence of political, economic, sociocultural, and technological indirect environments (Aguilar, J, 1967), with indirect effects on the object of study. At the beginning of the new millennium, there are authors who, in perfecting management theory (Lawrence et al., 2009) that define PESTEL and its various variations in relation to the environment. In strategic management, this type of analysis is used to identify, track and assess the changes that will occur in these environments and the underlying factors and the severity with which they affect it. This is done because these changes can change the whole competitive situation in the industry (Figure 1).

Political factors (P) include analysis of: government regulation of business, commercial law, labor legislation, tax legislation, legislation in the field of import and export regulation, competition protection, consumer protection, environmental protection law, etc.

Economic factors (E) include an analysis of the general state of the country’s economy (inflation, gross domestic product, interest rates, exchange rate, unemployment, etc.) and the ratio between small, medium and large businesses, between private and state property, the intensity and the type of competition, etc.

Socio-cultural factors (S) cover the study of demographic trends (age, sex, number, natural increase, birth rate, mortality, population migration), level of education and social groups among the population, cultural beliefs and values (traditions, customs, beliefs, religion) , culture), the individual needs of people (career aspiration, way of spending free time, etc.)

Technological factors (T) analysis covers innovation and innovation, technology transfer, the availability and access to patents, the attitude towards copyright of researchers, the availability and access to the services of research institutes.

Legislative framework (L) European, national, sectorial legislation forming an institutional framework that develops into business environment and operates in the primary sector of agriculture.

Environmental factors (E) environmental factors related to the applied technological solutions and policies in order to preserve the potential of the ecological resource in agriculture. This is a condition for the sustainability of economic systems.

PESTLE as an analytical method has its advantages as well as certain disadvantages, which we will discuss briefly.

Advantages of PESTLE analysis are:

- Easy to do, the costs are only time spend on the analysis;
- Provides understanding of the wider business environment;
- Encourages the development of strategic thinking;
- May raise awareness of threats to a project;
- Can help the organization anticipate future difficulties and take action to avoid or reduce their effects;
- Can help the organization assess opportunities and exploit them.

Disadvantages of PESTLE analysis:

- Usually provides a simple list without critical presentation;
- The rapid pace of change in society makes it increasingly difficult to predict events that may affect the organization in the future;

P	E	S	T	L	E
Government policy	Economic growth	Population growth rate	Technology incentives	Weather	Discrimination laws
Political stability	Exchange rate	Age distribution	Level of innovation	Climate	Antitrust laws
Corruption	Interest rates	Career attitudes	Automation	Environmental policies	Employment laws
Foreign trade policy	Inflation rates	Safety emphasis	R&D activity	Climate change	Consumer protection laws
Tax policy	Disposable income	Health consciousness	Technological change	Pressures from NGO’s	Copyright and patent laws
Labor law	Unemployment rate	Lifestyle attitudes	Technological awareness		Health and safety laws
Trade restrictions		Cultural barriers			

Fig. 1. Schematic of the components of the PESTLE analysis

Source: Author’s adaptation by Marmol et al. (2019)

- Gathering a large amount of information can make it difficult for us to see the “forest behind the trees” and lead to “analysis paralysis”;

- The analysis may be based on assumptions that may be unfounded.

Given the objectification of the analysis and the achievement of reliable results, the presence of high expertise by those applying the PESTLE analysis is an imperative requirement.

Analysis of Pestle Panels

Political environment

Political environment in Bulgaria is the focus of this panel. The legislature is in the hands of the National Assembly. In Bulgaria from 2013 to 2020 there is political instability; this is characterized by protests, frequent changes of ministers and changes in the political situation, scandals in the media and signals of corrupt practices. This political situation also leads to destabilization in the country’s industries, due to uncertain policies and frequent changes in the leadership in the administration, which is large (compared to other EU members) which many cases further complicates decision-making processes. The Republic of Bulgaria has been a full member of the European Union since 2007, using the instruments of the common European political space. Bulgarian institutions implement and enforce European legislation. Bulgaria is part of the common European economic space, which supports the development of market positions in export-import processes and enjoys the free movement of goods and services in the free trade area. This includes the output of agriculture and goods produced by the primary industry. As a member of the EU, Bulgaria is part of the international trade system and an active agent in the common European market, and various laws are in force to protect consumers. One of the main goals of the European Union (EU) is to maintain a stable economic environment for the implementation of a normal production process for businesses, regional and national economies and the community as a whole (Georgiev, 2019). Despite the above factors in the agricultural sector, the country is faced with challenges caused by politically motivated decisions taken during the transformation (Yovchevska, 2016: 47), in the period before EU accession. These decisions lead to fragmentation of the land and a reduction in the productivity and strength of the industry. As part of the EU, agriculture provide employment, produce agricultural produce, contribute to gross value added, and meet commitments in relation to the Common Agricultural Policy of the EU (Marinov, 2019).

The CAP is another factor that has changed the structure of agriculture, giving consumers an economic incentive to

grow goods not because there is demand on the market but because of subsidies. The lower profitability in agriculture, compared to other economic activities, necessitates the support of farmers, which guarantees them a certain level of economic security in crises and supports their income so that they can stay in the industry, as well as ensure the sustainability of agricultural production (Koteva, 2019). The independent existence of many farms is in question without the support of subsidies, which are basically aimed at supporting income, not their complete replacement. The government’s corrupt practices and the lack of laws on lobbies, as well as the replacement of people in high-level positions, contribute to volatile economic and economic performance. In the last decade, Common agricultural policy has focused exclusively on identifying measures to mitigate climate change. Apart from the lack of a comprehensive strategy in this area for the Bulgarian agricultural sector, there is no specific legislation to deal with adaptation to climate change. The lack of systematic studies on the impact of climate change on the Bulgarian agricultural sector and fisheries explains the fact that in general the agricultural community and the specialized administration do not have enough information on the requirements for adaptation to climate change.

Bulgaria lacks a risk management system in agriculture. The insurance sector lags behind the EU-28 average, with a participation rate of 2.1% per capita compared to 7.6% for most European countries. Insurance in Bulgaria is limited to hail, while losses from drought and floods are not covered. Given the lack of access to credit, small farmers are trying to diversify their production to reduce income volatility instead of buying insurance.

Taxes in Bulgaria are regulated by the Law on Local Taxes¹ and Fees as there is no tax on agricultural land.

The income of individuals (farmers) is taxed under the Personal Income Tax Act (PITA)²: With a tax on the total annual tax base, if they are not traders within the meaning of the Commercial Law or have not chosen to be taxed in accordance with the procedure provided for in the Personal Income Tax Act for sole traders. In these cases, in determining the taxable income, they are entitled to:

- 60% of statutory recognized operating costs for income from the production of unprocessed agricultural products, excluding income from the production of ornamental plants

- 40% of normatively recognized expenses for the activity for incomes, acquired from activity on production of pro-

¹ Law on Local Taxes and Fees – <https://www.lex.bg/laws/ldoc/2134174720>

² Personal Income Tax Act <https://www.lex.bg/laws/ldoc/2135538631>

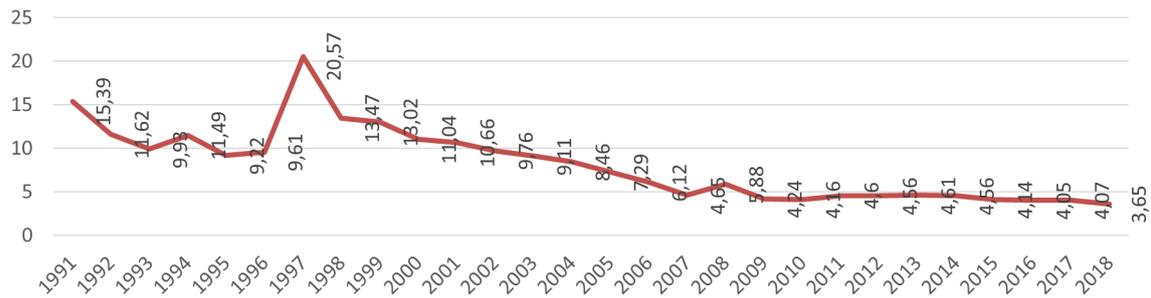


Fig. 2. Relative share of agriculture in Bulgaria's GDP in %

Source: prepared by the author according to NSI data

cessed products from agriculture and from production of ornamental plants.

As part of the EU, Bulgaria must take into account the development trends in Europe, as well as the state of Bulgarian agriculture. In 2013, the Ministry of Agriculture prepared a "National Strategy for Sustainable Development of Agriculture in Bulgaria in the period 2014 – 2020"³, that provides an assessment of the situation and ways to overcome the problems. The document is of a desirable nature and was prepared by official transit.

The new CAP period provides for new changes.

Compared to other countries in Europe, Bulgaria has some of the lowest taxes: Flat tax – 10%, Corporate tax – 10%, VAT – 20%. But there are countries with very low VAT rates on food.

Bulgaria has very strict laws against unfair competition and consumer protection. The legal regime for the protection of competition is in Competition Protection Act⁴ of 1998. Unfair competition is any action or inaction in carrying out economic activity that is contrary to good commercial practice and harms or may harm the interests of competitors in their relations with each other or in their relations with consumers. When the interests of consumers are affected, they can turn to the Consumer Protection Commission, which brings relative security for them.

Economic environment

Agriculture is an important sector in any national economy. In the historical annals there is evidence of the importance of the agriculture for the development of societies. Its emergence played a key role in the emergence of human civilization. By creating surpluses of food resources and giving the opportu-

nity to increase the population density and complicate the social organization, agriculture contributes to the improvement of public relations. Bulgaria has extremely favorable natural and climatic conditions for agricultural development. The agricultural products produced provide food for the population, raw materials for the food industry, fiber, biofuels, medicines and other products for various economic sectors. During the period under review, 1991-2018, the burden of agriculture as a percentage of GDP decreased (Figure 2). This is a process that does not affect the importance of the agriculture for the national economy. It is important to mention that Bulgaria is influenced by the fact that as part of the EU she has no right to independent trade agreements, but complies with the union, when imposing restrictions by the EU; it is obliged to comply with the restrictions.

The agricultural economy, which deals with the economic development of agriculture, reports that more than half of the population in the rural areas of Bulgaria is at risk of poverty or social exclusion. Low wages and limited employment opportunities create lasting patterns of poverty in rural areas. The constant level of the long-term unemployed, which is almost three times higher in rural areas, is a worrying indicator. And because incomes in Bulgaria's rural areas are low, the gap with urban areas is widening. GDP per capita in Bulgaria amounts to nearly 45% of the EU-28 average and about 30% of that generated in urban areas of Bulgaria. Over 51.4% of the rural population is at risk of poverty or social exclusion – the highest level of poverty in rural areas compared to other EU-28 Member States. This is a major problem due to a number of factors, including:

- the high proportion of retired individuals in rural areas with low pensions;
- low productivity (labor productivity in rural areas of Bulgaria is the lowest in the EU-28) and low incomes, which prevail for small and semi-subsistence farms
- lack of employment opportunities in sectors (secondary and tertiary) other than agriculture and forestry

³ National Strategy for Sustainable Development of Agriculture in Bulgaria in the period 2014 – 2020 -<https://m.president.bg/bg/cat147/nacionalna-strategia-za-ustoichivo-razvitiie-na-zemedelieto-v-bulgaria-v-period-2014-2020>

⁴ Competition Protection Act – <https://www.lex.bg/laws/ldoc/2135607845>

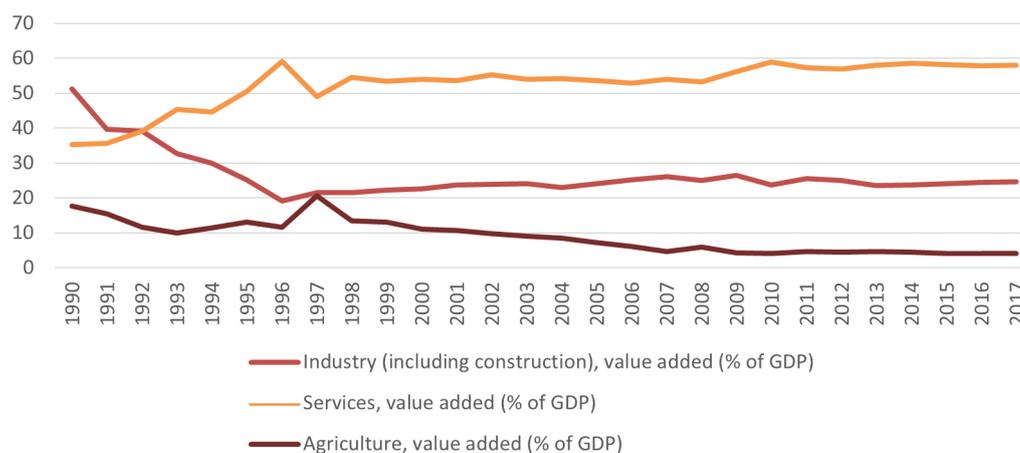


Fig. 3. Gross value added by industry

Source: calculations by author on Eurostat data

For this period the gross value added in agriculture gradually gets lower and lower. The value added in agriculture remains quite low – even in the region where GVA per capita in agriculture is the highest (Silistra, 1327 leva* per capita), it is still three times lower compared to the country average for industry (3522 leva) and six times lower than the country average for services (8281 leva). This process is complex of many factors (the low pay, the lack of market for Bulgarian agriculture products, and the lack of production of products with added value for final consumption) (Figure 3).

The low added value in the industry prevents the preservation of jobs and its competitiveness and attractiveness to other industries. After 1997 our entry into the currency board, the value added falls sharply. Agriculture in Bulgaria is characterized by a polarized farm structure. (Agricultural Report, 2019)⁵. The share of small farms is much higher than the EU-28 average. Small farms are important in terms of employment and economic activity in rural areas. Small farms in mountainous area are predominating in disadvantaged, as well as in areas with intensive vegetable production, fruit growing and tobacco production. The activity of small farms is crucial for the protection of the landscape and the local culture. They provide most of the jobs and incomes in the sector, thus significantly contributing to the achievement of balanced social and territorial development of the country. Of the total number of agricultural holdings, 72% have UAA less than 2 ha, which represents nearly 3% of the total utilized agricultural land. On the contrary, less than 2% of the total number of holdings are large market holdings

(with more than 100 hectares of UAA), which cover almost 80% of the existing UAA.

Social environment

The social and demographic environment in Bulgaria over the last thirty years has been characterized by features typical of most countries in transition, namely: a sharp decline in living standards, rising unemployment and expanding processes of social isolation of minorities. The free movement of people presented to the country's agriculture another problem – the reduction of labor.

The number of people employed in agriculture on the territory of the country is drastically decreasing. Like most developed countries, Bulgaria is shifting to the services sector. More and more people living in the villages are moving to urban areas because of the better infrastructure, most amenities and access to institutions (schools, hospitals and universities). This process is clearly reflected in the figure below (Figure 4).

The aging population and the lack of continuity in traditional labor have drastically changed the social profile of agriculture in 30 years. Migration from the country when opening of the borders to the EU happened, allowed the working population to earn a better wage seasonally, working for agriculture in Western countries, which helped bleed the industry and deepened the problems of the 1990s. From the beginning of the period 16.1% to the end 6.3% the difference in employment in agriculture decreased by almost 39%. Looking at the population pyramid, in the future Bulgarian agriculture will again face a lack of labor and an aging population. An increase in the added value of products, in turn, will lead to an increase in revenues and wages and would

*1 lev = 0.51 Euro

⁵ Agricultural Report 2019. https://www.mzh.government.bg/media/filer_public/2019/11/29/agraren_doklad_2019.pdf

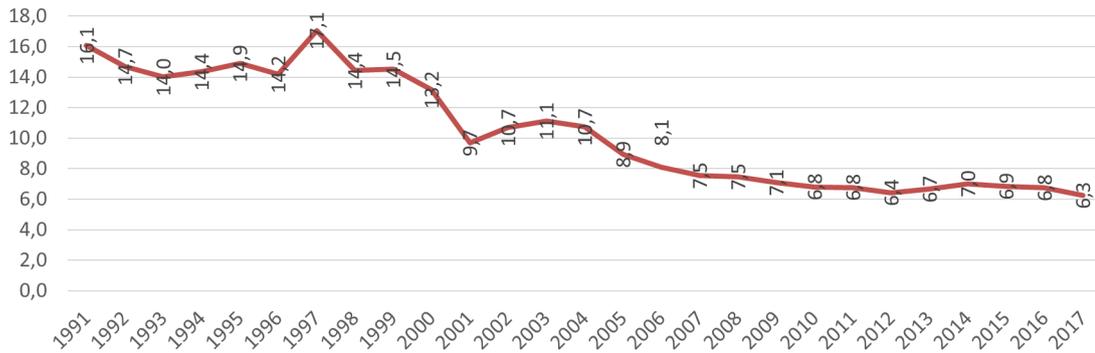


Fig. 4. Employed in agriculture in% of the employed in the country
 Source: calculated by the author according to NSI data

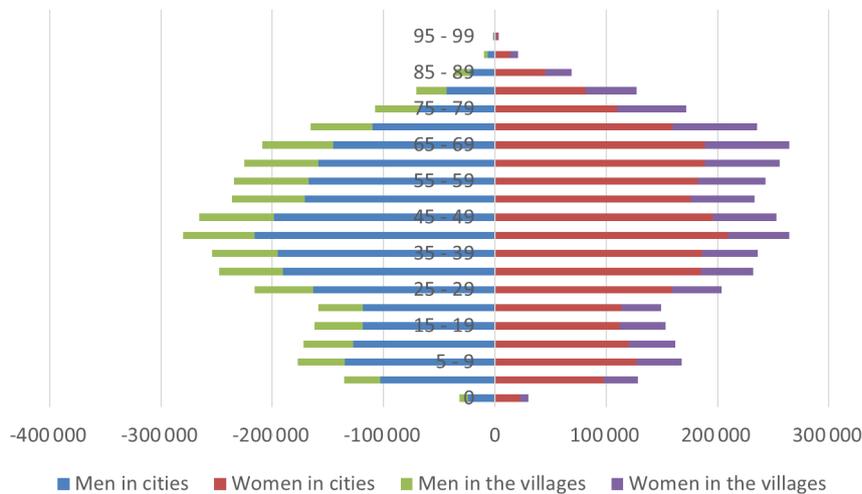


Fig. 5. Population pyramid of the population in Bulgaria 2018 (cities and villages)
 Source: Prepared by the author according to NSI data

stop the outflow of staff to EU Member States. The social structure is an indicator of what development a country and its industries should focus on. In the case of Bulgaria, the increase in the aging population, the social burden of pension funds and their combination with low wages will force a large part of the young population to seek work abroad. Looking at the pyramid (Figure 5) by age groups, people over 50 are those who live in the villages.

The seasonal nature of production is one of the main factors determining the existing forms of employment in the sector. Low added value contributes to the reduction of the labor force and the lack of institutions in rural areas leads to the search for a higher standard of living in cities, all this leads to a lack of labor, competitiveness and prospects in the

agricultural sector. In order to overcome these negative processes and trends, it is necessary to introduce modern technological solutions in Bulgarian agriculture. Opportunity in this direction is provided by the CAP (CAP 2021-2027), which is a prerequisite for the Bulgarian agricultural units to improve the technological level of farmed crops and animal breeds.

Technological environment

It is vital that the EU’s agricultural sector continues to seek opportunities for innovation in order to remain economically competitive and meet the challenges of sustainable development. This is in the spirit of perfecting the PESTLE model. The introduction of high-tech solutions in agriculture,

including precision farming, offers opportunities for savings along the entire chain to create added value. This includes a shift to transport and logistics automation, which will shorten the distance between agricultural products and consumers and create the conditions for faster and more accurate inventory management in warehouses and retail stores. Intelligent agricultural systems that use cameras and other technological solutions can make irrigation more efficient and save water. Precision agriculture, which includes data-based technologies, including satellite navigation tools and the Internet, can help EU farmers manage crops and reduce the use of fertilizers and pesticides. EU seed banks contain an abundance of genetic material that can be used to develop new varieties. Bulgarian agriculture is lagging behind the pace of implementation of new technologies by developed countries, however, more and more private farms have focused on modernizing and creating more efficient and easy to manage. In recent years, R&D expenditures in agricultural sciences have decreased significantly, both in absolute terms and as a relative share of total R&D expenditures in the country (Figure 6). While total R&D spending increased almost threefold after 2007, R&D spending in agricultural sciences fell by 45% by 2014, after which it increased slightly. Lowering the already low levels of research and development has a negative effect on the development of new technologies in Bulgarian agriculture and reduce the competitiveness of farmers and the international innovation sector.

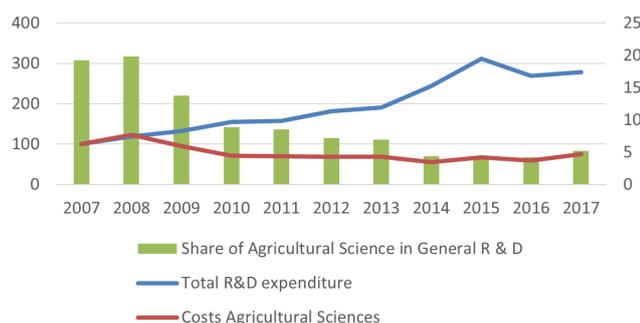


Fig. 6. Expenditures for necessary development activity in the Republic of Bulgaria

Source: author's calculations based on NSI data

The main problem is the lowering of the costs allocated for agricultural sciences, which in turn reduces both the quality and the scale of the research. The lost state-science link prevents the introduction of field research and hinders the process of agricultural development.

The lack of data at the national level on technological development, the use of new methods and the introduction of

know-how hinders the development of an adequate assessment of the technological state of the industry.

Ecological Environment

Bulgaria is one of the countries with many environmental problems, which are due to non-compliance with environmental laws by companies, dumping their waste. Various nature protection projects are being created for the protection of the ecosystem in Bulgaria. This provoked the creation of the Environmental Protection Act in 2002 and on the other hand the EU legislation became imperative for the Bulgarian agricultural producer.

Climate policy is mainly focused on the relatively rapid increase in the share of renewable energy sources and the elimination of high-carbon fuel sources. CO₂ emissions per capita are relatively low.

Livestock is one of the biggest causes of environmental problems. Livestock accounts for 70% of the land used for agricultural purposes. It is one of the largest sources of greenhouse gases. It produces 65% of man-made nitrous oxide and 37% of all man-made methane (which has 23 times the greenhouse effect of CO₂) and generates 64% of ammonia emissions. Livestock is considered a key factor in increasing deforestation, thus raising livestock is also the reason for reduction of biodiversity.

Agriculture generally uses about 70% of fresh water resources. Given that more and more fresh water is being used by industry and for the growing urban population, it is expected that increasing agricultural production will have to cope with the use of less fresh water. The use of water for irrigation leads to environmental problems such as destruction of natural wetlands, salinization and soil erosion from improper watering.⁶ Widespread application of primitive irrigation techniques, and inappropriate crop choice, rotation and agro-techniques augment inefficiency of water use and local soil erosion (Bachev, 2010).

The increased content of fertilizers in the soil leads to the ingress of nitrogen and phosphorus into the water basins, which in turn leads to eutrophication. This causes the extinction of fish and the deterioration of biodiversity, as well as the destruction of water in water bodies such as drinking water.

The country lacks a coherent water resources strategy, with management largely controlled by municipalities. For-

⁶ Findings of the Comprehensive Assessment of Water Management in Agriculture (PDF). Annual Report 2006/2007 – http://www.iwmi.cgiar.org/About_IWMI/Strategic_Documents/Annual_Reports/2006_2007/pdf/IWMI%20Annual%20Report%202006-07.pdf

est protection and biodiversity are strengths. Conservation-focused groups are more influential than many other civil society associations, although business interests continue to undermine environmental policies, especially in the mining and tourism sectors.

Bulgaria is relatively passive in terms of international environmental policies, but is in the group of Eastern and Central European countries that have expressed caution about aggressive carbon targets.

Legislative environment

The Bulgarian sectorial legislation outlines three main laws: the Law on the Ownership and Use of Agricultural Land, the Law on Lease and the Law on Support for Agricultural Producers. After 2007 they were synchronized with the *acquis communautaire*. “Law on Biological Diversity”, this law regulates the relations between the state, municipalities, legal entities and individuals on the conservation and sustainable use of biological diversity in the Republic of Bulgaria. “Law on Restoration of Ownership of Forests and Forest Lands” this law regulates the restoration of ownership of forests and lands from the forest fund.

“Forest Law” this law regulates public relations related to the protection, management and use of forest areas in the Republic of Bulgaria, in order to ensure multifunctional and sustainable management of forest ecosystems and other laws. Law on Seed and Planting Material, Law on Feed, Law on Genetically Modified Organisms, Law on the Bulgarian Food Safety Agency, Law on the Center for Risk Assessment in the Food Chain, Law on Veterinary Activity, Law on Food, Law on Registration and control of agricultural and forestry machinery, Law on the Implementation of the Common Organization of Agricultural Markets of the European Union, Law on Wine and Spirits, Law on Restoration of Ownership of Forests and Forest Lands, Law on Protection of Agricultural Lands, Law for plant protection, Law for protection of animals, Law for livestock, Law for overstocks of agricultural and sugar products, Law for the professional organization of veterinarians in Bulgaria.

“Law for protection of agricultural property” this law regulates the protection of agricultural property from damage, destruction, scattering, theft and misappropriation, as well as the procedure for compensation for damages. In Bulgaria, each of the laws is in accordance with the law of the European Community. Each of the laws during the period under consideration is subject to dynamic changes (Figure 7), which is one of the main problems and leads to an unstable institutional environment and hence unstable economic processes. After reviewing the legislation, it is clear that it is subject to frequent changes, which makes the institutional

environment unstable. Frequent changes in the legislative norm hinder the normal functioning of the industry and lead to uncertainty and confusion for producers. The realization of the production and the functioning of the markets depend precisely on the stable legislation and political environment.

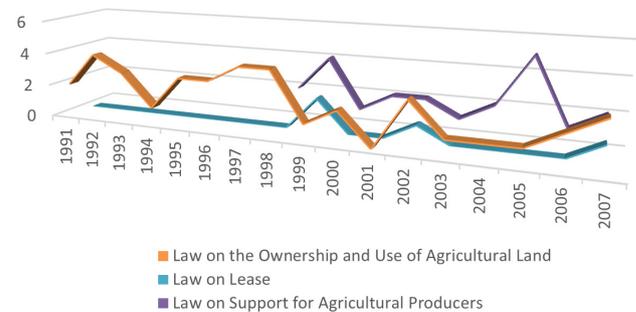


Fig. 7. Change in legislation related to agriculture

Source: prepared by the author by law: Lease Act, LOUAL, LSAP

The process of restoring land ownership “within real limits” according to the Law on Land Acquisition leads to its economically unjustified fragmentation. The way the land reform was carried out “landed” numerous heirs of former owners. Some of the new landowners are burdened by the new acquisition, as they live in another settlement and have a professional profile different from that of the farmer (Yovchevska, 2019).

The law that regulates the contractual relations between an employer and a worker in Bulgaria is the Labor Code.

Art. 2. (New, SG No. 25/2001, effective 31.03.2001) The state shall regulate labor and directly related relations, social security relations and issues of living standards after consultations and dialogue with the employees, employers and their organizations in a spirit of cooperation, mutual concessions and respect for the interests of each party.

“Personal Income Tax Act” is the law applied by farmers to pay taxes.

It should be borne in mind that in case of taxation under the procedure provided for sole proprietors, natural persons registered as farmers may not exercise the right to assign the tax on the annual tax base under Article 48, para. 6 of the Personal Income Tax Act.

Newly registered farmers may choose for the year of their registration to be taxed on the annual tax base under Art. 28 of the Personal Income Tax Act as the choice is declared in the annual tax return under Art. 50 of the Personal Income Tax Act for the same year. In case they wish to continue with this order of taxation during the next five tax years, it is necessary to submit a declaration under Art.

29a, para. 4 of the Personal Income Tax Act by December 31 of the year.

Conclusions

For the period under consideration, each of the factors influencing the environment plays a decisive role in the overall picture of agriculture. The political, economic, social environment and legislation are extremely important. These four factors carry more weight than the technological and environmental condition. The processes that take place in the four factors contribute to the greatest extent to the appearance of Bulgarian agriculture.

PESTLE analysis highlights the strengths and weaknesses in each of the factors that affect the environment. This analysis can be used as a strategic plan to improve the agricultural environment. Weak foundations in all six factors contribute to the negative processes in the industry. In the Bulgarian agriculture the ecological condition and technologies have the least influence, due to the low integration of new technologies in the small and medium farms and the non-observance and the lack of adequate sanctions in the ecological measures recommended by the EU.

References

- Aguilar, F.** (1967). Scanning the business environment. New York, Macmillan.
- Bachev, H.** (2010). Agricultural water management in Bulgaria. *SSRN Electronic Journal*, January 2010, https://www.ssrn.com/institutes/home_bd.html
- Fahey, L. & Narayanan, V. K.** (1986). Macroenvironmental analysis for strategic management (The West series in strategic management). St. Paul, Minnesota: West Publishing Company. ISBN 978-0314852335.
- Georgiev, M.** (2019). Land consolidation in land relationship: Theory, practice, perspectives. Institute of Agricultural Economics, 38-51. ISBN-978-954-8612-18-0.
- Koteva, N.** (2019). Support for direct payments in the development of agricultural holdings and rural households in the context of the EU CAP. Institute of Agricultural Economics, ISBN 978-954-8612-27-2.
- Marinov, P.** (2019). Index of localization of agricultural holdings and employees in the rural areas of the South Central Region for Bulgaria. *Bulgarian Journal of Agricultural Science*, 25(3), 464–467.
- Marmol, T., Feys, B. & Probert, C.** (2015). PESTLE analysis. 50 minutes, gestion & marketing., v. 28, 9-10, ebook EAN: 978-280-6268-37-2.
- Schmieder-Ramirez, J. & Mallette, L.** (2015). Using the spelit analysis technique for organizational transitions. Chapter 28 In: Mafalda Carmo (ed.) *Education applications and developments*, Science Press (Retrieved 2015-08-21).
- Yovchevska, P.** (2016). Land relationships: Economic perspectives. Institute of Agricultural Economics, 208. ISBN: 978-954-8612-10-4.
- Yovchevska, P.** (2019). Transformation, institutional change and land relations in land relationship: Theory, practice, perspectives. Institute of Agricultural Economics, 8-12. ISBN-978-954-8612-18-0.

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