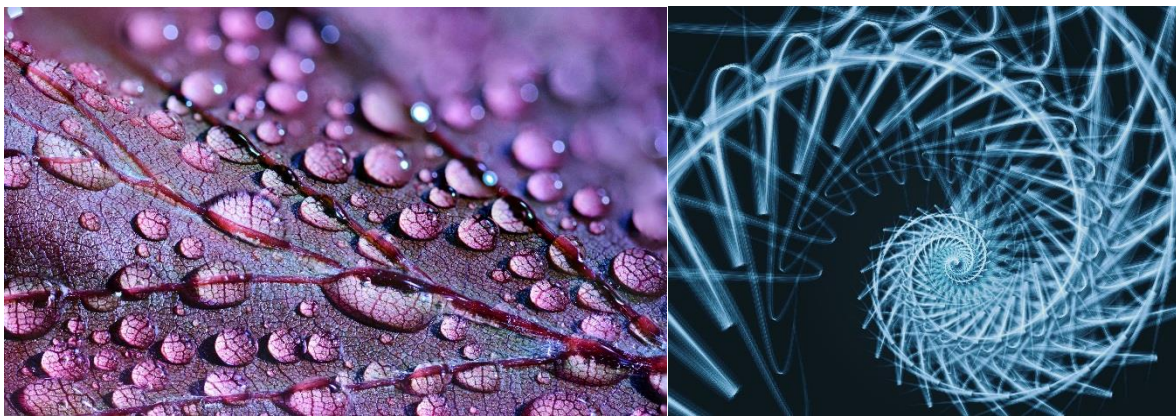


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Research and innovate

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FOOD MARKETS OF CONVENTIONAL PRODUCTS: A CHARACTERIZATION OF FACTORS INFLUENCING FOOD CHOICE

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Abstract

The developments of the last 3 years have had consequences for the economy and markets in Europe. Climate change, growth slowdown and the impact of the Covid-19 pandemics have been some of the main factors for the increase of basic prices and with consequences in the distribution-consumption networks in the functioning of the conventional food markets and food choice in Albania. These developments can affect in a variety of economic, social, institutional, psychological factors, by causing potential consequences to food choice. The research literature considers food choice as 'complex', 'dimensional', 'multifaced', 'situational' and authors support the impact of variables under review. The objective of the study is to test the potential impact of several variables, such as education, employment, income, experience — expressed by negative experiences, packing, trust in retailer, price preference and food safety to food choice of conventional agricultural products (vegetables), according to an observation in the retail-food-markets of the city of Tirana, Albania. The results of the statistical model used shows that education, employment, negative experience, packing and price preference, different from how they are hypothesized have no impact to food choice, while income, trust in retailer and food safety have a high (up to very high) impact on food choice. The findings are important to understand the multidimensional nature of food choice, the most influential factors and their characterizations, suggesting adjustments that improve the functioning of conventional food markets.

Key words: food choice, education, employment, income, experience, trust, food safety

Abstrakt

Die entwicklungen der letzten drei Jahre haben sich auf die wirtschaft und die märkte in Europa ausgewirkt. Der klimawandel, die verlangsamung des wachstums und die Auswirkungen der Covid-19-Pandemie waren einige der hauptfaktoren für den anstieg der grundpreise und für die folgen in den vertriebs- und verbrauchsnetzen für das funktionieren der konventionellen lebensmittelmärkte und die lebensmittelauswahl in Albanien. Diese entwicklungen können sich auf eine vielzahl wirtschaftlicher, sozialer, institutioneller und psychologischer faktoren auswirken, indem sie potenzielle folgen für die lebensmittelauswahl nach sich ziehen. In der forschungsliteratur wird die lebensmittelauswahl als "komplex", "dimensional", "vielschichtig" und "situativ" betrachtet, und die autoren unterstützen die auswirkungen der untersuchten Variablen. Ziel der studie ist es, den potenziellen einfluss verschiedener variablen wie bildung, beschäftigung, einkommen, erfahrung - ausgedrückt durch negative erfahrungen - verpackung, vertrauen in den einzelhändler, preispräferenz und lebensmittelsicherheit auf die lebensmittelauswahl bei konventionellen landwirtschaftlichen produkten (Gemüse) zu testen, entsprechend einer beobachtung in den einzelhandels-lebensmittelmärkten der Stadt Tirana, Albanien. Die ergebnisse des verwendeten statistischen modells zeigen, dass bildung, beschäftigung, negative

erfahrung, verpackung und preispräferenz, anders als angenommen, keinen einfluss auf die lebensmittelauswahl haben, während einkommen, vertrauen in den einzelhändler und lebensmittelsicherheit einen hohen (bis sehr hohen) einfluss auf die lebensmittelauswahl haben. Die ergebnisse sind wichtig, um die multidimensionale natur der lebensmittelauswahl, die einflussreichsten faktoren und ihre charakterisierung zu verstehen und anpassungen vorzuschlagen, die das funktionieren der konventionellen lebensmittelmärkte verbessern.

Stichworte: lebensmittelauswahl, bildung, beschäftigung, einkommen, erfahrung, vertrauen, lebensmittelsicherheit.

Résumé

Les développements des 3 dernières années ont eu des conséquences sur l'économie et les marchés en Europe. Le changement climatique, le ralentissement de la croissance et l'impact des pandémies Covid-19 ont été quelques-uns des principaux facteurs de l'augmentation des prix de base, avec des conséquences sur les réseaux de distribution-consommation, sur le fonctionnement des marchés alimentaires conventionnels et sur le choix des aliments en Albanie. Ces développements peuvent affecter une variété de facteurs économiques, sociaux, institutionnels, psychologiques, en provoquant des conséquences potentielles sur le choix des aliments. La littérature de recherche considère le choix alimentaire comme "complexe", "dimensionnel", "multifacette", "situationnel" et les auteurs soutiennent l'impact des variables examinées. L'objectif de l'étude est de tester l'impact potentiel de plusieurs variables, telles que l'éducation, l'emploi, le revenu, l'expérience - exprimée par des expériences négatives, l'emballage, la confiance dans le détaillant, la préférence de prix et la sécurité alimentaire sur le choix des produits agricoles conventionnels (légumes), selon une observation dans les marchés alimentaires de détail de la ville de Tirana, en Albanie. Les résultats du modèle statistique utilisé montrent que l'éducation, l'emploi, l'expérience négative, l'emballage et la préférence de prix, différents de ce qu'ils sont supposés, n'ont pas d'impact sur le choix des aliments, tandis que le revenu, la confiance dans le détaillant et la sécurité alimentaire ont un impact élevé (jusqu'à très élevé) sur le choix des aliments. Les résultats sont importants pour comprendre la nature multidimensionnelle du choix alimentaire, les facteurs les plus influents et leurs caractérisations, suggérant des ajustements qui améliorent le fonctionnement des marchés alimentaires conventionnels.

Mots clés: choix des aliments, éducation, emploi, revenu, expérience, confiance, sécurité alimentaire

Introduction

The developments of the last 3 years have had consequences for the economy and markets in Europe. Climate change, growth retardation and the impact of the Covid-19 pandemic have been some of the key factors. Despite government commitments to facilitate measures for the functioning of the production economy (eg export sectors) and trade (eg green food corridors), the consequences have been evident especially for small and non-integrated markets. These effects have had an impact on income, consumption and especially on the functioning of retail-food-markets in Albania. The functioning of retail-food-markets is important for (1) the economy of consumption and (2) the economy of production of the country due to the importance of the offer of conventional domestic agricultural products, as well as (3) actors in the value chain (e.g. input providers, etc.). That is why the sustainable functioning of food markets is an important source for economic growth in Albania.

Rising effects of basic prices (eg cereals and oils) due to the consequences of climate change, effects of shocks on distribution–consumption networks (eg from the pandemic situation) combined with local structural constraints (eg structural rigidities), have raised concerns about the functioning of food markets in Albania. These developments can affect in different ways on socio–economic, institutional or individual factors (eg psychological consequences) and food choices in the markets. However based on neoclassical and evolutionary theory this is a complex issue, because the lack of responsiveness to price signals (or the lack of invisible hand effect) or even ‘signals’ of market forces for a development or ‘new combination’ (Marshall, 1920), may not influence the behavior of actors in the markets (Morgan et al. 2000) or even food choice, as consumers are largely guided by the traditional beliefs or norms used continuously (Schumpeter, 1934) and it deserves an investigation.

In fact, socio–economic and/or institutional factors (eg informal institutions) in the form of trust in the retailer, factors at the individual level (eg consequences of negative experiences), or technology factors (eg packaging) can influence food choice (Kamphuis et al. 2015; Anisimova, 2016; Lau et al. 1984; Berg, 1984; Vila–López et al. 2014). Food choice is part of (different) behaviors between individuals and social groups, including judgment at an important stage of decision–making and can be influenced in different ways by the above group–factors. Given this perspective, their potential impact on food choice and the characterization of the problem in the conditions of Albania represents a subject of interest that contributes to understanding the interdisciplinary and multidimensional nature of the functioning of retail–food–markets in Albania, shedding light on the potential for policy adjustments. Sustainability of markets is crucial for the integration and prosperity of the country.

This study aims to evaluate variables such as education, employment, income, experience, products packing, trust in retailer, preference for food products and food safety to food choice (vegetables) in the markets of conventional food–products in Tirana, Albania. Studies on food choice in the segment of conventional food–products are lacking and may be a topic of interest to understand more about the dynamics and predictability on (1) the sustainability of conventional agri–markets as the main part of retail–food–trade in the country, (2) farmers domestic producers of conventional agri–products (as a major part of production) and may contribute (3) theoretically for generalizations and future studies. This approach emphasizes the interdisciplinary nature and the variety of factors (eg external internal factors, institutional, psychological, tech., etc.) influencing food choice in the framework of heterogeneity of challenges that characterize it, also shedding light on food behavior in general.

The research literature support the impact of the above variables on food choice by considering it as ‘complex’, ‘dimensional’, ‘multifaced’, ‘situational’ and characterized also by ‘access’, ‘affiliation’, ‘culture’, ‘educate’ ‘heritage’, etc. By Kapelari et al. (2020), there are encompassed social reasons for food choice and the education affect to food choice. Wise (2015) argues that education have potential and effect to healthier food choices. By McKenzie et al (2017), status of employment affect to food choices. Levy et al. (2021), points out that there are different choices among employees and employment influences food choice. Wiig et al. (2009), submits that income and personal and family economic status influence food choice. Briley (1998), underline that income affect the food choices of the elderly. By Lawrence et al. (2009), life–course trajectories are cumulative, developing over the lifetime and incorporating meaningful experiences with eating and food choices. Shkodrova (2021), considers that food is highly individual and experience affects food choices. Coles et al (2003) and (Borisov&Marinov, 2013), explain that packing as a competitive advantage for the food industry continues to increase due to demand and may affect to wider food choices. Rencher (2012), beliefs that product packaging may affect to food choice. By Yeh et al. (2020), trust in retailer is important for decision–making behaviour and effects

to food choice. Kening (2008), through a research in the German food–retailing market, finds that general as well as specific trust positively affects buying behaviour and food choice. Pollard et al (2002), by interpreting socio–economic differences as a 'hierarchy' considers the price 'as an important barrier' implying the impact on food choice. Dana et al. (2021), find that price is a dominant factor to food choice. By Frewer et al (2007), highlights that food safety as part of consumer behaviour, including cognitive aspects such as risks perceptions affect to food choice.

Objectives and hypotheses. The objective of the study is to test the potential impact of several variables, such as education, employment, income, experience — expressed by negative experiences, packing, trust in retailer, price preference and food safety to food choice of conventional agricultural products (vegetables), according to an observation in the retail–food–markets of the city of Tirana, Albania.

The study hypotheses are:

- H1 — consumers education affects to the food choice of conventional agricultural products;
- H2 — employment affects to the food choice of conventional agricultural products;
- H3 — income affects to the food choice of conventional agricultural products;
- H4 — negative experiences affects to the food choice of conventional agricultural products;
- H5 — packing affects to the food choice of conventional agricultural products;
- H6 — trust in retailer affects to the food choice of conventional agricultural products;
- H7 — price preference affects to the food choice of conventional agricultural products;
- H8 — food safety affects to the food choice of conventional agricultural products.

The above variables have been tested according to consumers' perception of conventional agricultural products in the retail–food–markets of the city of Tirana and they are: education, employment, income, negative experience, packing, trust in retailer, price preference and food safety.

Measurement procedure. A quantitative questionnaire was conceived for testing the above variables and after some preliminary discussions and adjustments (in a focus group) was used in the retail–food–markets of conventional agricultural products in the city of Tirana. Considering the heterogeneity of consumers (220) in the market the interview was conducted (by random choice) according to the questionnaire sections and the scaling (1–5) of the above variables. Based on data provided a linear statistical model is used to test variables under review and their significance is presented in the following table (table 1).

Conclusions and discussions

The paper provides an analytical research on the determinants of food choice in conventional retail markets in the city of Tirana, Albania. Food choice represents a factor of theoretical and practical importance for the segment of consumer decision–making for the functioning of markets and sustainable consumption. From the testing of the above variables (table 1) we see that education, employment, negative experience, packing and price preference, different from how they are hypothesized, have no impact to food choice. The variables income, trust in retailer and food safety have a high (up to very high) impact on food choice. Income is a very important factor for buyers of conventional products (vegetables). With increasing income opportunities for food choice increase. However, if we consider that income growth can be a 'myth' for some categories (eg marginalized groups, low–income or groupings of pensioners), this deserves attention and suitable reaction. If we consider fixed incomes (eg for the above

social groups), perhaps the possibility of incentives or other instruments for certain food categories should be verified and this deserves special attention at a time when in Europe and everywhere there are expectations for rising basic food prices (eg cereals, oils, etc.), which will cause other (food relative) prices to rise. This thesis however requires a more specific and ongoing approach to looking at effects considering long-term expectations for sustainable consumption, domestic conventional production, export trends, import trends, etc.

Table 1. The significance of variables by linear statistical model.
Model 2: Heteroskedasticity-corrected, using observations 1–220 (n = 217)

Missing or incomplete observations dropped: 3
Dependent variable: Food choice

	Coefficient	Std. Error	t-ratio	p-value	
const	1.50161	0.228025	6.585	<0.0001	***
Education	-0.0435226	0.0300267	-1.449	0.1487	
Employment	-0.0207782	0.0581177	-0.3575	0.7211	
Income	0.0711152	0.0357578	1.989	0.0480	**
Negative exper.	-0.0362487	0.0278073	-1.304	0.1938	
Packing	0.0112793	0.0338682	0.3330	0.7394	
Trust in retailer	0.0632735	0.0266416	2.375	0.0185	**
Price preference	-0.00084003	0.0347507	-0.02417	0.9807	
Food safety	0.148931	0.0451987	3.295	0.0012	***

Statistics based on the weighted data:

Sum squared resid	1530.705	S.E. of regression	2.712777
R-squared	0.086782	Adjusted R-squared	0.051658
F(8, 208)	2.470748	P-value(F)	0.014070
Log-likelihood	-519.8738	Akaike criterion	1057.748
Schwarz criterion	1088.167	Hannan-Quinn	1070.036

Statistics based on the original data:

Mean dependent var	2.055300	S.D. dependent var	0.664359
Sum squared resid	89.61897	S.E. of regression	0.656400

Source: Data processed by authors.

Trust in retailer is a factor that has a high impact on food choice among buyers of conventional vegetables in retail markets. Frequent interpersonal communication with retailers in small markets (eg neighborhoods) fosters interaction and mutual trust between parties. Given the variety of concerns about food purchases (eg product quality), consumers are influenced by trust in retail buyers. Certain groups of buyers can find it with interest (or eg inaccessible) by visiting more small shops than supermarkets and in Albania is specific their high presence from the consequences of the urbanization model, etc. The idea that products are fresh, safe often prevails in such shops. Sometimes retailers probably exceed expectations by giving 'green' status to the products they sell (meaning, close to organic or natural

products) and bilateral interaction fosters consensus and trust. Other studies in the food markets of Tirana (Kolaj et al. 2021; 2021) emphasize, however, the growing importance of product certification measures as opposed to trust in small retailers (eg in supermarkets, trust in the seller would be meaningless). Food safety has a very high impact to food choice. The measures of the agencies that assist/supervise the products, starting from the production to the last customer, should increase the performance, considering the current big challenges of knowledge, technology, environment, climate, shocks (eg pandemic situation), etc. The production of safe food in the 21st century is much more than just a matter of standards among EU countries; perhaps this may be a guiding motto for improvements in the food chain and especially in the markets in Albania.

In summary the findings reconfirm the well-known sentence that no theory can conclusively explain the problems. This is especially important considering the multi-dimensional nature and specifics of food choice in the segment of consumer decision-making and food behavior in the case of small markets of conventional products in Albania, prompting future research for necessary adjustments.

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TERRITORIAL DEVELOPMENT THROUGH THE PRISM OF INFORMATION TECHNOLOGY AND STRUCTURAL CHANGE OF CITIES

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Abstract

This presentation presents trends in the development of sustainable urbanism, in which innovations and technologies are brought to the fore. It is assumed that at this stage the necessary measures are being introduced to improve the efficiency of services and the use of resources in smaller machines (eg energy efficiency or efficiency in your enterprises) with information technology. This creates the conditions within the regional development offer to develop a concept of a smart city ("smart city"). In practice, the smart city is growing beyond this initial goal to one that applies to entire cities and urban blocks, not just the transport system or buildings, and covers a large area. This raises the need to study the development of settlements in order to better illustrate the processes of development of geo-spaces through the prism of the introduction of new communication technologies.

Key words: urbanization, area, space, information, technologies, development, environment and management.

Abstrakt

In diesem Vortrag werden Trends in der Entwicklung des nachhaltigen Städtebaus vorgestellt, wobei Innovationen und Technologien in den Vordergrund gerückt werden. Es wird davon ausgegangen, dass in dieser Phase die notwendigen Maßnahmen eingeführt werden, um die Effizienz von Dienstleistungen und die Nutzung von Ressourcen in kleineren Maschinen (z.B. Energieeffizienz oder Effizienz in Ihren Unternehmen) mit Informationstechnologie zu verbessern. Dies schafft die Voraussetzungen im Rahmen des regionalen Entwicklungsangebots für die Entwicklung eines Konzepts für eine intelligente Stadt ("Smart City"). In der Praxis entwickelt sich die intelligente Stadt über dieses ursprüngliche Ziel hinaus zu einer Stadt, die sich auf ganze Städte und Stadtteile bezieht, nicht nur auf das Verkehrssystem oder Gebäude, und die ein großes Gebiet umfasst. Daraus ergibt sich die Notwendigkeit, die Entwicklung von Siedlungen zu untersuchen, um die Entwicklungsprozesse von Geo-Räumen durch das Prisma der Einführung neuer Kommunikationstechnologien besser zu veranschaulichen.

Stichworte: Urbanisierung, Gebiet, Raum, Information, Technologien, Entwicklung, Umwelt und Management.

Résumé

Cette présentation présente les tendances du développement de l'urbanisme durable, dans lequel les innovations et les technologies sont mises en avant. On suppose qu'à ce stade, les mesures nécessaires sont introduites pour améliorer l'efficacité des services et l'utilisation des ressources dans les petites machines (par exemple l'efficacité énergétique ou l'efficacité dans vos entreprises) avec les technologies de l'information. Cela crée les conditions au sein de l'offre de développement régional pour développer un concept de ville intelligente ("smart city"). Dans la pratique, la ville intelligente dépasse cet objectif

initial pour s'appliquer à des villes et à des blocs urbains entiers, et pas seulement au système de transport ou aux bâtiments, et couvre une vaste zone. D'où la nécessité d'étudier le développement des agglomérations afin de mieux illustrer les processus de développement des géo-espaces à travers le prisme de l'introduction des nouvelles technologies de communication.

Mots clés: urbanisation, superficie, espace, information, technologies, développement, environnement et gestion.

Introduction

This research aims to focus on urban development and proposes that cities be seen as platforms for integrating policies aimed at achieving sustainability, both between different sectors and between different levels of cooperation, from local to international. Informed decision-making in crises such as the COVID-19 pandemic requires comprehensive, up-to-date, timely and easily accessible information, reliable data and indicators and their proper assessment. In order to solve this problem and ensure the timely adoption of the necessary measures to protect the most vulnerable groups, it is necessary to develop appropriate monitoring programs, information management systems and evaluation procedures and solutions. On the other hand, the introduction of new technologies creates confidence that the future development of large cities cannot be achieved without the introduction of working information technologies. The territorial component is important in the current development of cities. Due to the continuing territorial (geographical specificity) inequality, including a coordinated approach at many levels and stakeholders for sustainable urban development is needed. This new approach to the introduction of information and communication technologies increases the level of services provided and at the same time makes cities more comfortable to live. Thus, the well-being and prosperity of each city become increasingly dependent on technological innovations. In this regard, we can assume that no nation can claim sustainability if many of its cities are not at the required technological level and pace of development. For example, in the last year the introduction of 5G technologies has become especially relevant, which in practice means the fifth generation in mobile communications. Unlike its predecessors, however, in the new technology, the connections and data exchange between devices, antennas and servers are much closer and more comprehensive. In this way, it becomes possible to connect many more appliances, which will facilitate technologies related to urban management, their use in the household, autonomous driving, innovation in industrial production and the speed of the Internet. Response time to the transmission of information is important for everything that is done in real time - from online gaming through a mobile device, virtual reality-based services, to medicine and autonomous vehicle movement. The change will allow the imposition of a standard with negligible delay in any action requiring precision. The doctor will be able to remotely control a device that performs real-time diagnostics, or even perform surgery. An operator will be able to remotely control vehicles, measure the values of electronic water meters, as well as make deliveries to the respective homes. We can assume that digital technologies are increasingly integrated into urban design and management. Implementing them, urban governance, infrastructure and finding smart solutions to support the integration and coordination of urban conditions will promote the possibility of providing citizen-oriented services. Although these technologies are not a panacea and need to be adapted to the real needs of cities, they are able to provide efficiency gains and

rationalization. Urban operating systems implemented together with digital twins are called to create comprehensive and optimized ways of managing municipal services and transport infrastructure. Cities are experimenting with robotics and autonomous systems (e.g. connected self-driving cars, health robotics, building automation for energy efficiency). This means that if we want to have a modern regional development, we must look for solutions at the regional level and with the introduction of new technologies in urban management and local business development. New internet sharing platforms also open up opportunities that were previously underused and creating new markets (e.g. sharing cars, bikes, houses). Cities are increasingly aware of the ethical and social challenges that have arisen in the process of transition to digital technologies. Socially smart cities strive to be digitally inclusive, empowering and providing value and benefit to all citizens. Another important issue for the development of urban spaces is their mapping (Bulkeley, 2016). Mapping is an important element of broadband planning and provides a basis for EU evaluation for all its members. Broadband mapping helps to target funding more efficiently and facilitates planning. On the other hand, unsatisfactory mapping can lead to insufficient financial viability of both public and private investments. Broadband mapping is the collection and presentation of data related to broadband deployment. This mapping is not just about geo-reference visualization; it covers the whole process of data collection. This can be data on the deployment of the broadband infrastructure itself, i.e. copper or optical cables, and may be connected to infrastructure such as ducts and pipes. In addition, the mapping of broadband must take into account the real supply and demand for broadband services, as well as existing and planned investments in broadband infrastructure.

Results

Innovative development and functioning of urban systems. Urbanization is defined as a new central force in the overall development of civilization in the new urban program adopted by Habitat III in 2016. It is a landmark document that sets a global vision for urban development over the next two decades. In developing a New Urban Development Agenda for a number of important directions, including through the main recommendations for sustainable housing and urban development (Habitat, 2016). At the heart of cities' enormous potential for sustainable development are people as communities and as individuals living today and those who will live tomorrow. Society is certainly responsible for many of the problems facing our planet. However, the innovation and transformation potential of cities should not be taken for granted. This function of cities needs to be clearly recognized and promoted at all levels of government and that the necessary powers are given at these different levels. The creation of favorable conditions for innovation is associated with a number of factors, all of which must be present in order to create a living ecosystem and a reliable information environment. Cities that strive to create a better and more sustainable environment provide an integrated combination of housing, urban and social infrastructure. These sectors are part of the functioning of the 'urban economy', which is becoming an increasingly distinct advantage in urban life, which is crucial for the creation of a new urban consumer culture and business in cities. This aspect of the development of urban systems in the XXI century sets a new fragmentation of the models of regional development. The prism of innovation is increasingly intertwined with spatial development, but on the other hand, these processes also have their workload and oversaturation. This defines innovation as an introduction to the use of any new or significantly improved product (product or service) or process, a new marketing method or a new organizational method in business practice, the organization of workers places or external relations (Bulkeley, 2016).

Innovation encompasses the creation and application of new knowledge that redefines the path to a more sustainable future. In addition to new technologies or new products, innovations may include new management methods and organizational methods, new ways of structuring partnership relationships, or new ways of managing social relationships. In other words, the concept of innovation goes far beyond research, high-tech start-ups and even business-oriented to profit from private sector activities. It's about trying and defining better ways to improve communication and well-being. This process is part of creating a more attractive urban environment for all social groups and ages. For example, in the context of aging, cities support the environment for a healthy lifestyle and well-being and create the conditions for older people to "grow old on the spot" in a pleasant environment. In such cities housing, social transport infrastructure meets the needs of the elderly and people with disabilities. Another important issue is energy efficiency, which can also find better management through information technology. Almost everywhere there is a tendency to tighten energy efficiency standards for new buildings and residential buildings and to ensure energy recovery in existing buildings, as well as the exchange of experience between cities. Cities are shifting energy supplies to cleaner energy sources and modernizing energy infrastructure. It is very possible to achieve by focusing on transport, which is still used mainly by fossil fuels. It is very possible for the local economy and public administration to focus municipal procurement on clean energy and green technologies for public services. Such an important priority is to reduce pollution from transport, which is an effective lever for a green transition along with urban planning and to stimulate the transition from mobility to greener regimes. In order to find new and innovative solutions, experimentation and the search for new things are important. Smart policy measures are an ongoing search process, not a prescribed set of strategies with expected results (Rutherford and Coutard, 2014). To make full use of their innovation potential, cities are developing an open culture of flexible governance that promotes reflective learning, adaptation, creativity, innovation, co-creation and the maintenance of innovative business models (Carbon Neutral Cities Alliance, 2019). This includes experimental multi-level governance mechanisms to facilitate collaboration between different sectors to gain experience and knowledge of what works, gain confidence and develop, test, adjust and scale ideas.

linnovation is the key to sustainable urban transformation. Cities bring together industries, entrepreneurs, research and educational institutions, people capital, efficient infrastructure, a wide variety of consumer demand and preferences, Investors responsible and responsive to the needs of citizens Politicians and officials person, culture and, importantly, different types of talent. Leading cities have a critical appraisal system that allows you to define the main problems or what works and what doesn't! This creates an environment that provides opportunities for change and, above all, to eliminate what does not work, avoiding maintaining the "status quo" and situations in which the choice of one option complicates the choice of a more successful option in the future (Golubchikov and O'Sullivan, 2020). A principled approach to the development of sustainable practices must be based on real results and awareness, allows understanding and evaluation of decisions in practice. In order to take the innovative approach as a leader, it should be borne in mind that the concentration of all elements in one location serves as a fertile ground for innovative ideas to create opportunities and ultimately to address the challenges of sustainable development that currently face the world, including congestion, energy and resource depletion, environmental pollution, public health, waste management and housing affordability. In order to take the innovative approach as a leader, it should be borne in mind that the concentration of

all elements in one location serves as a fertile ground for innovative ideas to create opportunities and ultimately to address the challenges of sustainable development that currently face the world, including congestion, energy and resource depletion, environmental pollution, public health, waste management and housing affordability. These include in themselves the application of approaches developed under other conditions. It is important to note that innovation in this context includes not only technologies but also mechanisms for applying knowledge, ideas, practices and new and better ways to address today's dilemmas and challenges (Easme and DG Grow, 2019a); (Petrov and Borisov, 2021). This is in line with the established model of building "sustainable cities" as one of the main directions of urban development since the early 90's of the twentieth century for sustainable development, which has become a social paradigm. The development of urban systems is often defined as a political commitment. The concept of a sustainable city is imposed, which is considered a city that finds a balance between social, economic and environmental problems and processes in the spatial aspect. Sustainable cities are often associated with a number of relevant regulatory visions for urban development. For example, cities must be economically rich at the same time (productive cities, competitive cities, creative cities), socially responsible (open cities, comfortable cities to live in, fair cities, comfortable for the elderly) and ecologically literate (resource-saving cities, green eco-cities, sustainable cities). Rapid trends of urbanization are transformed into a growing and urgent demand for new or improved infrastructure, services and institutions capable of solving the triune task: 1) ensuring access of the growing urban population to basic services and vital resources; 2) maintaining continuous economic growth and 3) managing resources within the limitations of our planet in solving the problems of adaptation to climate change and mitigating its consequences. Cities are already major socio-economic assets and are a driving force for development in all countries (including those where the population still lives mainly outside the cities). This is largely due to economic and cultural globalization. Driving factors of globalization are advances in telecommunications, digital technologies, transport systems and trade liberalization (Easme and DG Grow, 2019b). At the same time, globalization requires an increase in the pace of socio-economic development interactions, forcing people to move to cities, especially large cities, with their advantages proximity, accessibility and exceptional productivity. It determines the productivity of cities agglomeration effect, economies of scale, knowledge sharing, business interaction, access to jobs, finance, entertainment, media, art and other services. Competitive and attractive cities stimulate job growth, income growth and labor productivity, even if there are huge differences between cities and regions in terms of performance. In this way, geo-urbanization restructures geography both globally and locally, strengthening the urban hierarchy, with large metropolitan areas enjoying a special privilege as centers of globalization, although all cities in the structure of the urban hierarchy play their role within the architecture of the new economic geography. The role of cities in promoting social development must be seen in the context of the wider trends and challenges of social development to which all cities must adapt in one way or another.

These trends and challenges also open new opportunities, lead to the formation of new functions of cities in society. Relative economic performance, employment opportunities and wages are some of the indicators that often show differences between cities (Friedman, Conteh and Philips, 2019). These differences often cause a chain reaction. For example, a steady decline in the city's economic performance and lack of economic opportunities lead to a brain drain, loss of skilled staff and relocation of jobs to other more prosperous communities. This reduces the ability of the public and private sector to ensure the

sustainability of the budget of such a settlement, as well as the provision of services and maintenance of infrastructure. As a result, the level of business development decreases and innovation. Over time, qualitative and quantitative differentiation between settlements is only intensified, which leads to uneven quality of life. As central places systematically gain advantages (economic, cultural and / or political) over peripheral areas, this can be seen as a spatial or territorial injustice, contrary to the idea of sustainability. Related to this is the phenomenon of urban shrinkage. These are the cities that are experiencing a decline in population (Yenneti, Day and Golubchikov, 2016). This process is relative, the decrease is of different intensity in different cities and runs in parallel with the growth in other cities, which attract population. At the same time, these processes after 2019 were placed on a new plane. The rapid growth of the use of digital technologies, including digital communications and infrastructure and other advanced technologies, has changed many areas of public life, including production and consumption, how people interact with each other and how people work and behave. Isolation measures in response to the COVID-19 pandemic and the temporary shift to teleworking also demonstrate the prevalence of digital transformation in society. This change has led to the elimination of the link between the workplace and the place of residence has suddenly become the norm for many more people, even those who do not normally do work away from the traditional workplace. This showed that the world is moving towards a new technological change.

Development of the city's economy through information technologies and networks. Cities contain colossal resources, human talents, creativity and serve as centers for sharing knowledge, experimentation and innovation, generating new ideas and implementing these solutions at the local level, the most successful of which is scaled up in a wider application. However, cities are not abstract machines for sustainable development; real people live, work, study and realize themselves in cities. Cities consist of people built by people and existing for people. Therefore, sustainable development measures must make sense above all for the city dwellers themselves, making their lives more comfortable. Moreover, people are the driving force behind sustainability, its source and beneficiary. This vision is at the heart of the concept of "people-smart sustainable cities". By promoting sustainability in all its environmental, economic, social and cultural dimensions, such cities create the conditions and infrastructure to empower their citizens to contribute to and benefit from a better, more sustainable and sustainable development city (Klinenberg, 2018). Such cities form an environment for the full participation of citizens in the exercise of their rights. to the town. The focus is on making cities more prosperous, fair, comfortable and innovative, meeting social needs and ensuring high quality and affordability of housing and urban services. These cities meet the needs of vulnerable groups and people with disabilities, gender and age, recognizing the needs of residents are different and change at different stages of life. This approach is comprehensive and equitable, directly and clearly linking sustainable development to human capital development, and also reaffirming the urgent need to expand life opportunities and improve the quality of life for all.

Citizens are seen as a source and as beneficiaries of sustainable development. These ideas are based on the concepts of "sustainable cities" and "smart cities" (Latham and Layton, 2019). Stakeholders to participate in joint, inclusive and at the same time pragmatic policies for sustainable development. The continuing digitalization and the development of intelligent technologies have influenced the conceptualization of sustainable cities, the introduction of the intelligent dimension as a new normative

requirement for a technological society. But the concept of "smart city" has changed over time: there is a change from the concept that some are now called "Smart City 1.0" (which features a top-down system, with a focus on ICT infrastructure and the implementation of solutions driven by technology companies), to the concept of "Smart City 2.0" (a system that is focused on people and user-friendly) and even Smart City 3.0 (inclusive governance and participatory urban management). In terms of technology, instead of blindly copying and applying what other cities do, there is a search for "really smart" solutions for cities that are tailored to the needs of specific cities and their inhabitants, taking into account their characteristics, aspirations and challenges. (Nesti, 2019). This approach is more in line with the concept of adaptive control. Intelligence is certainly one of the conditions for more sustainable development, but at the core of this concepts must be people, citizens, communities. In this publication, the concept of "socially smart sustainable cities" refers to an extremely "humanistic" vision of a "smart" city, which includes, but is not limited to, ICT or technology, but extends far beyond them. for a socially intelligent sustainable city promotes a broader understanding of intelligence in urban development - as a set of conditions aimed at strengthening human capital, while ensuring sustainability and creating a harmonious society and improving the quality of life. This means meeting social needs and creating more favorable conditions in cities for innovation, which will make cities more attractive to people and businesses (Valkov, 2020). This approach sets the new trend, which focuses on creating an enabling environment that makes cities socially smart and opens the door to a more sustainable and comfortable future. It also demonstrates that cities are key forces for introducing and implementing innovation for a sustainable future. In practice, this environment cannot go through the implementation of new communication technologies such as 5G. In addition to the basic terminology and important trends, at the level of cities and in particular in Bulgaria as municipalities, efforts will have to be made for the introduction of 5G technology. There are already working 5G networks in Bulgaria, although in test mode. The reason this is not really felt is that these are working networks, but with many reservations: limited coverage, limited speed and most of all a limited number of devices that can be included in it. In addition, even if the construction of a 5G network can be completed in the next few years, it will be unusable - there will not be enough mobile devices adapted to work with it. The successful and timely introduction of 5G networks will require a significant change in infrastructure investments, which will require significant coordination and development of regulatory frameworks. 5G mobile networks will be vital to sustaining the growing demand for mobile video. Increased data transfer capacity, speed and low latency will allow ordinary users to have fun through so-called virtual reality (VR) and alternate reality (AR). These technologies are already helping to enhance the experience in sports and other live events with innovations such as AR games and interactive gaming programs, while VR is helping to recreate a live experience for those at home and on mobile devices. Currently, virtual reality bandwidth is almost 100 times higher than playing high-definition video. 5G will allow for more innovation in this area. Given the complexity of future 5G systems, it is not yet clear how and where 5G networks will be located. It is possible that their development will be part of a much broader wireless ecosystem, based on investment in 4G networks and the improvements needed to provide different uses in different areas. Connecting hotspots is likely to provide additional capacity for hundreds of thousands of small short-range and high-speed cellular radios that support the existing network. Thus, 5G will require a gradual change in investment in digital communications infrastructure, as well as the necessary skills to provide its capabilities. Applications transform the user experience with

urban spaces and services, including how people receive information, communicate, interact with each other, move, access places and participate in public and political life. Many other features for urban living applications include the following in themselves:

Urban mobility. Smartphone applications use a built-in navigation feature to adapt to different modes of transport. Many public transport services provide real-time traffic schedules, traffic information, the ability to purchase tickets online and track access to bus or train stops from geolocation.

Car sharing. These applications offer access to car sharing services, allowing the user to find free cars and rent them on an hourly basis or to access the car sharing services of several colleagues on joint trips. Taxi calling services make it easy to order a taxi, search for it in real time and pay for the trip online through the app. This is exactly what 15toGO does - it connects people with common interests and desires to visit a certain destination. When users use the Travel with Me button, they offer a "travel friendship" using the term travelship in the platform. The more people accept the invitations, the greater the network of travelers created by the respective user.

Shopping and delivery. Retail and supermarket chains provide applications that provide access to their products, allow you to place a purchase order, and help you find nearby stores. You can also order food and its delivery by accessing the menu of restaurants and independent delivery services.

Financial services. This group includes applications for daily use of mobile devices bank and online payment by phone in stores or when receiving services, which replaces a credit or debit card. Such applications also allow those who do not have a card payment machine to make small personal money transfers (Rutherford and Coutard, 2014).

Short-term rent. Find hotel rooms, compare prices, book a room and manage the reservation can be made both from a smartphone and a desktop computer. With the growth of the sharing economy. These possibilities are not limited to hotel rooms, but also cover services for sharing (short-term rent) of residential premises.

E-government or e-government. Receiving government services directly through smartphones is becoming commonplace. Many local authorities provide applications to make it easier for citizens to inform the authorities and participate in the decision-making process. These include reported infrastructure gaps using geographically indicated images and brief descriptions that are sent to the relevant services.

Medical care. The applications also change the way we approach healthcare, some of the applications proved useful during the COVID-19 epidemic.

The digital revolution provides cities and citizens with new tools to find opportunities, solve problems and create pathways to a more sustainable and comfortable future for all. This is particularly true of the fourth industrial revolution (Industry 4.0), automation and robotics, which can change the way businesses work, the organization of social life and its impact on labor markets (Yenneti, Day and Golubchikov, 2016); (Friedman, Conteh and Philips, 2019).

Finally, we cannot ignore the fact that the information society is a stage of the development of civilization, let's assume that the new technologies lead to a qualitatively new structure, organization of public relations based on global access and use of information, communication networks and services. Through information technology it is possible to overcome national, geographical or other restrictions on the exchange of information on scientific, spiritual, cultural and other achievements.

Conclusion

It is a determining factor in public life as a whole scientific knowledge. It displaces labor (manual and mechanized) as a factor in the value of goods and services. The economic and social functions of capital pass to information. Thus, the urbanism of the platform and smart cities are some of the trends in the commitment of cities in the digital transition. They recognize cities as suitable metropolitan areas for the introduction of "smart" technologies, including in an experimental, "test" mode. Various "Platforms" introduce new services and markets in urban life, enabling more efficient and cost-effective, opening up new opportunities for service providers and offering more convenient and cost-effective services. The sharing economy involves activities based on user-user interaction, which allows transactions between buyers and sellers, usually supported by Internet platforms. The model allows the creation of new markets in which consumers can profit from underused or unused assets, such as cars or real estate. Airbnb, Uber and their regional alternatives such as Yandex.Taxi and other Yandex services and other similar platforms quickly became part of everyday life. Car-sharing services by several other passengers, such as Oszkár in Central Europe, car-sharing and bicycle-sharing platforms are widespread (Carbon Neutral Cities Alliance, 2019). Similarly, collaboration platforms and freelance practice help to better balance supply and demand in a more flexible labor market. The platforms are evolving due to network effects and economies of scale. This predetermines the entry of 5G technologies within the Bulgarian national space. The infrastructure of the information society is the new intelligent, not the mechanical technology. The social organization and information technologies form a kind of symbiosis. Society enters a technotronic era when social processes become programmable. There is a lot of information in modern society as well plays a colossal role. To understand the essence of the information and why it plays such an important role in the modern age is needed clearly distinguish message (or message), interpretation perception) and communication. Modernization goes through the introduction of new technologies and their management in order to create a new labor market that brings to the fore new professions and winds of the economy of the XXI century.

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REGIONAL SURVEY OF AGRICULTURAL HOLDINGS AND EMPLOYEES IN THE SECTOR OF AGRICULTURE,
FORESTRY AND FISHERIES IN THE RURAL AREAS OF THE SOUTH-CENTRAL REGION FOR THE PERIOD 2008-
2020

(The context of the Index Localization - IL)

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Abstract

The study and analysis of social and economic processes in agriculture in smaller administrative units, rural areas according to the NUTS classification, gives an accurate picture of the actual situation. The problem is relevant with regard to the functioning of farms and employees in areas outside urban areas. The provision of employment, agricultural production, as well as non-agricultural cooperative activities, contributes to increasing Gross Value Added and fulfilling the commitments under the EU's Common Agricultural Policy. The rural development policy in Bulgaria is dictated by the accompanying facts that approximately 45% of the population lives in them and covers 85% of the territory.

The application of the localization index for agricultural holdings and employed persons in the rural areas of the South-Central Region of the Bulgaria reveals their real status. The study of the coefficient of specialization for agricultural holdings and employees covers the period from 2008 to 2020. The localization index is the basis for analysis of various types of economic processes and phenomena. It is also applicable in smaller administrative areas, namely in the rural municipalities of the South-Central Region.

Key words: Localization index, rural areas, agricultural holdings and working.

Abstrakt

Die Untersuchung und Analyse der sozialen und wirtschaftlichen Prozesse in der Landwirtschaft in kleineren Verwaltungseinheiten, den ländlichen Gebieten gemäß der NUTS-Klassifikation, vermittelt ein genaues Bild der tatsächlichen Situation. Das Problem ist relevant für das Funktionieren von Betrieben und Arbeitnehmern in Gebieten außerhalb städtischer Gebiete. Die Bereitstellung von Arbeitsplätzen, die landwirtschaftliche Produktion sowie nichtlandwirtschaftliche genossenschaftliche Tätigkeiten tragen zur Erhöhung der Bruttowertschöpfung und zur Erfüllung der Verpflichtungen im Rahmen der Gemeinsamen Agrarpolitik der EU bei. Die Politik zur Entwicklung des ländlichen Raums in Bulgarien wird durch die Tatsache bestimmt, dass etwa 45 % der Bevölkerung in diesen Gebieten leben und 85 % des Territoriums von ihnen bedeckt sind.

Die Anwendung des Lokalisierungsindex für landwirtschaftliche Betriebe und Erwerbstätige in den ländlichen Gebieten der Region Süd-Zentral-Bulgarien zeigt deren tatsächlichen Status. Die Untersuchung des Spezialisierungskoeffizienten für landwirtschaftliche Betriebe und Beschäftigte erstreckt sich über den Zeitraum von 2008 bis 2020. Der Lokalisierungsindex bildet die Grundlage für die

Analyse verschiedener Arten von wirtschaftlichen Prozessen und Phänomenen. Er ist auch in kleineren Verwaltungsgebieten anwendbar, nämlich in den ländlichen Gemeinden der Region Süd-Mitte.

Stichworte: Lokalisierungsindex, ländliche Gebiete, landwirtschaftliche Betriebe und Arbeit.

Résumé

L'étude et l'analyse des processus sociaux et économiques de l'agriculture dans les petites unités administratives, les zones rurales selon la classification NUTS, donnent une image précise de la situation réelle. Le problème est pertinent en ce qui concerne le fonctionnement des exploitations agricoles et des employés dans les zones situées en dehors des zones urbaines. La fourniture d'emplois, la production agricole, ainsi que les activités coopératives non agricoles, contribuent à augmenter la valeur ajoutée brute et à respecter les engagements pris dans le cadre de la politique agricole commune de l'UE. La politique de développement rural en Bulgarie est dictée par les faits qui l'accompagnent, à savoir qu'environ 45 % de la population y vit et qu'elle couvre 85 % du territoire.

L'application de l'indice de localisation des exploitations agricoles et des personnes employées dans les zones rurales de la région centre-sud de la Bulgarie révèle leur statut réel. L'étude du coefficient de spécialisation des exploitations agricoles et des salariés couvre la période de 2008 à 2020. L'indice de localisation est la base de l'analyse de différents types de processus et de phénomènes économiques. Il est également applicable dans des zones administratives plus petites, à savoir dans les municipalités rurales de la région du centre-sud.

Mots clés: Indice de localisation, zones rurales, exploitations agricoles et travail.

Introduction

The South-Central region is part of the National classification NUTS of Bulgaria with a territory of 22,365 km² and includes five districts (Kardzhali, Pazardzhik, Plovdiv, Smolyan and Haskovo), seven urban municipalities (Kardzhali, Pazardzhik, Plovdiv, Asenovgrad, Smolyan, Haskovo and Dimitrovgrad) and 51 rural municipalities with an area of 18,441 km². The article analyzes the farms and the persons employed in them, located in the rural areas of the above territory, applying the localization index as a basis for comparison with the region and the country for the period 2008-2020. The rural areas in the country are diverse in terms of geostrategic location, physio-geographic, socio-economic and ecological features. This is one of Bulgaria's biggest resources. Different economic, social and environmental programs have been implemented in recent decades (RDP 2014-2020, Horizon 2020, The European Agricultural Fund for Rural Development – EAFRD), which attempts to improve the social status of the population in those non-urbanized areas. For a number of reasons, much of the expected results are slowing down and not getting their realization. Applying modern approaches to rural integration is a potential guarantee for overcoming differences.

The aim of the publication is to reveal the real social and economic picture of the state of the agricultural holdings and the employed persons, the specialization of the respective region (rural municipality) in the border of the South-Central Region on the territory of the Republic of Bulgaria.

The research and analyzes are conducted within a twelve-year period with the application of the Localization Index - IL (Isard, 1978, 2003). As in the field of regional development, rural areas and in particular, the application of the above index, work a number of scientists (Kovalenko 2008), (Geneshky

2000), (Patarchanova 2006), (Borisov and Radev, 2011), (Nurgalev 2012), (Borisov and Marinov, 2013), (Petrov 2014), (Marinov 2015), (Markov and Toneva, 2018), (Nikolov, Borisov and Radev, 2014), (Bachev et al., 2017), (Olah et al., 2020), (Shaban et al., 2020).

To support rural development, their growth in socio-economic prosperity The EU has three main objectives: 1) to improve the competitiveness of agriculture; 2) achieving sustainable management of natural resources and climate action; 3) balanced territorial development of rural areas. The localization index and the analyzes obtained can be applied to the objectives and tasks set by the EU committees.

Disclosure of the real socio-economic picture of the agricultural holdings and the employees in them determines the specialization for the respective region - a rural municipality within the boundaries of the South-Central Region on the territory of the country. The application of the localization index for agricultural holdings and those employed in rural areas reveals their real economic status (Mihailova, 2020). I apply the localization index to determine the coefficient of specialization for agricultural holdings and the employed, as the research and analysis cover the period from 2008-2020.

The coefficient of specialization (Milusheva, 2012) is a basic indicator that is used to compare and analyze farms and employees in a given area in this case in rural areas of the South-Central Region. The specialization of the area, in addition to the built technical, social infrastructure, internal and external markets, largely depends on the factors: natural resources, agricultural holdings and skilled labor. The results of the study and the analysis of the specialization for rural areas are directly dependent on the scale of the study. The lower the rank of a study, of a given economic activity for the coefficient of specialization in a territory, the higher and more accurate the economic values. The real economic picture of the studied and analyzed municipality, production, farms and occupied places is revealed.

The Localization Index (IL) is used to analyze and compare districts, municipalities and smaller settlements (rural areas) by economic indicators of production and employment in the respective sectors of the economy with the main indicators of the country. Using the Localization Index (Isard, 1998), one can analyze a specific area in which different types of socio-economic activities are developed. The index in this article refers to the analysis of farms and employees in the South-Central Region according to the NUTS classification for Bulgaria. If the index is higher than (unit) 1, the production of farms and employees in the sector - Agriculture, forestry and fisheries (in CEA classification 2008), it has a higher concentration, which is an indicator of the localization of the relevant economic or social activity. For a factor less than 1, localization processes are absent or have a low concentration. The results of the research and the analysis of the specialization for the rural areas of the South-Central Region in Bulgaria are directly related to the scale of the research. The lower the rank of research, economic activity for the coefficient of specialization in a territory, the higher the economic values. It reveals the real economic picture of the state of the surveyed and analyzed municipality, farms, (production) and occupied places.

$$IL = \frac{S_j : N_j}{S : N} = \frac{S_j : S}{N_j : N}$$

Where:

S_j – the number of employed/farms in sector j in the area

S – the number of employed/holdings in the processing industry in the area

N_j – the number of employees/holdings in the industry j in the country

N – the number of employed/holdings in the processing industry in the country

Results

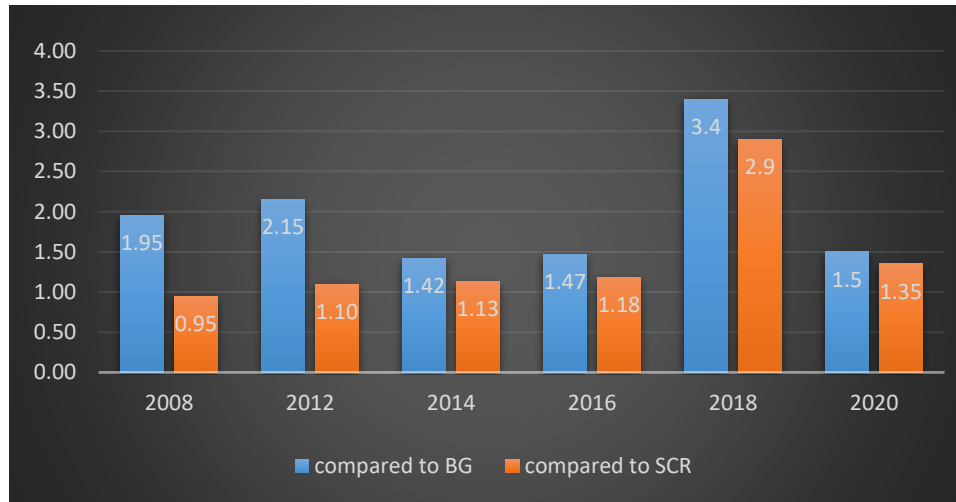
The localization index is a model used for comparison, analysis and formation of conclusions in this case, I apply IL in the rural areas of the South-Central Region in Bulgaria for a period of twelve years examining farms and employees in the sector and the specialization of the region. There are objective factors influencing the economic development in the rural municipalities of the region. They must be considered individually, as indicators of sustainable development, they do not have a precise formula or definition.

The conditional factors are socio-economic, similar and characteristic for each rural municipality in the South-Central Region for the territory of the country. In the article the main factors - external (natural resource potential) and internal (farms and employees) are key to the development of the competitiveness of each rural municipality. It is not possible to create a universal set of factors that can be applied locally. Each region or rural community must have its own set of factors, which are specific and on the basis of which different methods, models and programs for competitive development should be developed. It is the relationship between the various factors, the natural environment and agriculture that determines the development strategy in rural municipalities. The natural resource potential as a factor for the development of agriculture in the region is characterized by three climatic zones (transitional, Mediterranean and mountainous). Usable agricultural area is 4975,47 km² (4,98 thousand of acres) for the period 2008-2020.

Farms and employees are an internal factor in the development of rural areas in the South-Central Region. At the initial stage of the survey the farms for 2008 were 10 920 and the number of employed was 80 260. The total number of agricultural holdings in 2003 was 666 548, and in 2013 it reached 254 142, or falls within ten years, 411 406 number or 62%. For Bulgaria, according to statistical information from the National Statistical Institute, the number of agricultural holdings in 2014 was 176 230, and in 2016 199 980. In the period 2008-2016 there is a growth rate of 40,23% for farms or 2016. for the year. For the 94 450 employees for 2016, during the same period the analysis shows 15% growth. For the last survey period for 2018-2020 there is an increase in the number of farms, compared to the country the increase is almost 40% and for the region 20%.

In the article, the study period is within twelve years, overlapping the last world economic crisis, its end and the time of stabilization. The application of a localization index for analysis of agricultural holdings and employees in the rural areas of the South-Central Region in Bulgaria reveals the economic picture of the state of the internal factors in the smaller municipalities. Figure 1 shows the index of the location of farms for a period of twelve years in rural areas compared to Bulgaria and the region.

Figure. 1 Index of localization of agricultural holdings in rural areas of the South-Central Region in the period 2008-2020. Source: Information from NSI and author calculation



During the initial survey period of 2008 y., agricultural farms in the countryside compared to the country have a coefficient of approximately two. This period coincided with the beginning of the global economic crisis. Depending on the region, the coefficient approaches the unit, regardless of the change in objective factors, rural areas retain their specialization. The next stage of the study coincides with the exit from the economic crisis, as a result of which the coefficients show growth in both indicators - relative to the country and the region. In 2014 y., the analysis shows a minimal decline from the previous year, compared to the country's coefficient of 0,73 points, the region has a slight increase compared to the previous year 0,3 points - the rural areas retain their specialization. In the last survey period 2016 y., the analysis shows stabilization of the indicators, with the minimum increase for the country being 0.5 points, for the region it is 0,5 points. Throughout the survey period 2008-2016 y., analyzing the localization index takes into account the specialization of rural areas in agricultural holdings. Agricultural farms are an internal factor for the development of the rural area of the South-Central Region in Bulgaria. At the initial stage of the survey, the agricultural holdings for 2008 y., are 10 920 number and the employed are 80 260 people. Within the period 2008-2016 (for 2014 y., the number of agricultural farms in Bulgaria is 176 230, for the South- Central Region they are 36 510 number, with 22 890 in the rural municipalities in the same territory) there is a growth of growth in the farms by 40,23% or by 2016 y., their number is 27 140. At the end of the study period, there is again an increase in agricultural holdings for both the country and the region. The specialization is visible and visualized in Figure 1. The indicators of IL are over one, which shows a high degree of development of this sector in the region.

Employees in the agriculture, forestry and fisheries sub-sectors are moving to a greater extent. Over 90% of farms are private, some of them family-owned, and reporting to employees is quite difficult and inaccurate for a number of socio-economic reasons. For greater accuracy and reliability for those employed on farms, I rely on information from the National Statistical Institute.

Figure. 2 Localization Index of Employed Persons in Rural Areas of the South-Central Region in the period 2008 – 2020. Source: Information from NSI and author calculation

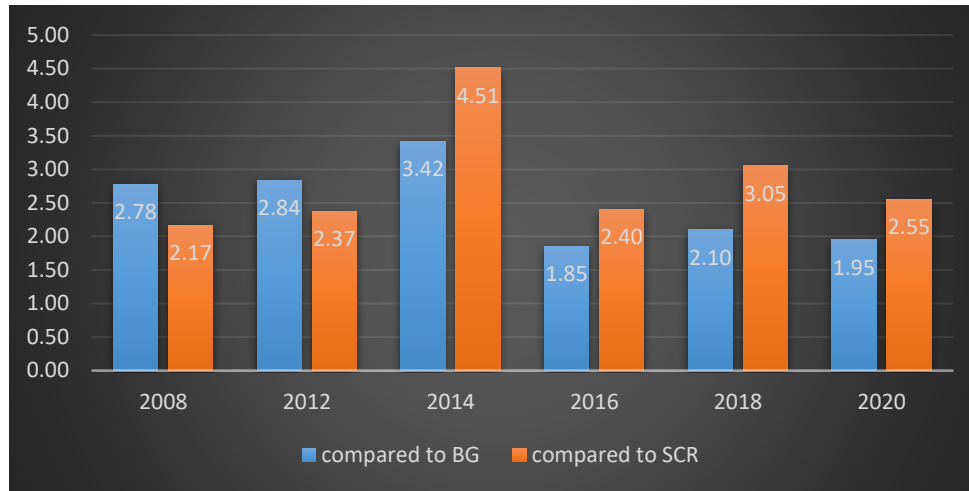


Figure 2 shows the index of localization of employed persons during the period 2008-2020 in the rural areas compared to Bulgaria and the region. During the initial survey period of 2008, the employed persons in rural areas compared to the country reported a coefficient above two points, the same for the region with minimum values above two points, there is a specialization. The first year of research, like farms, coincided with the beginning of the last World Economic Crisis. However, the worsened external factors during this period in the rural areas the index of localization has positive values. The next stage marks the outbreak of the World Economic Crisis, with the number of employed in rural areas compared to the previous year, the country having a minimal growth of 0,06 points, the region is 0,17 points growth, there is a specialization. In 2014 y., the analysis shows the highest growth of employees throughout the survey period, the specialization is retained.

At the end of the survey for 2016 y., the index shows declines in rural, country and regional employment. For both metrics, the values are more than one. During the entire survey period 2008-2016 y., analyzing the localization index takes into account the specialization of the rural areas in the employed persons. In the following years we have again confirmed the analysis from the previous period, as for 2018 IL reports strong specialization with over three points, which is close to the maximum in 2014. At the end of the study the values compared to the specialization of employees in Agriculture, Forestry and Fisheries highest values.

Conclusion

The natural and climatic features of the area are fundamental to the development of agricultural holdings. The increase in the number of farms in the rural area of the South-Central Region during the survey period. On the basis of an IL analysis, the number of farms located on the territory of the region retain their specialization. Throughout the survey period, the localization index takes into account the specialization of rural areas on farms. However, worsened external factors during the first survey period in rural areas have a positive index. The study period and the analysis of the localization index take into account the specialization of the rural areas in the employed persons. The increase in the number of agricultural holdings and employees in the agriculture, forestry and fishery sectors in the rural areas of

the South- Central Region is due to the natural and climatic conditions and socio-economic activities aimed at stimulating this sector. The region retains its specialization and is the leader in these two activities. The development of rural municipalities is based on the implemented state policy, synchronized with the European programs for the stimulation and development of the smaller administrative territories through various programs based on socio-economic growth. In the coming years, the impact of a protectionist policy directed at rural areas must be strengthened in order to keep young people and raise living standards.

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THE DEMOGRAPHIC SITUATION AND THE REGIONAL DEVELOPMENTS IN THE CONTEXT OF REGIONAL POLICY

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Abstract

The development of scientific knowledge in recent years has necessitated the systematization of regional issues through the prism of the population and settlements. The population-territory-development model is largely imposed, as the definition of basic fundamental formulations related to the clarification of the subject area of regional development and regional policy. The exhibition considers the possibility of systematization of the scientific tools of regional development and the definition of its problem area as a result of demographic findings. It is expressed in the framing of the separate scientific directions and theoretical formulations in the development of the regional science in the context of the demographic situation in regional and local plan.

Key words: regional development, regional economy, local, impact, processes, structures and models

Abstrakt

Die Entwicklung der wissenschaftlichen Erkenntnisse in den letzten Jahren hat die Systematisierung regionaler Fragen durch das Prisma der Bevölkerung und der Siedlungen erforderlich gemacht. Das Bevölkerungs-Territorium-Entwicklungsmodell ist weitgehend auferlegt, wie die Definition der grundlegenden grundlegenden Formulierungen im Zusammenhang mit der Klärung des Themenbereichs der regionalen Entwicklung und Regionalpolitik. Die Ausstellung berücksichtigt die Möglichkeit der Systematisierung des wissenschaftlichen Instrumentariums der Regionalentwicklung und die Definition ihres Problemfeldes als Ergebnis der demographischen Erkenntnisse. Sie drückt sich in der Formulierung der einzelnen wissenschaftlichen Richtungen und theoretischen Formulierungen in der Entwicklung der Regionalwissenschaft im Kontext der demographischen Situation in der regionalen und lokalen Planung aus.

Stichworte: regionale entwicklung, regionale wirtschaft, lokale, auswirkungen, prozesse, strukturen und modelle

Résumé

Le développement des connaissances scientifiques au cours des dernières années a nécessité la systématisation des questions régionales à travers le prisme de la population et des établissements humains. Le modèle population-territoire-développement s'impose largement, comme la définition des formulations fondamentales de base liées à la clarification du domaine du développement régional et de la politique régionale. L'exposition considère la possibilité de systématiser les outils scientifiques du développement régional et la définition de sa problématique à partir des résultats démographiques. Elle s'exprime dans l'encadrement des directions scientifiques distinctes et des formulations théoriques dans le développement de la science régionale dans le contexte de la situation démographique dans le plan régional et local.

Mots clés: développement régional, économie régionale, local, impact, processus, structures et modèles

Introduction

Regional development has its own demographic focus. In the last few decades, the demographic situation in Bulgaria has been negative characterized by declining and aging population, declining birth rate and persistent high level of overall mortality, negative natural and mechanical growth. The aging of the population is typical for most EU countries (on average 19.7% of people over 65), but in Bulgaria it has larger dimensions - 21.3%. Regionally, this one characteristic is the worst in the North-West Region (NWR) - 26.2% and North-Central district (SCR) - 24.0%. At the district level, the differences in this indicator are even more significant. 20 districts have above the average value (21.3%), while Sofia-city (17.5%) and Varna (18.9%) have the most favorable shares (7). Natural increase is the end result with a markedly negative value. Only in 2018, the country's population decreased by 46,329 people at a natural rate increment minus 6.5 ‰. In just one year, a population equal to that of a city bigger than Vidin. The EU reference value for 2017 was minus 0.4 ‰. The difference "city (-4.1 ‰) - village (-13.5 ‰)" is 3.3 times and definitely outlines the spaces of alarming depopulation in rural areas (NSI, 2021). The spatial labor distribution correlates with that of the demographic masses. Common national a problem in recent years has been the shortage of qualified staff in a number of industries. The economic activity rate follows a positive trend parallel to that of the workforce. For the period 2014-2018, this ratio increased by 2.5%, reaching a national value of 71.5%. The spatial addresses of the pole values are the same - SWR with 75.8% and NWR with 66.4% (NSI, 2021). The ongoing economic processes in the spatial structures of the country are summarized in a mosaic of predominant positive but also some negative manifestations, especially at low territorial levels. Despite the realized cumulative economic growth for the period 2010-2017, Bulgaria and the Bulgarian regions have failed to make significant progress in catching up in other EU regions. And in the next period, this fact puts the focus on national and regional policy on economic growth and support for the main drivers of growth. The assessment of the demographic situation necessarily goes through the regional analysis. In this focus, the assessment of the regional economic potential of the territory often comes to the fore. The regional economy, as well as the theory and practice of regional research do not remain unchanged over time. One of their main task is to reveal new trends and characteristics typological features of modernity (Boyadzhiev, 2006). In essence, the development of the regional economy as a science reflects the objective needs of our development. The Regional Development Program (RDP) 2021-2027 focuses on the territorial goal of the policy "Europe closer to the citizens", and in its second working version the main goal of the policy for regional development in Bulgaria is - to create vital, economically strong and sustainable regions in response to adverse demographic trends and deepening inter- and intra-regional disparities. The program includes two specific priorities - one for integrated urban development and another for integrated territorial development of regions at NUTS 2 level, as well as one priority for technical assistance to facilitate the implementation of the new territorial approach. The integrated territorial approach in Bulgaria should be applied on the basis of integrated territorial strategies for regional development (Valkov, 2018).

Structure and nature of regional development. The economic and vital activity of man takes place in a certain territory. Depending on the specifics and features of the natural complex there are different

prerequisites for organizing economic activity, for the formation of a certain economic potential of the territory and construction of an infrastructure base. Regional development is a process that reflects the economic reality in spatial and territorial terms. Through it, people become aware of economic processes, acquire knowledge, which they use for their transformation for the development of the respective territory or assessment of the change in its structuring and development (Vladev, and Vladeva, 2002). The approach to regional development usually begins with its subject area, with the identification of the range of problems that are studied, as well as the disclosure of the specific methods that are applied. With regard to the first round of questions, a phonological and geographical approach is applied, which reveals how the ideas of the main theoretical directions in regional development develop and change. The second, larger set of problems presents the scientific tools of regional research and the functions performed by regional science in the context of development. In this aspect, regional development is a science of the interests and behavior of economic entities, their rational choice goods and resources in territorial and spatial aspect from the point of view of their functional organization and management (Hudak, Huitfeldt, Meegan, 1999); (Hooghe and Marks, 2001). Thus, a fundamental task of regional development is to describe, explain and predict the rational behavior of economic entities in spatial and territorial terms. Moreover, the systematization of regional theory offers a variety of definitions of its own subject mainly in the direction that regional development studies regional relations and features of production, distribution, exchange and consumption of society's wealth in territorial and spatial terms. Most of all, we accept the view that regional science characterizes the daily economic activity of people by studying indirectly the changes in socio-economic life - production, prices, unemployment, etc. In practice, regional development examines how people organize production and consumption, seeks answers to the main questions of each business - what, how and for whom to produce.

Of course, as a scientific discipline and for the purposes of education, regional development is reduced to the study of the behavior of economic entities in a territorial aspect, in spatial terms on the basis of limited resources and interdependence between goals and alternatives for their implementation. Regional development has a functional dimension and in practice is a science of choice generated by the spatial and territorial development of society and the planet. Regional development has the task to develop theoretical and practical models of people's geoeconomic choice caused by the scarcity of goods and the territorial location of productive forces and the established foundation of a functioning regional economy and the implementation of regional development policies. In this sequence, in a theoretical sense, regional development provides an opportunity to study changes in the regional economy through analysis of price dynamics, unemployment and others (Marinov, 2005). At the same time, from a functional point of view, to develop decisions and strategies for the implementation of a policy of influence by the government on the national space in its entirety and specificity of its regional variations and features. Thus, regional development as a science of impact and choice shows how people decide to use limited resources to produce goods and distribute them among members of society. In this direction, we must distinguish between a regional economy and regional development. The regional economy studies the functional and probationary dependencies in the form in which they appear on the surface, in the action of the market mechanism for regulation of the economy in territorial aspect and mainly in the local choice. Therefore, the main object of study is the regional local and local market and the law of supply and demand in local and territorial terms. Regional development studies the managerial decisions

and the organization of the environment caused by the relations between people in the process of production, distribution, exchange and consumption of material goods and the implementation of public administration. In practice we can say that the regional economy is part of regional development (Petrov, 2009). This allows regional development to enrich and diversify the subject in the rapid development of economic life with the enrichment of geoeconomic theory with new tools. Thus, regional development is a science that examines the phases of development in territorial terms and the stages of social production in its entirety with a view to the rational use of productive resources for ranked satisfaction of needs while respecting social justice in spatial and territorial terms. So let us summarize that regional development is a science of the most rational choice of ways to most effectively use limited resources in the production, exchange and consumption of tangible and intangible goods and services in spatial and regional aspects in order to develop functional links between individual industries to better meet the growing needs and desires of individuals in society and the imposition of sustainable management decisions and practices (Petrov, 2020); (Petrov and Borisov, 2021).

Moreover, regional development is interested in the analysis of different economic systems in terms of rational conservation and use of resources in order to select the optimal model of national and regional economic development, especially of less developed countries, according to their natural and socio-economic features and territorial differences. In a purely theoretical aspect, regional development considers the needs of the individual consumer, examines consumers related to the production decisions of companies, pricing and market equilibrium. It justifies the rational behavior of companies depending on the dynamics of the national economy and the situation on the world market as a result of the assessment of the labor market (unemployment), inflation, gross national product and others. related to the problems of macroeconomic balance and economic growth in the different regions, districts and municipalities. This allows regional development to operate between local communities and the national space, characterizing at the meso level, the results of the concentration of capital in production and their trans nationalization in purely territorial and spatial terms. The object of study are the investment activities and the role of economic entities of different scale influencing entire countries and international trade and the impact on the regional development of the nation state (Petrov, 2009).

Thus, regional development studies the behavior of geoeconomic forces in business and their impact on the development of national economies and on the processes in the world economy. This model of regional development has its megaregional dimension when studying the relationships between national economies in terms of exchange of goods and services, capital and labor. Then the tools of geoeconomics are used, which reveals the development of the international economy, financial, political and economic systems, international financial markets, international institutions and the rights to the world economy, the integration process, etc. in spatial and territorial terms (Pavlov and Mikhaleva, 2003). From a conceptual point of view, regional development is also interested in the analysis of different geoeconomic systems from the point of view of rational protection. In addition, it is important to use the resources in order to choose the optimal model of geoeconomic development, especially of less developed countries, according to their natural and socio-economic characteristics. In the systematization of knowledge on regional development we can distinguish several types of scientific fields. The first direction is "Comparative regional development (positive regionalism)" it is an explanation and analysis of the facts, shows the reality as it was, is and will be. It takes into account practical experience verified

by facts. The statement "regional development policies stimulate business to invest" is positive. The second direction is "Management of regional development (normative regionalism and regional management), it provides an answer to how it should be, be and be in regional development, based on the regulatory environment and moral and ethical assessments of different processes. In practice, normative regionalism shows the importance of the normative environment governing regional development and the possibilities for its rational use, as well as the management of processes and phenomena in regional development. Thus, regional development is designed to enrich knowledge about economic life, revealing the features of the regulatory environment, laws, categories and mechanisms of their action and practical use, building a scientific system of views and their application in regional development. The third direction is "Strategic Regional Development" (Regional Planning), it consists of statements about what we want it to be. In practice, regional development is a process and its change and future require strategic measures, both on the basis of theoretical knowledge and regional development. In this direction, a strategy, plan and mechanism for the transformation of theoretical knowledge into practical skills must be implemented, which will help us in our most rational and useful geoeconomic behavior and have a real connection with the reality of development (Petrov, 2020). This direction is associated with the construction of a comprehensive geoeconomic vision of the world, helps us in the criteria of socio-economic justice, for a rational economic order against the chaos in the management of economic processes. In strategic terms, the directions study the regional development through means and principles for revealing the objective connections and dependencies between the phenomena and the processes. The directions in the regional development formed in this way have their own framework. In the Bulgarian case, the model of strategic management stands out, which is based on logical analysis, which shows how the organization must "think" in order to successfully adapt to ever-changing external and internal conditions. Strategic management is a territory of political decisions both in the state and in a specific organizational plan. The elaboration of the strategy is often defined in the theory as the formulation of the policy, the philosophy of the managerial influence (Tsonkov, 2016). That is why, in its importance, strategic management undoubtedly leads the types of managerial influence. Strategic management presupposes integrated technologies for the entire management process, formal technologies for management decision-making, analytical-research and directive technologies. Strategic public management is carried out in accordance with the legislation in force in the country.

Operational and strategic goals for regional development. Regional development is a set of economic, legislative and administrative measures and actions taken by state and local governments to speed up regional economic growth and overcoming regional disparities in the country. The realization of regional development depends on the legislative ones decisions regarding the territorial organization, stimulation of economic development by region, the administrative division of country, local government. The conclusions that regional development makes with the help of its methods are tested in practice (Pavlov and Mikhaleva, 2003). Reaching these conclusions is done by studying the facts of socio-economic life. In this direction, thought experiments have an important place, which are the only possible ways of research, because the phenomena and processes in regional development are not always available for direct observation. Thus, for the elucidation of the processes and phenomena in the regional development, theoretical models are constructed on the basis of a hypothesis reproducing the most characteristic features of the studied socio-economic phenomena. Thus, in the regional development it

perceives a categorical apparatus of scientific abstractions, reflecting the most general qualitative characteristics (countries, properties, relations) of the socio-economic phenomena in spatial and territorial aspect. They are the most essential features of abstract thinking, the result and basis of the process of cognition. The regional categories reflect the quantitative aspects of the socio-economic processes in territorial and spatial aspect and are considered as variables. They can be endogenous - intrinsic to a socio-economic process and exogenous - external to the process. From the position of time are distinguished into dynamic - changing and static - not related to time. This requires that the relevant regional principles be defined in regional development. Several basic principles of regional knowledge can be listed: economic goods are scarce to use, money and time are spent; the behavior of economic entities is rational; one strives to optimize one's choice; economic thinking is marginal; economic behavior is appropriate, which gives it an economic character, any economic action has a secondary effect, etc. (Tsonkov, 2016). This presupposes the formation of the fundamental regional law, which is a summary of recurring, sustainable links between socio-economic phenomena, characterized by universality and validity in territorial and spatial terms. Just as socio-economic processes are not absolutely subject to these requirements and there are exceptions, regional laws are perceived as trend laws. The method is based on a certain idea of the nature of regional problems. The approach to regional development includes the preconditions, problems, basic concepts and hypotheses defined by the majority of regional development. Thus, regional development is understood as everything that the business entity does. This concept is broader than a transaction because it encompasses phenomena that are not transactions. The ultimate goal of any regional activity is development. Therefore, the development is related to those economic entities, in the interest of which is ultimately a management activity that has an end result. Public economic entities, generally called "state" in spatial terms are the central and territorial bodies of the state (municipalities, districts), as well as economic policy departments, budget organizations and public enterprises. Thus, regional development in the public sphere is realized through the implementation of regional policy. In our conditions we distinguish two types of regional policy. The first is regional economic policy, which informs the study. The economic process is set by the defining ways of behavior and goals of economic entities, institutions, technical and other conditions. In regional economic policy, one always starts from the state of the process at a certain moment or from a certain course of the process in a certain period. The given state or course of the process represents the initial situation in the analysis, its change is investigated. The close surroundings (environment) of the initial situation in spatial and territorial context are observed. This corresponds directly to the implementation of policies to promote economic, social and territorial cohesion is one of the EU's main objectives. It devotes a significant part of its activities and budget to reducing disparities between regions, paying particular attention to rural areas, areas affected by the industrial transition, and regions affected by severe and persistent natural or demographic handicaps (Petrov, 2020).

The second type is the policy for regional development, in some cases by some participants in the regional development it is interpreted as a state policy regarding the development of municipalities, in others - as a "territorial projection" and coordination of sectoral policies and actions. third - as a component of the overall national development policy, and fourth - as a separate independent policy. In order to promote its overall harmonious development, the European Union is stepping up its economic, social and territorial cohesion. In particular, the EU seeks to reduce the inequalities that exist between

the levels of development of the various regions. Among these regions, special attention is paid to rural areas, areas affected by the industrial transition, as well as regions affected by severe and persistent adverse natural or demographic conditions, such as the northernmost regions with very low population densities, as well as island, cross-border and mountain regions. To a large extent in this direction can be accepted the view of Marinov that "The need for regional development policy is conditioned by the fact that the principle of territorial solidarity requires the creation of relatively equal living conditions in different parts of the territory that regional disparities in each country raise social and political problems, that regional and national economies are closely linked (national development can be represented as the sum of the development of different regions of the country), and that only market forces cannot ensure balanced regional development. (Marinov, 2005) "

The review shows what a significant part of Bulgaria's social policy is allocated to pensions for insurance experience and age. They have the greatest weight for the insurance system of our country. In this form, the insurance system damages a group of persons who have been imposed a pension ceiling, and they must receive a higher amount than the statutory one. Bulgaria is the country with the lowest minimum pension of all member states in the European Union. In our country there is social solidarity from the point of view of the fact that there is a maximum insurance income, which benefits the persons receiving a higher amount of remuneration (Petrov, 2009).

Conclusion

Regional policy is one of the most dynamic areas of development in Bulgaria in the last few years. A normative base and institutional structure have been created, experience has been gained in the process of planning and coordination between the different sectors. It is not possible for regional development to be detached from state (national) development, from its goals, approaches, mechanisms and resources for implementation. The big question in a market economy is to find the relationship between the central ones approaches and regulators and local mechanisms of the regional market economy. In modern social, economic and legal sciences, regional development acquires a new fundamental significance, which characterizes the socio-economic development of the national space. The new Regional Development Program emphasizes the need to strengthen policies based on local specifics, in line with local needs and potentials in each territory. This need stems from the fact that the approach used in the 2007-2013 and 2014-2020 programming periods to determine EU funding on the basis of sectoral priorities and to divide urban and rural areas has led to unhealthy competition between municipalities and to the deepening of interregional, intraregional and even municipal inequalities and imbalances. This gives grounds to state that regional development is one of the foundations of the nation state, it is called to implement those functional and sectoral links that build the architecture of the national economy and promote development policies in the territory. This necessitates the reproach of the foundation of regional sciences by deriving regional development as a fundamental scientific discipline. In this direction, regional development needs to be strengthened and new scientific research in the assessment and analysis of the ongoing processes in the spatial development (at global, national, local and local level) of the country. After the assimilation of space by society, it is increasingly necessary to optimize, redesign and sustainable development, so the new field of scientific development will be in search of answers what regional policy we need to implement and what results we can achieve in the context of the new global change.

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PECULIARITIES OF INNOVATION AND INNOVATION PROCESSES AND THEIR IMPACT ON REGIONAL DEVELOPMENT

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Abstract

A characteristic trend of the current stage of development of entrepreneurship worldwide is its regional orientation. Considering the innovation process on a territorial scale gives us reason to bring entrepreneurship as a source of opportunities for development of the region. This predetermines the definition of concepts about the elements and characteristics of the regional business system and the innovations in it. In the exposition we accept that the region is a system of relations for ensuring the production processes within a specific territory, in which intensive innovation processes take place, influencing the regional development of the territory.

Key words: innovation, regional development, governance, environment, policy, solutions and space, territory.

Abstrakt

Ein charakteristischer Trend in der derzeitigen Entwicklungsphase des Unternehmertums weltweit ist seine regionale Ausrichtung. Die Betrachtung des Innovationsprozesses auf territorialer Ebene gibt uns Anlass, das Unternehmertum als eine Quelle von Chancen für die Entwicklung der Region zu betrachten. Dies setzt die Definition von Konzepten über die Elemente und Merkmale des regionalen Geschäftssystems und der darin enthaltenen Innovationen voraus. In der Darstellung gehen wir davon aus, dass die Region ein Beziehungssystem zur Sicherstellung der Produktionsprozesse innerhalb eines bestimmten Gebiets ist, in dem intensive Innovationsprozesse stattfinden, die die regionale Entwicklung des Gebiets beeinflussen.

Stichworte: Innovation, regionale entwicklung, governance, umwelt, politik, lösungen und raum, territorium.

Résumé

Une tendance caractéristique de l'étape actuelle du développement de l'entrepreneuriat dans le monde est son orientation régionale. En considérant le processus d'innovation à l'échelle territoriale, nous avons des raisons de considérer l'entrepreneuriat comme une source d'opportunités pour le développement de la région. Cela prédétermine la définition de concepts sur les éléments et les caractéristiques du système d'entreprise régional et les innovations qu'il contient. Dans l'exposition nous acceptons que la région est un système de relations pour assurer les processus de production dans un territoire spécifique, dans lequel les processus d'innovation intensifs ont lieu, influençant le développement régional du territoire.

Mots clés: innovation, développement régional, gouvernance, environnement, politique, solutions et espace, territoire

Introduction

Against the background of the economic downturn and slow pace of development in many segments of the industry on a global scale and in our country, the trading companies demonstrate enviable business activity. This activity is caused by the imposition of new business models based on electronic technologies and local spaces that have reliable information accessibility. Especially after the appearance of Kovid-19, the world's major retail chains continued to expand their territorial presence, opening new hypermarkets in the electronic environment. Of course, this requires new logistics and management of goods and services in spatial and territorial terms. However, this creates new conditions for economically active people and their development. In practice, developing their business, trading companies pay great attention to optimizing operating costs, as well as increasing customer loyalty. Against this background, among the main trends in their informatization are updating of the used information systems, introduction of electronic document circulation. Also the possibilities for servicing the citizens, as well as for systems for financial planning and budgeting, integration of the applications and development of mobile solutions in the administrative units. At the same time, regional development and the penetration of information technologies in them lead to regions where there is a sufficiently high level of demand for the services and goods they offer (Barzilska, 2012). This necessitated, in view of spatial development, that we focus on innovation as a factor in promoting regional development.

It is important to note that in addition to the existence of a separate structure of spatial planning, the mechanism of functioning of the relevant bodies and institutions is also important. In this regard, there are different ways of locating the authorities worldwide and, accordingly, different status, specific to individual countries. The bodies of the administrative-territorial unit differ in their way of constitution, mandate and respectively competencies (Dimitrova, 2012). The modern paradigm of regional governance considers the competitiveness of regions depending on their capacity to generate technological innovations. Innovative regions are studied as an innovation environment, which is embedded as a concept in a number of theoretical approaches related to regional development.

Results

Nature of innovation and innovation processes. Different and numerous definitions of the term "innovation" are known. As a complex complex phenomenon, it is the subject of attention by sociologists, lawyers, economists and psychologists. Authors who have thoroughly studied innovation conclude that all definitions could be summarized in six groups: new idea, impetus to new idea, invention, introduction of invention, idea different from existing forms, approach that disharmonizes with most of the prevailing behavior. What unites the different definitions is the creative nature of the process of searching for and implementing the new in all spheres and areas of human activity (Dokova and Petrov, 2015).

The concept of innovation was first introduced in the 1920s. Then innovations are defined as mastering new production functions, or "new combinations" (production of new goods with new properties, change of technology and use of new equipment, opening of new markets, changes in the organization of production and its material and technical insurance, etc.). Innovation is the introduction of a new or significantly improved product or production process, a new marketing method or a new organizational method in commercial practice, the organization of workplaces or external relations. A minimal feature of an innovation is the requirement that the product, production process, marketing

method or organization be new or significantly improved for the practice of a company (Dimitrova, 2012). This includes in the category of innovation products, production processes and methods that companies have created first and / or products, production processes and methods borrowed from other companies or organizations.

Different types of innovation are the result of different content and structure processes and, therefore, the solutions associated with them require different scope, accuracy and time horizon of information obtained through different sources and channels.

- Six features divide innovation into groups:
- According to the site where the novelty is realized;
- According to the degree of novelty and lag between the invention and its practical application;
- According to the degree of novelty for the company, the market and the consumers;
- According to the extent to which innovations change consumer behavior;
- According to the reason for creating and implementing the innovation;
- According to the degree of compulsion to innovate;

A common feature of innovation is the fact that it must be implemented. A new or improved product is considered to have been introduced when it has entered the market. New production processes, marketing methods or organizational methods are considered implemented when they are actually used in the company's activities. The nature of innovation activities in different companies is different (Barzilska, 2012). Some companies are engaged in very clear innovative projects - including the development and implementation of a new product, while others are mainly concerned with making new and new improvements in their products, production processes and operations. Both types of firms can be considered innovative, as innovation can consist of the implementation of a single significant change or of a number of less significant improving changes, which together form a significant change (Krasteva, 2013).

The innovation process, in turn, is defined as the preparation and implementation of innovation changes. The goal of the innovation process should focus on the use of available resources in the institution, to increase and improve the creative processes for acquiring new knowledge and original and feasible ideas. The innovation process becomes mandatory for every company. It is a complex, creative, complex, iterative process, between the stages of which there are direct and feedback. It is a set of interconnected and complementary activities, the implementation of which is carried out in a specific chronological and logical sequence, depending on the source, purpose and type of innovation. The innovation process can be viewed from different positions and with different levels of detail. But every innovation process is characterized by a beginning and an end. Although there are different opinions in the literature on the question of the boundaries and structure of the innovation process, a number of common features can be established in the individual structures, which form a generalized idea of this concept (Krasteva, 2013). The beginning of the innovation process is considered to be the activity directly related to the formulation, argumentation and concretization of the innovation idea (invention). The end of the innovation process is identified with the full exhaustion of opportunities to disseminate the product or technology in other areas and enterprises, as well as to significantly improve their characteristics. Or this is the end of the diffusion phase of innovation. The innovation process made up of interconnected

phases, forming a complex whole, results in the realization of the innovation. It is associated with the transformation of the idea into a product through basic and applied research, development, marketing, production and others (Dimitrova, 2012). The effectiveness of the innovation process depends on many conditions, experiencing the influence of various factors. Studying and researching their action allows companies to stimulate the positive influence of some and ignore the negative influence of others. The choice of innovation management model plays a key role in the success of the innovation process, so it is necessary for each manager to determine which model is best applicable, taking into account both external and internal environment of the organization (Petrov, 2016); (Petrov and Borisov, 2021). Innovation is different from the innovation process. Its success requires research, ensuring the advanced development of the company, production with modern equipment and marketing. This company, which has the ability to ensure the most efficient operation of the three areas, can count on success in the competition. In regional development, the innovation process is related to the structure of the territory and its management. The arrangement of the territory is a system of measures, acts and actions of factual legal nature, which aim to create normative conditions for the use of the earth's surface for work, recreation and restoration of the population. The territories in the country are divided into groups according to different criteria. Through this division, the state determines which parts of its territory can be used for what purposes, regardless of their physical and geographical location. Until now, according to the law on territorial and settlement organization, there was one main division. It depended on the purpose of the territory. Applies to urban and non-urban areas. It seeks to eliminate the separation of urban and non-urban areas and to create a unified regime that depends only on the specifics of the territory and its purpose according to the adopted plans. In the modern world there are more than 190 state entities, and depending on their characteristics and structure, they determine the respective competencies of government and regulate the relationship between the state and citizens. In this regard, public administration is regulated by the basic laws of the parties or in other words by the Constitution. Accordingly, the requirements for the development of the territories are determined by development schemes and plans in accordance with the current regulations. In the separate states according to the separate constitutions the level and character of the legal regulation of the administrative-territorial structure is determined. In most countries, the regulation of the administrative-territorial structure is at the constitutional, legal and by-law level. Territories with special territorial protection, including territories with specific characteristics, determined by the order of separate laws, may acquire a special regime of structure and control. The scope and mode of their device are determined by development schemes and plans (Solins, 2015). The territorial structure analyzes the current state of the settlement network, the problems and trends of the urban environment. The ratio between urban and rural population, territorial scope of urbanized and non-urbanized territories, depopulated settlements, unusable building stock, environmental problems related to urbanization, expansion of urban areas at the expense of agricultural land. Municipal and settlement network, number and type of settlements, density, density (altitude / 100 sq. Km.), Infrastructure provision. The visualization (depiction) of the territorial structure in the separate territory reflects - the agricultural territories, the forest fund, the urbanized, protected and disturbed territories. Assessment of their condition and ratio, opportunities for development and improvement of this structure (3).

In search of the connection of innovation and trade local plan. The definition of the term "trade" is an exchange of goods and services that can take place between two (bilateral) or more persons (multilateral) trade. In modern society, trade also plays the role of a link between different economic sectors and regions. In trade, product innovation is the introduction of a good or service that is new or significantly improved in terms of its properties or uses (Stoyanov, 2010). This includes significant improvements in technical specifications, components and materials, firmware, usability, or any other functional features. New product or technology can be used in product innovation, or it can be based on new usage techniques or new combinations of existing knowledge or technology. The term "product" is used to denote both goods and services. The concept of 'product innovation' includes the introduction of both new goods and services and the implementation of significant improvements in the functional or consumer characteristics of existing goods and services (Dimitrova, 2012).

The complex knowledge of the separate territorial and administrative units requires the accumulation and systematization of huge and diverse information, due to which the methodological tools for analysis of the condition of the administrative territorial units become wider. In this regard, they are used through some adaptation and methods from other sciences, with which it interacts in solving complex and dynamic problems of economic and social development of individual regions and territorial production complexes. The management of the economy of the territorial units includes a fully unified reproduction process (Barzilska, 2012). In practice, this means managing the productive forces in material production and the service sector, managing settlements, municipalities and infrastructure. A characteristic feature of the management of the economy of the territorial units is its complex nature, the expression of which is the unification in a single system of all subsystems of the reproduction process in the respective territory. The implementation of such an approach makes it possible to make the fullest use of available and potential resources, to combine local and national economic goals as much as possible and to carry out the most effective proportional socio-economic development of the respective territorial unit. Marketing innovation is the introduction of a new marketing method, including significant changes in the design or packaging of the product, its storage, advertising on the market or in determining its selling price. Marketing innovations are aimed at better meeting the needs of the consumer, opening new markets or gaining new positions for the company's products in its market in order to increase sales (Tsvetkov, 2015). The ever-increasing competition between retail chains has, to put it mildly, spoiled buyers. They no longer want to stand in line. For many of them, the gathering of people in front of the cash registers at peak hours is a sufficient reason to give up shopping.

In addition, it is perfectly understandable that consumers want to receive as much information as possible before the purchase about the goods offered, their properties, composition and quality. And among other things, buyers are strongly influenced by price changes - the lower price or additional discount in many cases predetermine the choice of store (Tsvetkov, 2015).

All of the above gives rise to commercial companies to use the latest technologies available on the market, including in terms of equipment. Here are some solutions that are already proving their benefits:

- Mobile terminals or "shop without a queue". In Western Europe and the United States, the so-called Queue busting technology has been used for 10 years to solve the problem of uneven loading of crates. The insufficient capacity of the cash registers during peak hours is compensated in the following way - as soon as there is a danger of a queue, the cashiers are assisted by employees who use mobile terminals to

scan customers' purchases while they wait their turn. The scanned goods are packed in a package for which a special label with a bar code is printed. Thus, the cashier only has to scan a bar code, issue a receipt and accept the customer's money (Petrov, 2016).

- Guided Selling. In order to make a purchase decision, customers often need a detailed consultation on various parameters of the product they are looking for. Sellers are not always able to provide such advice - sometimes they simply do not have the necessary information. As a result, the customer may remain dissatisfied with the quality of service and cancel the purchase. Guided Selling solutions help buyers make their product choices. This can be done on your own with the help of an information kiosk located in the store or with the help of mobile terminals used by sales consultants

Mobile Guided Selling solutions allow sellers to advise customers in detail on any characteristics of the goods, to select analogues, as well as to control stocks in the warehouse. There are already enough examples in practice around the world to confirm that Guided Selling solutions significantly increase the quality of service and customer satisfaction, which has a positive impact on store performance and increases sales.

- Mobile printers - always current prices. As already mentioned, flexible pricing is one of the tools to attract and retain customers. With the help of mobile devices, which enable the printing of price labels in real time, the managers of the trading halls solve the tasks of operational monitoring and revaluation of goods (Tsvetkov, 2015).

- Increasing the importance of e-commerce. E-commerce is a business transaction made in real time through telecommunications networks. This term has a wide application, including the virtual examination of goods, their selection for purchase and payment methods. In e-commerce there is no prior agreement between the parties - customer and seller. It is carried out over the Internet through the use of all or a combination of technologies designed to exchange data, access data and record information (Yumurova, 2014).

Some new trends in e-commerce are:

- Responsive design. This is a commonly used word for design these days when people talk about new and innovative web development technologies. Responsive design is a way to design a website so that it automatically adjusts and reformats according to the user's screen resolution. By building an adaptive website using a convertible grid, images and CSS media queries, it can work on most devices and web browsers.

Of course, in addition to all the benefits and advantages, Responsive design has some disadvantages related to resizing images, downloading data and speed.

- Remarketing is a new technology in the field of e-commerce. It uses several methods to generate a lasting effect on the product. If you've ever noticed that the ads and apps that appear on the pages you visit online reflect your interests a lot, then you're already facing remarketing. The danger with this type of marketing is the tendency of consumers to be annoyed by the "sinister" nature of the Internet ads that follow them. However, if consumers have not yet made their choice to purchase a product, the emerging mobile advertising may lead them to make the specific purchase (Yumurova, 2014).

- Omni – channel. A common sight in malls are customers standing in front of products while looking for their smartphones. Their purpose is to compare prices with other retailers. Alternatively, they may try to find a replacement product that better meets their needs.

- Online magazines. An important role is increasingly played by eBay Inc., which is an American Internet company that owns www.ebay.com - an online trading website. The goods are offered in the form of auction or direct sale at a fixed price. Participants are both individuals and large companies. They all have the ability to sell or buy goods through eBay. The goods can be both new and used. eBay is known for the fact that the price of many goods is significantly lower than the market. The site is gaining over 200 million users. The company announces that it will launch a new digital media - "The Source Inside". This is the newest magazine on the market, which will publish information about the trends and desires of consumers and what are the most sought-after items from more than 89 million active users of the online auction, what are the latest goods they are looking for, buying and sell within the site. The content will focus on various topics of life, such as fashion, technology, cars, home and garden items and others (Krasteva, 2013).

- Discount coupons. Google Inc. plans to offer discount printing coupons that allow consumers to shop at stores found through Google Maps. The company will adapt an existing tool for this purpose, which has so far been used only by business users. In this way, Google will offer a way to users of their services in the US to save on shopping from local chains of shops, restaurants, pizzerias and more. Google also plans to support merchants to create their own online coupons through a small program, thus enabling merchants who do not have websites to offer online promotions (Petrov, 2016).

- Fingerprint shopping. With the help of the cameras on their mobile phones, customers scan special labels on the goods they are interested in. The camera is directed to a special bar code and after a few seconds, brief product information and price appear on the display. If the purchase is completed, the amount is calculated automatically and reappears on the display as a barcode. The customer has three options to pay: in cash, by card or with the help of a fingerprint.

- EDI invoices. EDI has established itself in international business, and now in Bulgaria, as a modern and efficient system. It creates prerequisites for standardization of document turnover and traceability of the process, reduction of data processing time, minimal human intervention and, accordingly, reduction of possible errors. A significant advantage of EDI is that it is practically paperless for exchanging documents. The use of this electronic communication provides a secure and fast exchange of information between the parties in the trade process. - E-commerce and social networks By the end of 2021, about 50% of new customers of online stores will register in e-commerce resources through their social media accounts. The active use of social media accounts will be one of the determining factors influencing access management practices and identity data over the next few years.. However, convenience is associated with additional risks - social networks often use weak authentication systems. Some e-commerce site operators allow social media registration, but use additional verification tools when trying to access personal information and make a transaction. Other e-commerce resources may decide to take action against the increased risks personally. If they succeed in attracting a significant number of customers through social networks, the growth of their business will enable them to transfer security efforts to payment system operators who have reliable means of detecting fraud and risk management (Yumurova, 2014)

Conclusion

In the conditions of dynamically changing economic environment, innovations are among the most important elements for the successful development of commercial enterprises. Logically, the

increasing competitiveness of production systems located in economically weak regions or disadvantaged areas is linked to the innovation of small firms, which predominate in the regional economy (Petrov, 2016). In this way, the systems approach differs from both the linear model, in which innovations follow a “mechanical sequence from research to production and to the market. This predetermines the focus of the modern world on regional development, which requires the introduction of more and more innovative solutions. The management of regional development is associated with specific business and innovation culture and the introduction of a system structure in which the various elements are embedded and intertwined. The present study analyzes the factors that support innovation activities and stimulate entrepreneurial activity and decision-making to start a business in certain regions. Many commercial companies are preferred precisely because of the innovation that brings them to the forefront of other operators in the same market. Buyers prefer these businesses precisely because of the conveniences they offer, such as easier shopping or receiving information. The arrangement of the territory is a system of measures, acts and actions of factual legal nature, which aim to create normative conditions for the use of the earth's surface for work, recreation and restoration of the population. A territory acquires the character of protected in connection with its specific natural, historical, climatic or cultural features. For the territories or parts of them, which are for public, state and public property, no change of purpose is allowed. An exception may be made in the first place if there is a permit from the regional governor for state public property or from a municipal council for public municipal property. The structure of the territories and the specific purpose of each part of these territories depends on the provisions, which are normatively established by a development scheme and development plans (Dokova and Petrov, 2015). Innovation in trade plays a key role today. They impose both national and global leadership in customer choice. That is why companies are introducing new technological solutions, striving to be the first on the market.

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