

SUSTAINABLE REGIONAL DEVELOPMENT PLANNING

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Abstract. Issues of global and regional planning have been on the agenda for many years. The aim of this paper is to explore various approaches to regional development and analyse their relevance to reaching sustainability in the area. Despite the well-known idea of sustainability being dependent on the three pillars: economy, society, and environment, we notice that the social aspect, especially the involvement of the local community in the decision-making process of regional developing planning lacks enough attention. In this research, we emphasize the importance of the bottom-up approach of regional planning. We used bibliometric analysis for detecting the state of the art for regional development planning questions, then we examined the problem of forming a system for ensuring the sustainable development of the region and proposed a program-targeted approach to determine the integral indicators of such development. We also suggested stages of implementation of the strategic plan at the regional level. We concluded that it is important to create national development plans utilizing a regional approach, which involves local projects and programs, which benefit not just the economy and ecological state of the regions, but also the inhabitants of those regions.

Keywords: sustainable regional development, regional development strategies, regional planning, sustainable development, sustainability.

JEL Classification: Q01, R11.

Introduction

Issues of global and regional development and planning have been on the agenda for many years and are discussed both at the state level and in scientific circles. But all discussions come down to one thing: how to make development sustainable and what actions and approaches can help to achieve this.

Society constantly facing many international, regional, and local problems and the word “sustainability” has become a global buzzword for the description of potential solutions. Basically, sustainable development has three dimensions – economic, environmental, and social. However, it can be defined in different ways depending on the levels, types of activities, and different applications.

In 2015 United Nations General Assembly set 17 interlinked global sustainable development goals (SDGs) to be achieved by 2030 (United Nations Development Programme [UNDP], 2015). However, work to achieve sustainable development goals is impossible without their implementation at all levels: global, regional and

local. Since adequate development planning of the region is believed to play a major role in achieving sustainability, it is vital to analyze various approaches to sustainable regional development planning. In this paper, we review different methods and concepts of regional development planning, and used bibliometric analysis for detecting the state of the art for regional development planning questions, then we examined the problem of forming a system for ensuring the sustainable development of the region and proposed a program-targeted approach to determine the integral indicators of such development, and also suggested stages of implementation of the strategic plan at the regional level.

1. Literature review

The strategy of regional economic development is the system of action focused on the implementation of long-term goals of a country's long-term socio-economic development, which considers rational input of regions into a solution to various problems. The regional economic development strategy changes in accordance with the

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political and socio-economic orientation of the country during the set period of time. The development period of regions differs from one area to another one, mostly because of the noticeable differences in resource allocation, economic structure as well as extent to which various industries are developed in the region, among other factors (Soja, 2009).

At present, centralized state administration does not always adequately take into account regional specifics. As a result, the potential of many regions is clearly underused. Davidescu et al. (2020) provided an overview of the most relevant studies from the literature regarding the main pillars of sustainable regional development.

In the past years, a switch from central governance to a rise in regional independence in many areas across the globe has been noticed. This independence, however, brings along more responsibility for the results of regional economic development (Umanto & Ikasari, 2019).

The mechanism for ensuring the sustainable development of the region is part of the mechanism for the development of the region as a whole, which changes and improves depending on changes in the elements of the regional system and environmental factors. The mechanism of sustainable development of the region includes the following components: laws, principles, goals, methods, and functions of management. It is an organized or ordered set of these elements that ensure the achievement of the economic, environmental, social, and institutional development goals of the region (Talukdar, 2018).

According to Makkonen (2011), sustainable regional development includes social, economic, and ecologic factors, and it is a central function of the regional governments that becomes increasingly important during structural alternations. Such alternations, in turn, are inseparable from sustainability promotion.

Many authors correlate the idea of sustainable regional development with the integration of the principles of sustainable development or SDGs into the practice of regional development. D'Adamo et al. (2021) assessed regional performance for the sustainable development goals in Italy, but Krantz and Gustaffson (2021) in Sweden. In turn, Degórski and Degórska (2022) indicated environmental integrated approaches and tools in Polish regions and identified the interdependence between natural capital and the achievement of sustainable development of the regions. But Moallemi et al. (2020) discussed challenges and opportunities and their diversity of implementation of SDGs at the local level, using the case of Australia. Wu et al. (2022) classified regions when assessing SDG progress and applied the method at the provincial level in China, thus, identifying regions' strengths and weaknesses in achieving all SDGs. But Pradhan and Sharma (2022) investigated the regional planning strategy for sustainable development in Nepal and analyzed its shortcomings, as a result, they concluded that despite many shortcomings, the strategy is still relevant to address the country's unique development challenges.

By comprehensive literature review, Leal Filho et al.

(2020) proved the relevance of the SDGs and found the barriers to their implementation. In turn, Kroll, Warchoł, and Pradhan (2019) attempted to critically analyze the future interactions of projected SDG trends up to 2030 within and between goals. They found that there are many unresolved trade-offs and that the deterioration of some of the SDGs could seriously threaten the achievement of the 2030 Agenda.

Other authors are more focused on the analysis of individual indicators of sustainable regional development. For example, Siwar and Islam (2012) analyzed various indicators of sustainable development and sustainable regional development, emphasizing that they understand sustainable development indicators as a quantitative tool that analyzes changes, measuring, and reporting progress toward the sustainable use and management of economic, social, institutional, and environmental resources. Also, Jovicic et al. (2017) believe that the main goal of sustainable development is to meet economic and social needs while limiting the environmental impact and reducing harmful emissions. In their study, they found that the institutional component is the most important for reaching a compromise between economic and environmental issues.

Milenković et al. (2021) suggested multi-criteria decision analysis and used it to analyze sustainable regional development in Toplica District.

Through the site focus groups and semi-structured interviews with local participants, Camarena et al. (2022) tried to identify future strategic change drivers and the most relevant social actors for the attainment of economic, social, and environmental development in the Guaviare. They found that to attain sustainable regional development public policies are crucial.

Few authors pay attention on role of universities in regional development (Erina et al., 2017; Wagner et al., 2021). But, for example, Purkarthofer, Humer, and Mäntysalo (2021) declared that regional planning cannot be seen purely from the matter of scale and investigated the complexity of regional planning from three perspectives: interests, institutions, and relations.

In 2000 Berke and Conroy in their research using six principles of defining and operationalizing the concept of sustainable development evaluated a set of 30 comprehensive plans to determine how well their policies support sustainable development. They came to the interesting conclusion that, in general, plans support some sustainable development principles much more than others, and thus do not provide a balanced support for all six principles. In addition, when comparing plans that state the intention to integrate sustainable development and plans that do not, there are no significant differences in outcomes and in how broadly these principles are supported.

This is confirmed by the work of the OECD, which helps guide local and regional leaders in developing policy approaches and action plans to achieve the SDGs at local and regional levels (OECD, n.d.).

Taking into account the results of previous studies and all of the above, we can conclude that it is necessary to ensure a balance of all components of sustainable development, not only on the scale of the global economy or a separate national economy but also on the scale of territories and regions within a particular country, which gives the right to speak about the need to ensure sustainable development of the regions. And there is also a gap in understanding which approach to use and how it can be evaluated.

Thus, in this paper, the authors look at various approaches to regional development and analyze their relevance to reaching sustainability in the area.

2. Methodology

To understand how well the topic of various approaches to regional development planning is researched in the academic sources we performed a short bibliometric analysis based on the search results of the keywords “sustainable regional development planning” on the Scopus database (www.scopus.com). Articles from scientific journals were included for analysis. In turn, review articles, book chapters, conference proceedings, and books were excluded. For a broader analysis, we did not limit the period of articles published, however, included only articles published in English.

To investigate the strategic process of the regional development planning, we created a list of steps for planning regional development to do it more sustainable and suggested a methodology of the forming an indicator of sustainable development of the region.

To better understand the process of the strategic planning system and the socio-economic part of regional development we listed types of socio-oriented activities, analysed approaches to strategy, and as a result, created a sequence and description of stages of implementation of the strategic plan in regional level.

3. Findings

3.1. Results of bibliometric analysis

The first interest in the topic of regional development planning was sparked in the late 80s, growing substantially up to 2008. A rapid increase followed by just as rapid decline in 2013–2014 can be observed, after which the trend continued to be positive, reaching its peak in 2021 with 1150 published papers (see Figure 1).

The top ten countries in this field of research are presented in Figure 2.

When looking at the leading countries in the sustainable regional development planning research field, China shows the outstanding result with more than 2500 articles being published. Then comes the USA with less than a half of China’s result, followed by Russia.

Figure 3 presents the bibliographic map of the in Scopus selected scientific articles with the keywords: “sustainable”, “regional”, “development”, and “planning”. The

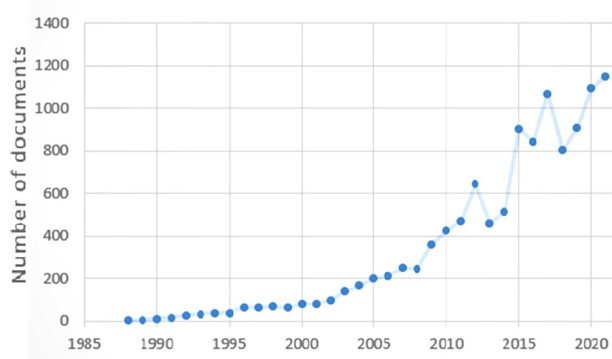


Figure 1. The number of articles about sustainable regional development planning on Scopus (created by the authors)

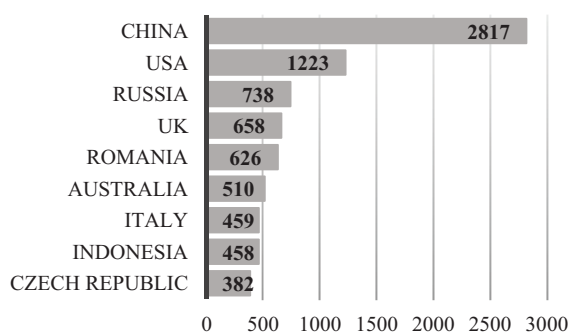


Figure 2. Leading countries in sustainable research development planning research (created by the authors)

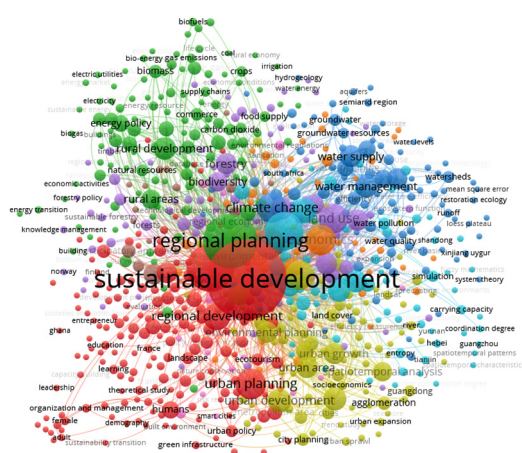


Figure 3. Bibliometric map based on the following keywords: sustainable regional development planning (created by the authors)

size of the bubble represents how often the keyword has been used (the larger the size of the bubble – the higher the frequency) and the length of the link shows how strongly connected several keywords between each other.

As can be observed on the map, the keywords “regional planning” and “sustainable development” are the most used in the indicated articles. Additionally, they are located very close to each other, meaning that most scholars connect these two concepts. Other concepts that authors pay attention to in their works related to sustainable regional development planning are: climate

change, biodiversity, water supply and management, land cover, energy transition, urban planning, energy policy, agglomeration, etc. Overall, the bibliographic analysis produced 731 items divided into 9 clusters.

Then the authors used the same data to analyse the occurrence of new concepts in this area of research throughout time (see Figure 4).

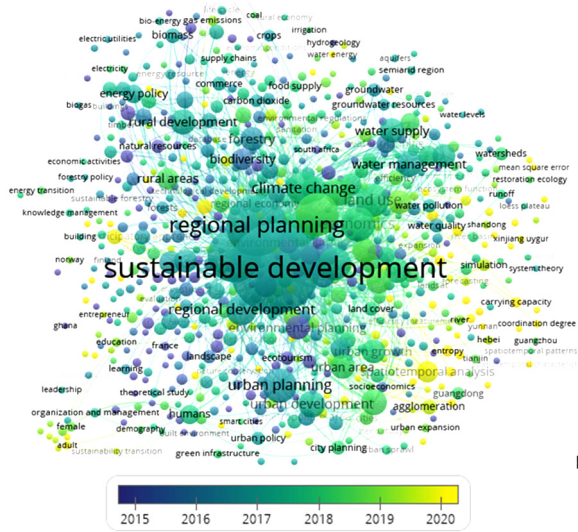


Figure 4. The appearance of keywords from the selected articles throughout time (created by the authors)

As demonstrated on the map in Figure 4, the problems of regional planning and sustainable development were present already about a decade ago, whereas such concepts as biodiversity, participatory approach, energy policy, coordination degree, and others gained their popularity relatively recently – in 2020 and later.

Also, the authors analyzed what types of journals sustainable regional development planning-related articles are being published in (see Figure 5).

Not surprisingly, the majority of papers were published in journals of Environmental Sciences research

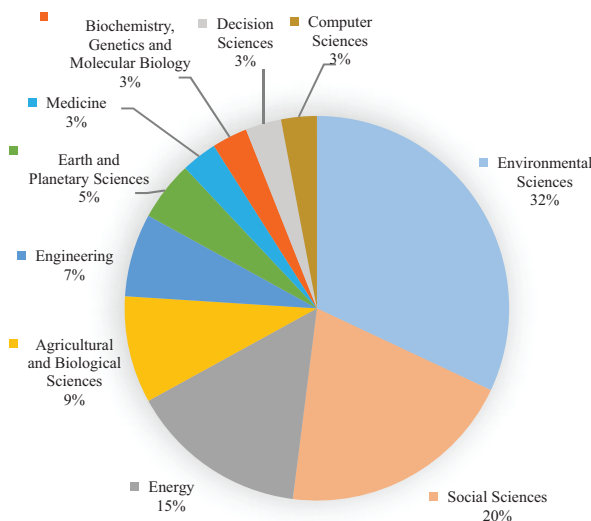


Figure 5. Indicated articles by subject area (created by the authors)

direction. Together with Social Sciences Journals, these two make up over half of the published works. It is then followed by the Energy-related journals with 15% of the selected materials, and Agriculture and Biological Sciences adding another 7 percent of papers. What, perhaps, is most notable, is that only 3 percent of the users in this analysis papers were published in the Decision Sciences related journals, due to the fact that regional development planning, as well as sustainable development management, are very closely related to the field of decision making. Indeed, these two areas depend on successful decision-making and their further implementation.

Thus, we can conclude that the issue of sustainable regional development and its planning is being studied by many authors around the world and interest in this issue is constantly growing.

3.2. Methodology of Regional Development Planning

Regional development planning can be performed through a number of different actions, using which local authorities promote economic development, increase tax budget, create new jobs, etc. When investigating the quality of regional development, it is very important to introduce the concept of growth stages. According to these stages, economic development follows pre-industrial, industrial, and post-industrial periods. During the pre-industrial stage agriculture, forestry, fishery, and extractive industries dominate the market (Lonska, 2021). Perhaps, this stage is the most difficult when it comes to maintaining sustainability. It is followed by the industrial stage, which is mostly focused on processing industries, for instance, food, chemical or automobile industries. Lastly, comes the post-industrial stage, the main focus of which is service industries and intangible products, such as healthcare, education, finance, insurance, and others (Brekke, 2015).

Modern societies tend to imply intangible production as the key factor in economic development. Thus, intangible production becomes a predominant area of employment and investment. Current economic development is no longer purely quantitative, but it rather emphasizes qualitative advancements. This makes strategic planning and regional marketing the most efficient instruments (Isyanbaev, 2018).

An important component of the mechanism for ensuring the sustainable development of the region are management methods, which can be classified as follows:

- administrative, economic and social;
- direct and indirect impact;
- used in normal development conditions and during periods of crisis;
- applied at the federal, as well as regional and local levels.

Accordingly, the main methods used in making economic, social, environmental, and institutional decisions are administrative, economic and social. Within each method, the appropriate tools are used to ensure the sustainable development of the region (Table 1).

Table 1. Methods and tools for ensuring the sustainable development of the region

Methods	Tools
Administrative	<ul style="list-style-type: none"> – legal regulation – procedures of licensing and certification – instruments of control, supervision and responsibility – regulation and administration of certain types of activities
Economic	<ul style="list-style-type: none"> – taxation – pricing – financial and budgetary instruments – tools to support and develop competition – new organizational forms of economic development (network structures, clusters, strategic alliances) – energy saving and environmental protection tools – modern methods of training and retraining of personnel – infrastructure support methods, etc.
Social	<ul style="list-style-type: none"> – targeted social development programs – social partnership – tools to reduce social tension, differentiation and polarization of the population – tools for resource saving and environmental protection, etc.

The effectiveness of the use of methods and tools provides for their reasonable combination, purposeful and adequate application. In modern conditions, to ensure the sustainable development of regions, regional authorities and local governments can actively use these methods, considering their powers and responsibilities.

The key question of the sustainable regional development plan is how to increase the well-being of the population and set up a foundation for its further betterment (Oktay & Gozgor, 2013).

The priority here is given to the creation of conditions that ensure an optimal life quality for the region's inhabitants. The steps of strategic regional development planning are presented in Figure 6.

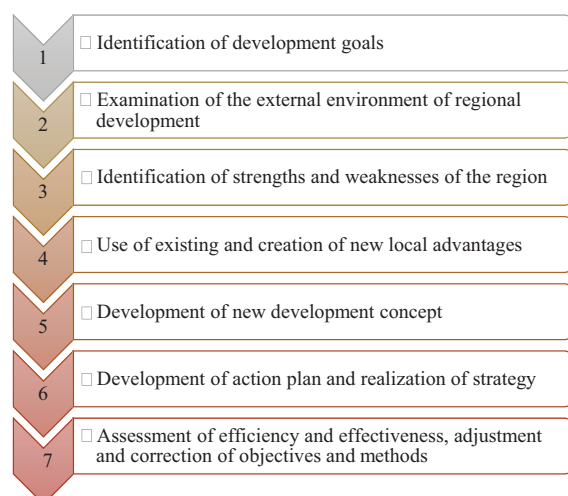


Figure 6. Steps of strategic regional development

Currently, many regions experience the occurrence of post-industrial tendencies, when it comes to socio-economic development, thus it is important to recognize the advantages of intangible as well as tangible production within the region (Jha, 2013). Also, regions are expected to interchange their services with one another. Production and “export” of services are expected to attract resources as well as promote welfare development. Sustainable regional development can be advanced through financial services, IT, insurance, and education, to name a few. Thus, we can conclude, that it is pivotal to adhere to regional planning to what it can potentially offer to the population within and outside of it (Silva et al., 2021).

According to Galvão et al. (2020), regional development planning is an ongoing process, which creates the direction for decision-making. The information age, that we live in today, is characterized by a substantially higher degree of rapid changes, causing ever-lasting uncertainty, and the impact of globalization, that creates new demands (Assiri et al., 2021). Despite much debate on this topic, many argue that the region's resources are no longer as important as the ability of regional government and businesses to respond to market challenges and to adapt existing resources, while simultaneously developing and creating new ones. This means, that the existing in most regions paradigm has to shift in order for each actor to prosper and benefit from the region one finds itself in.

Despite the growing popularity of the sustainability-related topics, not enough attention is being paid to the importance of regional development planning as a tool for reaching sustainability goals in the area. When it comes to evaluation of sustainability – the main focus usually is on ecological indicators, or economic significance, for instance, employment rate, business versatility, activities, etc (Shahraki, 2019). Nevertheless, it is necessary to look at this problem as at a complex issue of socio-economic nature, since fixing purely economic challenges in the region, though boosting the development to some extent, cannot bring along sustainability to the region.

To assess the system of sustainable development of the region, we have identified the following four basic components (subsystems):

1. Social sphere. It reflects the demographic situation, the standard of living of the population, education and healthcare, social protection, criminality, etc.
2. Natural environment. Accumulates data on air, water and soil pollution, as well as use of energy and other resources.
3. Economic development. It integrates the main indicators of the manufacturing sector, investment activity, the financial sector and trade, as well as employment.
4. Infrastructure. It characterizes the provision of the population with housing and infrastructure facilities.

To form a system for ensuring the sustainable development of the region, it seems possible to use a

hierarchical program-target approach, since its mechanisms contribute to the integration and coordination of all levels, branches and management bodies, commercial and non-profit organizations, their resources, create conditions for obtaining quantitatively measurable management results, i.e., contribute to improving the efficiency of managing the regional economy from the standpoint of sustainable development.

In this case, the integral characteristic of the 1st level will be the sustainable development of the region itself; the integral characteristic of the 2nd level will be collected from indicators of economic development, infrastructure, natural environment and social sphere. In turn, the integral characteristic of the 3rd level is calculated based on the analytical and statistical indicators of the 2nd level characteristics. For economic development, the level of GDP, the manufacturing sector, employment, investment activity, budget and trade are of interest; for infrastructure – housing and its availability, utilities, the state of road infrastructure, telecommunications and communications; for the natural environment – environmental pollution, quality of water resources, rational use of land resources, conservation of biological diversity, flora and fauna, protection of the atmosphere and management of solid waste and toxic chemicals; in turn, for the social sphere, this is the demographic situation, incomes of the population, health care, education, law enforcement, culture and social security. The integral characteristic of the 4th level will be the initial statistical, analytical and expert absolute and relative indicators.

Mathematically, the approach to determining the integral indicator of sustainable development of the region as a function of four components presented on the Eq. (1).

$$ISDR = f(IIE_i, III_i, IINE_i, IISS_i), \quad (1)$$

where *ISDR* is an integral indicator of sustainable development of the region; *IIE_i* (*i* = 1, ..., *N*) – an integral indicator of the state of the region's economy; *III_i* (*i* = 1, ..., *N*) is an integral indicator of the state of the region's infrastructure; *IINE_i* (*i* = 1, ..., *N*) – an integral indicator of the state of the natural environment of the region; *IISS_i* (*i* = 1, ..., *N*) – an integral indicator of the state of the social sphere of the region; *i* = 1, ..., *N* – individual statistical, analytical and expert absolute and relative indicators.

The proposed method of forming an indicator of sustainable development of the region is convenient for analyzing the advantages and disadvantages of individual regions when comparing them with each other. The use of this technique makes it possible to obtain a quantitative assessment of both individual components of sustainable development (to assess the state of the social sphere, economy, infrastructure, natural environment in the region), and the state of the region as a whole. The analysis allows you to identify the criteria that determine the position of a particular region in the ranking, to identify how and by what parameters it is ahead of its competitors, to indicate what the lagging regions should

do (what sustainable development factors should be prioritized) in order to improve their positions. The results of calculations and data analysis will be able to contribute to the development of recommendations for improving the state of sustainable development of the region.

3.3. Socially oriented regional planning

Sustainable regional development planning at the modern conditions of globalization, urbanization, increase in competition among territories for investment, intellectual resources, tourists, etc. becomes the most adequate tool for consolidation of government and society at addressing the challenges of the economy, ecology, and society. Key importance in the strategic planning system of socio-economic part of the regional development is played by the socio-oriented approach.

Socio-oriented activities are determined by the importance of the social activities performed by economic subjects on various levels of societal organization for the improvements of ecology, the social sphere, and the creation of material and intangible values (Raimbault, 2019). Social activities can be divided into the following groups: material-transformational, cognitive, value-oriented, communicative, informative, artistic, health-improving (wellness-oriented), sports, political, managerial, and environment protection.

Depending on the direction and type of interaction between government and environment, social sphere, and society five types of socio-oriented activities selected from the ones mentioned above are presented in Figure 7.

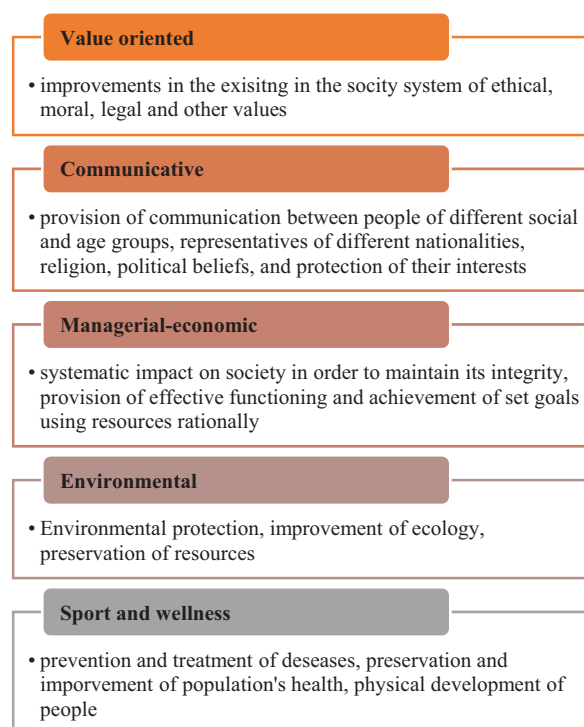


Figure 7. Types of socio-oriented activities (created by the authors)

The main goal of a socially-oriented strategy of regional development is to be presented as a three-dimensional system, according to the three pillars of sustainability. Aims on each of the three levels differ in directions: on the first level, they emphasize the improvement of key indicators of main developmental areas, which means that spheres that promote regional development are focused on the most (Azis, 2020). On the second level, managerial decisions are made on the basis of the region's positioning. The third level represents the region's basic socioeconomic policies. The complex approach to the solution of indicated objectives allows for reaching strategic goals, unlike when the interconnection between strategic goals and indicated objectives is weak.

Cowell (2013) mentioned that over forty years ago Ellen Chaffee (1984) suggested a system of differentiation of approaches to strategy. She divided linear, adaptive and interpretative strategies. In her opinion linear strategy is a list of agreed upon decisions and actions, aimed at reaching important organizational goals; adaptive strategy should ensure conformity of potential opportunities and risks arising from environment of economic system and the abilities of subjects and resources needed for use of such opportunities. In turn, interpretative strategy was described as a 1) vision of subjects as social agreements, a combination of cooperative agreements, concluded by individuals according to their own decisions and not like organisms, as in adaptive point of view; and 2) approval of social constructivism concept, thus accepting the idea that environment exists not objectively, but rather is created and altered by individuals in various processes of their interexchange, which are influenced by the understanding of these individuals about themselves and about other people (Chaffee, 1984).

Meanwhile, Johansson indicated 3 basic approaches to the development of regional strategies: strategic design, internal strategic scanning, and strategic governance, each of which offers to develop the set of actions, combining abilities, and forming networks on different grounds (Feleki et al., 2020). The common prerequisite is considered to be an administrative duty delegated by a legal power the ability to carry out some power actions. Strategic planning can be performed when the subject is able to at least partially predict future situations, according to which one would decide its actions. Later, another approach was formulated that resembled the one of Johansson. It defined rational, political, and collaborative approaches to strategic planning. It was also highlighted, that in real life those approaches tend to combine.

It is important for sustainable economic development for strategies to be effective and profitable, meanwhile, because, people of the region want to see the stable development of the existing system, which leads to the overall betterment of life quality. For reaching sustainable regional goals it is extremely important for all the stakeholders to participate in the implementation of the set activities: not just for the government, but also for society and businesses (Kwatra et al., 2021).

Stakeholder engagement and their participation in different processes like workshops (Moallemi et al., 2020) and events (Alananzeh et al., 2022) underlined the role of the local community in Sustainable Regional Development.

The implementation of a strategic plan begins from the creation of a plan, therefore, prior to that, it is necessary to identify a set of actions and their sequence. Additionally, it is necessary to choose methods and tools for planning and to appoint responsible executors in each direction of the strategy (Figure 8).

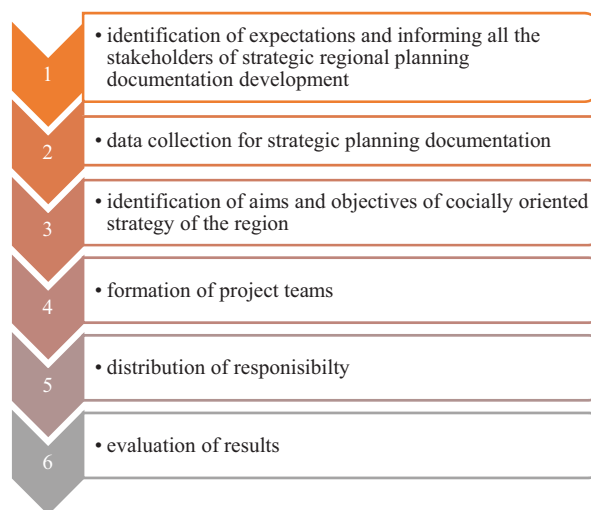


Figure 8. Stages of implementation of the strategic plan at the regional level (created by the authors)

The process of formation of a socially oriented strategy is characterized by such features as complexity, the inclusion of many elements, novelty, uncertainty, the significance of consequences, and irreversibility. Therefore, regional planning and management must be flexible and envisaged numerous opportunities for changing the external and internal environment.

In this regard, scenario techniques based on the cognitive cards of possible future events became very widespread (Laurin et al., 2020). To form a socially-oriented development strategy, it is expedient to use a set of methods and tools of strategic management. One such method, that can be very helpful in regional development planning and management is the Management by Objectives method by Drucker (Mohamed et al., 2020). Advantages of using this method are a hierarchy of goals, consistency of goals on all levels of government, understandable criteria of work efficiency, and systems of motivation, based on the efficiency criteria.

The solution to social problems is carried out through the development and implementation of targeted social programs, the development of social partnership, and the social responsibility of businesses for providing decent working and living conditions for citizens of the region while maintaining ecological balance.

Thus, the effective use of the developed mechanism makes it possible to ensure sustainable socio-economic development of the region.

Conclusions

National development goals should be promoted through regional development. National development plans, using a regional approach, should be effectively developed at the level of strategy, integrate local programs and projects, and ultimately benefit the inhabitants of individual regions.

The concept of planning is shifting from sectoral (industrial, economic, etc.) to integrated planning. This does not mean that planning can be very detailed for all sectors forever. Rather, integrated planning is aimed at integrating various sectoral plans into a single whole that can ensure productive interaction between interrelated development factors, as well as facilitate it.

Within the framework of regional development, various development processes interact, which are influenced or controlled by various organizations and are implemented through collective and individual decisions. So, it becomes clear that for achieving sustainable development regions need to be given more independence for addressing local challenges, however, within current situations in many countries, this switch to more self-reliant decision making is virtually impossible since it requires ground-breaking alternations to the existing bureaucratic systems as well as local governance systems. In more simple terms, we need to see at least a switch from a top-down approach to a bottom-up approach in decision making, which in turn should allow and even encourage active participation of local shareholders.

In the light of historical and modern approaches at the level of hierarchies, regional development is generally assigned a secondary role. However, if regional planning bodies assume greater responsibility for development and control compared to central planning, then the social criterion will take its rightful place in planning and development regions.

It seems that the developed model for the formation of an indicator of sustainable development of the region will allow the regions to become active subjects of the formation of a sustainable economy, since, focusing on the main indicators-indicators, the regions will be able to conduct operational monitoring of their state and evaluate it from the standpoint of compliance with the criteria for sustainable development.

The regions are able to become “leaders” of the country’s transition to a sustainable economy, showing independence, activity, and economic self-organization in ensuring the achievement of the goals of regional policy and in increasing the economic, scientific, and technical potential.

The research presented above is mostly based on the research produced in developed countries. In such states, a socially-oriented approach to sustainable regional planning seems to be very realistic. Moreover, it is clear now that many countries (or regions within countries) across the globe successfully implement such an approach to development planning. In that sense, such an approach,

can, in fact, be considered one of the best techniques for sustainability achievement. Nevertheless, there is not much research of the socially-oriented method of regional planning in developing countries, where governments lack decentralization in general, and there is no infrastructure for local decision-making in underdeveloped regions in particular. This means, that although such an approach can theoretically be beneficial for the developing states, it may become virtually impossible when it comes to implementation. Thus, we can conclude that the aforementioned findings are only limited to developed regions, with strong local authorities and necessary for the decision-making infrastructure. Further research needs to be done on whether the socially-oriented approach to regional development planning benefits the sustainability of less-developed regions and what are the conditions for its successful implementation.

Disclosure statement

The authors declare that they don’t have any competing financial, professional, or personal interests from other parties.

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