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A vision of a more sustainable Slovakia in the light of participatory processes

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Abstract
The paper reflects the results of the ongoing discussion about sustainable development in Slovakia as an increasingly urgent topic resonating across scientific disciplines. Specifically, it deals with the participation processes, which were realized in 2022-2023 under the auspices of the Ministry of Investments, Regional Development and Informatization of the Slovak Republic (MIRRI), and the second part of which was implemented at the Institute of Management of the Slovak University of Technology in Bratislava using its expert and organizational capacities. The mentioned activities follow the strategic document entitled Vision and Development Strategy of Slovakia 2030 and are related to the preparation of the document Vision and Development Strategy of the Slovak Republic until 2050 – Slovakia 2050.
In the light of the outputs from the participation processes, the paper deals, among other things, with the necessity of accelerating the transformation of regional economies from the industrial towards the post-industrial society, including sustainable innovation-oriented circular economy less dependent on raw materials and energy, with the simultaneous optimization of the system of decision-making and effective management, based on partnership and division of responsibilities between different levels and various actors of sustainable development. It also points out that discussions about this vision have the potential to significantly frame the creation of concepts of integrated territorial innovation-oriented clusters, the urgency of which - in parallel with the frustration of the ineffectiveness of fragmented development processes and activities - is felt at different levels by practically all participating subjects of the professional discourse analyzed in this paper. The results of the participation process fully confirm that Slovakia is not adequately prepared to respond to the challenges associated with all the necessary transformation processes.

Keywords
regional development, sustainability, post-industrialism, raw-material and energy consumption, circular economy, strategic planning, participation process, discussion forum

Introduction

The paper reflects the results of the ongoing discussion on sustainable development in Slovakia, which is currently an increasingly urgent challenge resonating across scientific disciplines. The authors of the paper, in agreement with the initiators/organizers of the described participation activities, expect confirmation of the hypotheses that despite the existence of a large number of adopted strategic documents at the governmental, ministerial or self-governing level, as well as numerous research and other activities in the field of academic and departmental research or the third sector, in the conditions of Slovakia, the situation in several critical areas is going from unsatisfactory to incorrect, or in an unsustainable direction. It is visible from statistics, international comparisons, and everyday perceptions and experiences. When looking at the complexity of the situation not only on a local, regional and/or national scale but also in the broader international context, as well as reflecting the qualitative findings presented in the paper, we also assume confirmation of the premise about the need for further development of Slovakia in the mutual synchronization of the basic pillars of sustainability - social, environmental and economic, in the conditions of Slovakia also connected with the problems of transformation of the country's administration system, which would reflect not only the complexity and multidimensionality of development processes but especially the fact that they are needed to be managed in functional interactions between various actors. In particular, we mean the functional relations between economic actors, public administration, the academic sector and subjects of civic society.

Therefore, according to the authors' assumption, not only recommendations for creating a suitable environment for the inevitable acceleration of the transformation of regional economies from industrial towards post-industrial society, including a sustainable innovation-oriented circular economy less dependent on raw materials and energy but also proposals for optimizing the system of decision-making and executive management based on partnership and division of jobs into different levels and different actors of sustainable development will become an integral part of shaping the vision of a sustainable Slovakia. And vice-versa, the discussion of this vision will also mean the creation of a framework for the concepts of integrated territorial innovation-oriented clusters, the urgency of which – hand in hand with frustration from the ineffectiveness of fragmented development processes and activities - is felt in different ways by practically all the participating entities analyzed in the paper.

Specifically, the paper refers to the participation process, which was realized in the years 2022 - 2023 under the auspices of the Ministry of Investments, Regional Development and Informatization of the Slovak Republic (MIRRI). In the intentions of the relevant government resolution, the participation process was covered in parallel by two institutions: the Czech firm Participation Factory, Ltd., which succeeded in the public procurement process organized by the MIRRI, and the Institute of Management of the Slovak University of Technology.

Theoretical Background

According to Thiel et al. (2016), participation is a broad term that can be used and interpreted differently in different domains. It can only concern one-way communication, for instance, in providing information to citizens (about planned or ongoing processes, etc.), but also different forms of active participation. As Thiel et al. (2016) further note, this ambiguity has promoted several scholars to develop frameworks and models in order to structure many existing forms of (e-)participation, while most frameworks define forms of participation based on the level of influence that participants (citizens) can exercise. The authors refer to Arnstein's ladder of participation - probably the most well-known participation framework, according to which three stages of participation are defined: non-participation, tokenism, and real participation, while "the degree of citizen empowerment in community planning and decision-making increases with each rung" and "...in the last stage, citizens can actively and democratically exercise power." (In Thiel et al., 2016). They conclude: "Frameworks are usually based on Arnstein's scale and distinguish three degrees (or levels) of participation: information, consultation and collaboration." (Thiel et al., 2016)

Referring to the authors Vaughn and Jacquez (2020), in the focus of research activities, there are also proposals, methods and frameworks for systematic inquiry in direct collaboration with those who are affected by the problem under investigation for the purpose of action or change. The authors point to the involvement of those who may not necessarily be trained in research but belong to or represent the interests of the subjects on which the research is focused. They also note that exploring participatory research methods, tools, and processes can help researchers more meaningfully engage stakeholders and communities in research, which can potentially generate relevant and meaningful research findings translated into practice. Nevertheless, according to Mathe (2014), different perspectives on participation can be found in the literature, but there has been no consensual normative approach to the stakeholder's involvement.

It is already clear from our short excursion that various aspects of participatory approaches have been discussed recently. Some of them are oriented more theoretically, others more pragmatically, touching on population–fighting poverty problems and providing social services to indigent people (Ivashinenko, 2012), social life cycle assessment (Mathe, 2014), research planning (Bagnoli and Clark, 2010), ecological research (Miller-Rushing et al., 2012), integrated environmental assessment (Hisschemöller, 2001), planning smart cities (Van Waart et al., 2016), creating adequate sets of indicators (Vaidya and Mayer, 2014), etc.

Van Waart et al. (2016) discuss how different stakeholders, like representants of public administration, the business sector (industry), the academic sector, and the civic society - thanks to a participatory design approach can arrive at an increased mutual understanding and at a shared vision of a desired smart city. Drawing on insights from transition management studies and the quadruple helix model of knowledge production, their work proposes a participatory approach to prototyping future cities that incorporates practice-oriented design research activities and thus focuses on practical impact.

Using and discussing participation approaches in relationship to sustainability concepts is more and more frequent, which is this paper's main topic.

Wittmayer and Schäpke (2014) deal with the role of researchers in the transition to sustainability.

Bell et al. (2012) state that "the use of participatory methods in sustainable development is a long and complex story with many roots," pointing to the diversity of sustainable development literature analyzing methods and case studies in different contexts, whether in the field of research or practice. The authors have found that there are fine lines between these activities, while the assumption of achieving a more sustainable goal must be based on an understanding of the best way to achieve it.

According to the same authors (Bell et al., 2012), participation is by no means only linked to sustainable development, and its origins are much older. The idea of using people with knowledge of a system to find answers to problems within that system, rather than relying solely on the opinions of external experts, helped give rise to what is now commonly called Problem Structuring Methodology (PSM). The perspectives of local stakeholders in the complexity of the issue of sustainability gradually began to be considered important not only in terms of human rights - in the sense that people who are permanently affected by different issues should be heard in them, but also as a means of making the adopted policies more effective. As the authors further state, the development of participatory methods continues. Their origins are in the social sciences, development studies, and systems thinking, but more broadly, participatory methods have their origins "in 'opening up' research to an authentic 'voice'." (Bell et al., 2012)

Similarly, Schneider and Buser (2018) assume that the interactions of interested parties are an increasingly important element of research for sustainable development. They also raise the question of to what extent, in what way, and for what goals interested parties should be involved. The subject of their research was to look for the degrees of stakeholders interaction that would be most promising in sustainable development research. For this purpose, they examined 16 research projects from the transdisciplinary research program "NRP 61 on sustainable water management in Switzerland". In their results, they suggest that different degrees of stakeholder interaction can be beneficial - according to the intended contribution of each project to sustainability, the form of knowledge required, the disputed issues, the degree of diversity of actors, the interests of actors and the existing cooperation among them.

Vaidya and Mayer (2014) deal with the issue of monitoring progress towards sustainability, which requires quantitative assessment methods, including a set of indicators. According to their findings, the indicators and targets, usually developed by experts and scientifically reliable, can often be difficult to provide to society and may not include all societal values. Therefore, participatory assessment approaches are emerging as more holistic methods of measuring sustainability.

On the other hand, Fritz and Binder (2018) introduced a critical approach to analyzing participation in sustainability research, pointing to the fact that in the field of sustainability, scientists and policymakers agree on the transformative power of participation in the production of knowledge, however, on the other hand, it is possible to observe a contradiction between these expectations and a limited understanding of the complex interactions forming the participation processes. Following this critical scholarship on participation and moving away from the focus on isolated actions of participation in sustainability research, the authors analyze spatial entanglement of participation with broader science-society relations. Further, they put questions about factors that constitute and shape forms of participation in knowledge production, concluding, among other things, that the participatory space

can change dynamically during the course of the project, for example, by increasing/decreasing trust, fulfilling/disappointing the image, or aligning/conflicting in the worldview.

To conclude this part, one can say that despite several weaknesses and misunderstandings in using participatory approaches in sustainability issues, the frequency and importance of research are growing. Different authors (for instance, Ansell et al., 2022; Thomas et al., 2021) point out the importance and currently highly emphasized the role of participatory processes or approaches, namely, "how to use participation in the process of co-creation of knowledge and co-production of plans and visions for sustainable development"?

Materials and Methods

The ongoing participatory process relies on several combined and complementary methods as discussion forums in the form of moderated face-to-face work meetings, moderated online work meetings and moderated discussion and work forums; questionnaire survey; consultations and interviews; creation of a catalogue of problems and proposed solutions by the consulted experts as well as comparative methods.

The paper analyses the findings of two interlinked processes organized by the abovementioned institutions. The first one, (Participation Factory, Ltd.), prepared ten hybrid meetings - the first four on general topics and the remaining six on selected priority areas (among the 17 sustainable development goals of the UN Agenda 2030, which were also reflected in the Vision and Development Strategy of the Slovak Republic 2030). The other institution (the Institute of Management of the Slovak University of Technology) organized two moderated discussion meetings and a questionnaire survey. The entire activity of the two institutions follows from the strategic document entitled Vision and Development Strategy of Slovakia 2030 and is related to preparing the document Vision and Development Strategy of the Slovak Republic until 2050 – Slovakia 2050.

The moderated discussion meetings conducted at the Institute of Management of the Slovak University of Technology in Bratislava were entitled Vision of Sustainable Slovakia 2050 and the questionnaire survey Vision of Slovakia 2050.

The discussion forum Vision of Sustainable Slovakia 2050 was attended by 38 active participants (24 men and 14 women) from different sectors/spheres: academic sphere (12), public administration (10), civil (third) sector (8), and business sector (8).

The questionnaire survey Vision of Slovakia 2050 was participated by 33 active respondents (18 men and 15 women) in the age structure: up to 30 years (4); up to 40 years (4); up to 50 years (9); up to 60 years (7); over 61 years (9). In the educational structure of the respondents - compared to the Slovak average, there was a significant preponderance of respondents with university and higher education, where the second level of higher education was the most represented. The respondents (according to the place of their permanent residence) represented all self-governing regions of the Slovak Republic, except for the Košice region. The absence of representation of this region can be explained by the physical distance from the venue, which could have deterred the invited participants from a long journey.

In total, 51 active participants took part in these activities (of which 15 participated in both activities), representing different individual institutions and professional focus:

Institutions:

- Ministry of Investments, Regional Development and Informatization of the Slovak Republic
- Ministry of Foreign Affairs and European Affairs of the Slovak Republic
- Ministry of Culture of the Slovak Republic (ex)
- Ministry of the Environment of the Slovak Republic
- Slovak Academy of Sciences
- Member of European Parliament advisor
- departmental research institutes (in the departments of the Ministry of the Environment of the Slovak Republic, the Ministry of the Economy of the Slovak Republic, the Ministry of Agriculture of the Slovak Republic, the Ministry of Health of the Slovak Republic)
- municipal councils
- self-governing regions
- business companies
- civil (third) sector institutions

Professional focus: architecture, economy, energy, environmental studies, philosophy, human geography, regional geography, geology, hydrology, inorganic chemistry, material research, landscape ecology, mathematics, soil science, sociology, education, urban planning, spatial planning, waste management, sustainable mobility, healthcare.

As far as the representation from the field of public administration concerns, it was relatively representative, even if, among other things, there were absenting representatives of umbrella self-governing groups (Association of Cities and Communities of Slovakia, Union of Cities of Slovakia, K8 – Association of Self-governing Regions of Slovakia, ...). The same applies to the representation of various professions. Despite their considerable number, their list is, of course, not exhaustive. The academic community was represented the most, but it also represents only part of the spectrum. The relatively small representation of representatives of the 3rd sector was surprising. The shortcoming was the relatively small number of business entities. Without obtained feedback from the addressed participants it is hard to make a relevant explanation of their absence, but their sceptical attitude towards the possibility of positive changes is not excluded.

Results and Discussion

1. Main findings resulting from the participatory process organized by the Participation Factory, Ltd.

According to the prevailing opinion of the participating experts, the Vision and Development Strategy of Slovakia until 2030, approved by the Government of the Slovak Republic, remains current in essential areas, but it has been added to a whole series of challenges, problems and crises deepened for which we were not prepared.

Czech firm Participation Factory, Ltd. held ten moderated discussion meetings based on the contract with the Ministry of Investments, Regional Development and Informatization of the Slovak Republic. Four of them related to the identification of the most important problems that Slovakia faces. The discussions took place in September and October 2022. The organizers summarized the results in 17 thematic areas. Within each of them, we identified the most frequently mentioned partial problems through keywords, as shown in the following table:

Tab. 1. Summary of the thematic areas and related keywords from the moderated discussion meetings in September and October 2022

Thematic area	Keywords
Energy crisis	increase in energy prices; inflation; energy poverty; Russia's invasion to Ukraine; supplies of gas as a weapon; coordination within the EU
War in Ukraine	unprovoked Russian invasion; impact not only on Ukraine; destabilization of the whole of Europe; consequences for Slovakia; unpreparedness of the state
Migration crisis	war in Ukraine; influx of refugees; unpreparedness for the refugee crisis; lack of coordination between sectors
Climate change	priority problems of Slovakia: climate crisis, loss of biodiversity; the need to transform society and the economy; direction towards environmental sustainability
Quality of education	education as a key topic; low quality of education; poor education is an obstacle to economic development and competitiveness; education as a condition for sustainable development of the state; the need to prevent brain drain
Inefficient allocation of financial resources	incorrect allocation of financial resources; need to reassess the flow of money from the state budget; lack of transparency; unknown effect of spent funds; unclear sustainability and continuity of pumping; non-respect of the specifics of Slovakia by the EU; public investments too dependent on external sources
Absence of indicators for projects and policies	lack of properly set measurable indicators; lack of linkage of indicators to projects and policies; lack of regular monitoring of the effectiveness of public administration; missing indicators for measuring its (public administration) performance and direction
Regional development: disparities and (un)intelligent and (un)sustainable municipalities	little support for cities and municipalities; fragmentation and inactivity of local governments; limits of development and quality of life; consequences for education, healthcare and the economy; unfinished public administration reform; lack of adequate policies; the problem of deepening regional disparities; depopulation of some areas; project implementation lags behind; lack of funds; too much bureaucracy and too long approval processes; little interest or unwillingness to solve problems; insufficient inclusion of Roma population; problematic coexistence with Roma population; increase in tension, threats to security and incidence of crime; inefficient allocation of public funds; the phenomenon of poverty, low average wages, limited access to services; and rise in the prices of public services; housing price growth; extreme cost of living, especially in the Bratislava region

Fighting misinformation	dissemination of false information; bad work with the media; poor awareness; little ability to distinguish between facts and misinformation; misinformation as one of the main problems
Slovakia's dependence on industrial production	dependence on industry; dangerously high share of the automotive industry; relatively low labour productivity; insufficient digitization of small and medium-sized enterprises; lagging automation; low competitiveness; insufficient help and guidance from the state
Absence of crisis management	Covid-19; environmental crisis; migration; war in Ukraine; unpreparedness for crisis situations; lack of crisis management; social impacts; lack of foresight; lack of interest in the necessary development strategies; lack of flexibility; a dramatic change in challenges; the need to reassess national priorities
The Covid-19 pandemic	Covid-19 and its effects; inflexibility of the school system; problems with adaptation to online teaching; the need for a post-covid revival of the economy and the solution to the abovementioned problems
Exhaustion of natural forces and resources	depletion of resources leading to a threat to economic existence; deteriorating food self-sufficiency; insufficient protection of drinking water sources
Brain drain	the poor education system and brain drain are connected vessels; the helplessness of university graduates; departure to economically stronger countries; another reason for brain drain is a dysfunctional state; art of the graduates are not absorbed by the labour market, but they are absent in other places; disproportion between the focus of graduates and the needs of practice
Non-functioning state administration	lack of courage to solve problems; unfinished transformation of public administration; remnants of the previous regime; the need for legislative changes; the requirement for a strong state, guaranteeing the needs of citizens and the allocation of funds; unresolved decentralization of public administration and its financing; lack of clarity of long-term goals; (lack of) transparency; little reflection of the needs of civil society in state policies; lacks continuity; crisis of democracy; (partial) state failure; partocracy; non-respect of the principles of a democratic society; inefficient performance of functions by the state (especially in the long term)
Healthcare	international lagging behind in several indicators; very poor mortality and morbidity rates; national priorities and policies do not always reflect the main problems; lack of a comprehensive, a systematic and long-term approach to solving problems; investments in health and prevention are insufficient; health not perceived as a condition for sustainable development; insufficient support of the health and human rights of not only patients but also medical professionals and staff; lack of human resources in the health sector; insufficient communication and participation in the creation of policies; low meeting of requirements of the Slovak Chamber of Other Health Workers
Absence of cooperation, departmentalism	one of the main problems: departmentalism and the absence of cooperation and coordination at the level of state administration; inability to respond quickly and effectively to common challenges; alienation of people (also due to the pandemic and lockdown); limitation of community cooperation; lack of dialogue; polarization of society

Based on the frequency of keywords, the problem of non-functioning public administration is most often mentioned in various contexts (32 times) at the general and central levels. The following are analogous problems at the regional level, related to regional development, disparities, etc. (20x). In third place, among the most frequent problems are financial or economic aspects. In the category of the most frequently mentioned problems were the education/school system (12x), the war in Ukraine and its consequences for Slovakia (11x), health (10x), unpreparedness for crises and the absence of crisis management (8x), changes in the international environment and EU deficits (7x), environmental problems (6x), lack of cooperation and excessive departmentalism (6x), Covid-19 and its consequences (6x) and brain drain (6x). In total, the discussants mentioned, and the organizers identified/defined/categorized 17 priority problems/challenges within four discussions on general topics (not specified according to national priorities). Within them, dozens of partial problems appeared, which we marked using keywords.

The simultaneous occurrence of several crises (energy, climate, migration, security, pandemic, demographic, etc.) is evident, as well as the absence of crisis management and non-functioning or ineffective public administration at the central, regional and local levels. This is also related to the inefficient allocation of financial resources mentioned by the respondents, as well as the absence of meaningful cooperation and hypertrophied departmentalism. Much of the above could have been at least partially prevented if it had not been for the absence of indicators in projects and policies that would measure development, assess (non)direction towards the desired

state, and then take the necessary measures. In addition, we have a long-term problem of the inability of our educational system to prepare pupils/students for the challenges of the 21st century, which worsens the (sometimes permanent) outflow of mostly the most capable students/graduates abroad. We rarely talk about Slovakia's morbid dependence on industrial production, which, according to some indicators (for instance, the share of industry in GDP creation), is one of the highest in the entire EU (Preťo, 2019; EUROSTAT, 2023). The depletion of natural resources, the loss of biodiversity and the threat to the self-regulating capabilities of ecosystems are even less discussed in the highest places of power.

It is important that the fight against disinformation also appears among the top issues. It would be easier if we had a more effective educational system here, which would educate the inhabitants of Slovakia and bring them up to values compatible with the idea of a sustainable Slovakia.

2. Main findings resulting from the participatory process organized by the Institute of Management of the Slovak University of Technology in Bratislava

The process implemented at the Institute of Management of the Slovak University of Technology in Bratislava consisted of several segments: a discussion forum, a working forum, a questionnaire survey, the creation of a catalogue of problems and proposed solutions, and the preparation of a publication on the results of the participation process, the summaries, knowledge and findings of which were put to good use in the form of the Introductory Report to the document Vision and Development Strategy of the Slovak Republic until 2050 - Slovakia 2050 and its executive summary.

2.1. Discussion forum

The discussion forum Vision of Sustainable Slovakia 2050 was held on November 9, 2020, on the premises of the Institute of Management of the Slovak University of Technology in Bratislava. In addition to the plenary session, it was divided into four working groups:

- Academic sector
- Public administration
- Business sector
- Third sector

Each of the four working groups dealt with three thematic areas into which the event was structured: Main problems and challenges; Obstacles and how to overcome them; Recommended solutions.

Summary of discussions in working groups according to Kaščáková (2022), Ondrejička (2022), Pauditšová (2022), and Zajko (2022):

The outputs from working groups logically differ depending on their focus and personnel composition. We present their summary, structured in the form of answers to three basic questions that arose from the content structure of the discussion: (1) Where are we, and what are the biggest problems and challenges we face? (2) What obstacles stand in our way? (3) How to overcome obstacles, implement desirable measures and make Slovakia's development more sustainable? (suggestions, recommendations/solutions/patterns, etc.):

(1) Where are we, and what are the biggest problems and challenges we face?

The most frequent problem/challenge is education in its various forms: from the educational system as a whole, through individual types and levels of schools, lifelong learning, the position of teachers, up to the correlation of education and value orientations. The issue of education's stagnation or decline in Slovak conditions is mentioned 12 times in various contexts, most often in the Academic Sphere working group, followed by the Third Sector working group. The second most frequently mentioned problem and, at the same time, challenge is failure, or poor or inadequate functioning of public administration in connection with its tasks in the field of strategic planning and managing the country, fragmentation of activities, as well as the lack and unpreparedness of human capacities and incomplete decentralization (11x). Problems and challenges of this kind were most often mentioned in the Public Administration group. The third most frequently mentioned problem/challenge (10x) are issues related to the devastation of nature, the landscape and the environment, as well as an unsparing approach to the use of natural resources. This range of problems was most often mentioned in the Academic Sphere and Third Sector groups.

Energy-related to the climate crisis was mentioned in five cases. Most often in the Public administration group. A crisis of values or value orientations in connection with education and subsequently behaviour (including behaviour towards nature and consumer behaviour: overconsumption and excessive orientation to material aspects of life were mentioned 4 times. Most often, it is in the third sector group, followed by the academic sphere group. Demographic or the population crisis intensified by the brain drain was also mentioned 4 times, equally in all groups. The phenomenon of war, the increase in other forms of violence, extremism and other socio-pathological phenomena were also mentioned frequently. Answers of this kind occurred evenly in the Public Administration and Third Sector groups. Questions related to unmanaged (i)migration were mentioned 3 times. And that in the Academic Sphere, Business Sector and Third Sector groups. It is an ambiguous or multiple problem. On the one hand, there are fears about migrants bordering on xenophobia; on the other hand, the loss of the opportunity to integrate and adequately use the potential of migrants, especially in areas where we have a shortage of qualified workers (for instance, healthcare and social care). Technological backwardness associated with slow digitization and Slovakia's international lagging behind in the field of innovation and competitiveness was mentioned 3 times, specifically in the Business Sphere group. Finally, problems of a cross-sectional nature were mentioned just as often (3x): increase in unpredictability, lack of continuity or insufficiently defined public interest). Most often, this is in the public administration and third sector groups.

(2) What obstacles stand in our way?

The answers to this question were even more diverse than they were for the previous question. Most often (6 times) among the obstacles, an inadequate understanding of the concept of sustainability on the one hand and its related inflation and emptying on the other hand appeared. We talk about sustainable development (or even growth) life but also decline. This knowledge emerged mainly from the Academic Sphere working group. This proves, among other things, the need for a new development paradigm. The second most frequently mentioned answer (4x) was the absence of competent personalities / elite crises. Either authorities (especially at the central level) or competent people in general (at all levels). This obstacle was most often mentioned in the Business sector group, but it was also heard in the Academic sphere and Third sector groups.

Several obstacles with the same frequency of occurrence (3x) follow. Regardless of the order of importance, they are: the conflicting or even antagonistic relationship between economic development and environmental protection, problems related to the environment, etc., and underdevelopment of environmental infrastructure (waterworks, sewerage, etc.) - mentioned mainly in the Academic sphere group, poor division of competences and inefficient public administration (mentioned in all groups except the business sector); deficiencies in education (mentioned in the Academic Sphere and Third Sector groups).

Obstacles related to regional disparities, poor planning and implementation, declining healthcare and social care, demographic crisis, growing individualism and egoism in conflict with public interest, departmentalism, and the high energy and material demand of production were mentioned twice. Other obstacles were mentioned only occasionally, but most of them have a common denominator: a badly managed society that generates obstacles such as: excessive politicization of life, submission to the 4-year electoral cycle, bureaucracy, excessive centralism, disrespect for norms and rules, lack of coordination between different levels of management, fragmentation of activities. In addition, the question of values, the unfolding gap in the global distribution of material goods and capital was mentioned, as well as Slovakia's declining innovation performance, low labour productivity and insufficiently defined or different possibilities of interpretation offering the term "public interest ".

From the analysis of the results of the discussion, three dominant circles (clusters) of approaches to the topic can be identified in the answers to the question: 1. axiological - philosophical - pragmatic (attention focused on values, sustainability, individualism, cooperativeness, public interest, etc.), 2. organizational (attention focused on the way public administration functions, departmentalism, centralism, norms and rules, planning, implementation...), 3. educational - personnel - competence (attention focused on the level of education, innovation, authority, personnel capacity, brain drain, etc.).

(3) How to overcome obstacles, implement measures and make Slovakia's development more sustainable? (suggestions, recommendations/solutions/patterns, etc.)

Except for consensus on the need to change the management or administration of the state and to improve/reform the educational and value system, the set of recommendations was very diversified and more or less related to the professional orientation of individual working groups. The most frequent recommendation/suggested solution concerns change in state management or in managing the company. It

appeared up to 14 times in different contexts, more or less equally in all work groups. Second, in the number of proposed measures (6x), there was an increase in the quality of education, including the reform of the entire education system and lifelong learning. Most proposals of this kind were made in the Academic Sphere group, followed by the Business Sector group. In the third place (5x), there was a set of recommendations in the sphere of value orientations (paying more attention to things like altruism and empathy, decency or the qualitative development of the personality and/or the transition from the fashion of HAVING to the fashion of BEING), including an entire range of changes towards a new paradigm of thinking, which belong on the one hand in the sphere of values, on the other hand in the field of education and also in the general behaviour of the state and society. This relatively revolutionary recommendation was heard mainly in the Third Sector group.

A proposal was made repeatedly (3x) to improve the monitoring of the state and development of the company and appropriate indicators with an emphasis on higher quality/more informative data and their undistorted interpretation. This recommendation was made in the Academic Sector group. The need to pay particular attention to the neglected environment (for instance, old environmental burdens, so-called brownfields, recycling, etc.) was also often voiced. Likewise, there was often the opinion that paying more attention to strategic planning is necessary. Related to this was the proposal to harmonize the creation and implementation of the state budget with strategic planning. The suggestions were heard mainly in the Business Sector group.

In the Academic Sphere group, it was repeatedly (twice) proposed to improve the conditions for people (especially young people) and thus avoid the persisting "brain drain" towards abroad. Twice, it was also suggested that we pay attention to regional differences as well as promote cooperation and partnership over competition.

Other suggestions and proposals have occurred only occasionally, but they also cannot be ignored. They are concerned, for example, with the requirement to compile and use a set of adequate indicators to measure the quality of life, to create an institutional body for coordination of different sectors and departments, to speed up the digitization of public administration, to increase the use of local resources, to eliminate bureaucracy, to increase greater predictability, flexibility and continuity, to enforce anticipatory management, to resolve self-government and the integration of self-governments, to introduce integrated territorial/spatial planning, to apply a problem-solving oriented approach and a win-win strategy of double or multiple victories, to support prevention before solving the consequences, to support circularity, to strive for decency and correctness in public space, to support the transition from sectoral to integrated planning and management, to enforce partnership for supporting the creation of alternative development scenarios.

In the summarization of the answers at this point, the most robust cluster of recommendations can be stated on monitoring the state management/public administration reforms - either explicitly or implicitly (de-bureaucratization, digitization, continuity, anticipation, prevention, integration, partnerships, cooperation, decentralization, municipalization, etc.). The second largest cluster can be created by requests/recommendations to reform the education system and everything related to it. The third largest cluster is the need to change values and the development paradigm, which logically follows from the previous two. A separate cluster could be created from groups of requirements and tools dedicated to monitoring, measurement, reporting, and planning, as well as another group of requirements for improving the state of the environment, decarbonizing the economy, and recycling or circulation.

2.2. Questionnaire survey

The questionnaire survey had a similar content structure to the discussion in working groups, while it was divided into four content areas - (1) main problems and challenges; (2) priorities and goals worth striving for; (3) obstacles that stand in our way; (4) proposed solutions. In addition, the questionnaire was divided according to hierarchical levels into national (or transnational) and regional levels. The results of the survey according to above-mentioned content structure are following:

(1) Main problems and challenges

- at the national level:

Deficits in the sphere of education and research, combined with brain drain towards abroad, are perceived as the most frequent problem here. The second most frequently mentioned problem is pollution, or the devastation of the environment and natural resources, followed by the issue of health, health care and social care, especially as a result of the ageing population trend, which is directly related to the next most frequently mentioned problem,

which is the failure of institutions (from public administration to the courts) and deficits in functioning, better said non-functioning of the rule of law as well as the increase in disparities and polarization of society.

All of the above, together with the often-mentioned deficits in the sphere of education, awareness, but also preventive health care and insufficient social services, cause mistrust of the state, fear leading to threats to mental health, as well as a growing incidence of socio-pathological phenomena (including violence). The lack of innovation and the remaining digitization are also related to the lagging behind of science and research. As a necessity (in addition to partial improvements in individual areas), several respondents mentioned systemic changes, the need for a change in the development paradigm, and the overall transformation towards a green and circular economy. On the other hand, migration is absent among the top issues which some politicians often and gladly talk about.

- at the regional level:

At the regional level, from the respondents' point of view, pollution, environmental devastation, and overexploitation of natural resources were highlighted. The reason is probably the more direct contact people in the regions have with these problems. At the same time, the nature of environmental problems differs, among other things, depending on whether the respondent lives in the city or the countryside. Notably, as the second most pressing problem, the respondents mentioned the lack of regional strategies and integrated planning, or, in other words, chaos and helplessness in the development of regions.

Insufficient health and social care is also an important problem in the perception of the respondents. The following two problems are interrelated. It is a problem of marginality and excluded communities (especially from the Roma population) and growing disparities/disproportions between and within regions. Another problem associated with them is the increase in socio-pathological phenomena. The reasons can be found in other problems mentioned by the respondents: deficits in the field of education and insufficient mutual cooperation within the region. The predominance of personal car transport over the mass means of transport, the lack of infrastructure, or its overall outdated state, lag behind in research and innovation. The consequences of climate change (especially insufficient adaptation measures) are also among the problems, but the respondents do not attach as much importance to them as they did at higher hierarchical levels.

(2) Priorities and goals worth striving for

- at the national level:

According to the respondents, our primary task in the coming years and decades should be to improve the quality of our educational system (its fundamental reform). According to them, we should place the same emphasis on the protection of the environment, nature, and natural resources, while some also mention the preservation of cultural heritage and the characteristic appearance of the landscape as part of this effort. Right after this pair of priority goals worth striving for, there follows the reform of the state and public affairs administration, i.e., the necessary legislative, institutional and competence changes, and especially their application in everyday life (implementation). Next, in order of priorities, is another area that fundamentally concerns us all: our health, prevention, and the level/quality/availability of healthcare and social care.

Other priorities mentioned by the respondents are also important, and their order is interesting. In this group, the first place is the lack and/or low level of meaningful development strategies, followed immediately by lagging modernization and innovation. This is also related to another important priority mentioned by several respondents, which is the need to improve cooperation, partnership, and participation in the administration of public affairs. The most frequently mentioned priorities group also includes the solution of mutually linked problems: energy and climate.

Almost as interesting as what the respondents most often identified as a priority and a goal worth striving for is the fact that they paid little attention to some problems: this includes, for example, the problem of migration and refugees, demographic problems, or threats to democracy, human rights, the (non)functioning of the rule of law or the growing influence of conspiracy theories.

- at the regional level:

Similar to the national and regional level, the respondents identified the protection of the environment, nature and natural resources as a priority problem. This problem, or rather the need to solve it, even has a noticeable

"lead" in the perception of respondents over other priorities and goals worthy of our efforts. Right behind it, with the same degree of importance, were three problems requiring a priority solution: the need for a fundamental improvement of the educational system, improvement of health care (health care) and social care, and with the same weight in the third, improvement of cooperation, partnership and participation. The following three priorities are also closely related to the last-mentioned priority: an increase in the quality of development strategies and planning, as well as the need for greater emphasis on integrated approaches and the reduction of undesirable disparities.

Regarding summarizing the answers to the questions at this point for both selected hierarchical levels of problems, it can be stated that the protection of the environment, nature and natural resources was ranked first among individual priorities and goals from the respondents' point of view (27 answers). This is followed by the reform of the educational system (24 respondents), followed by improving health and social care (20 respondents). Better strategic planning and management/administration (including integrated approaches) is also considered one of the top priorities by 20 respondents, improvement of cooperation/partnership/participation by 14 respondents, and public administration reform, institutional and competence changes, which are closely related to the previous two priorities, by 13 respondents.

Suppose we were to try to summarize the priorities and goals in the main areas based on the cumulative answers obtained from the respondents. In that case, the improvement of management, management or strategic planning is considered a top priority by 47 respondents; educational-social-health issues received 44 votes and environmental protection, nature and natural resources together with mitigation and adaptation measures in the field of climate 32 votes of respondents.

(3) Obstacles

- at the national level:

Respondents' four most frequent responses to this question are interrelated: In the first place, there were deficits in our education, for which our inadequate education system is to blame, but also deficits in education and in what we used to refer to as education in the past. Immediately after that, as a serious obstacle, comes incompetence, especially incompetence in the case of those who actually make decisions about public matters, about our present and future. Ignorance plays an important, although not the only, role. Hand in hand with the above is the third most serious obstacle from the respondents' point of view, which is the failure of public administration and institutions in general. Another frequently mentioned obstacle related to this is the absence of adequate strategies and shortcomings in implementing the measures taken. Other mentioned obstacles are also related to this, namely departmentalism and lack of capable leaders.

The other obstacles mentioned more than once are less obvious at first glance (some even taboo), but in reality, not less important and essential. They are connected with the values we profess as well as with their order, which is manifested, among other things, in prioritizing material values and business above everything else. The term neoliberalism is also used as a working label for this dangerous ideology, a highly simplified approach that distorts our perception and practice of liberal democracy. An accompanying manifestation is also the increasing occurrence of the so-called socio-pathological phenomena. Finally (but not least), it is noteworthy that some of the respondents also consider the negative influence of the media and social networks as an obstacle and cause threatening the positive development of Slovakia.

Again, it is necessary to draw attention to what did not appear among the top obstacles: for instance, the phenomenon of fear and feeling threatened by migrants, rising extremism, intolerance of minorities, the crisis of democracy, human rights or the rule of law, but in apparent contradiction to the problems, challenges and goals mentioned above, nor environmental, climate or energy issues. Similarly, alarming health or demographic and related social and economic problems faced by Slovakia did not appear among the most frequent obstacles.

- at the regional level:

At the regional level, respondents consider the complex problems associated with incomplete decentralization of public administration to be the biggest obstacle to the desirable sustainable development of Slovakia. According to them, it is mainly a bad division of competencies, excessive centralization, or many responsibilities transferred to regional and local governments combined with a lack of resources for their quality performance. Similar to the national and regional level, the respondents consider the poor-quality education system a top obstacle. On the other hand - in contrast to the national level - at the regional level, respondents identified the poor state of protection of

the environment, nature, and natural resources as another important obstacle on the way to a more sustainable Slovakia.

The other two most frequently mentioned obstacles are closely related. On the one hand, it is insufficient cooperation, partnership, and participation of citizens in public affairs, and on the other hand, it is a failure of public administration. The following two of the most frequently mentioned obstacles are also related to each other: socio-pathological phenomena and what could be simply called mental deficits (for instance, lack of critical thinking or low resistance to various misinformation, hoaxes, etc.). And finally, as surprisingly relatively the least important among the most frequently mentioned obstacles, there is a lack of funds. What did not appear among the top obstacles, on the other hand, are the phenomena of fear and feeling threatened by migrants, rising extremism, intolerance of minorities, crisis of democracy, human rights or the rule of law, or a climate or energy crisis, as already mentioned on the national level. Analogically, at the national level, alarming health or demographic and related social problems did not appear among the most frequent obstacles at the regional level.

When summarizing this point, we note that a total of 25 respondents consider deficiencies in the sphere of education, upbringing and spreading of awareness to be the top obstacle, failure of public administration by 15 respondents, an increase in the occurrence of socio-pathological phenomena by 12 respondents, a poor division of competences and incomplete reform of public administration by 10 respondents, insufficient environmental protection 8 respondents. The same number of respondents consider the priority of business interests above all other interests as one of the top obstacles, as well as the absence of appropriate strategies and shortcomings in implementing the measures taken.

All the obstacles articulated in this point can be summed up in basic framework areas (clusters), the biggest of which can be called the failure of public administration together with the incompetence of management staff, incomplete decentralization of public administration, excessive departmentalism, lack of leaders and deficits in strategic planning as well as in areas of cooperation/partnership/participation. Obstacles of this type appeared in the list of top obstacles a total of 69 times. Subsequently, the poor quality of the educational system appears to be an important obstacle (24 times). According to the respondents, all other obstacles, or their possible clusters, are much less significant obstacles in the direction of a more sustainable Slovakia.

(4) Proposed solutions

- at the national level:

Among the proposed solutions at the national level, the support of education, science, and the improvement of the education system and the spreading of awareness clearly dominate. Several other preferred proposed solutions are also related to this, such as the need to increase the professionalism and competence of management leaders and other management staff. Next is the need to improve state management, including better strategic planning and implementation of measures taken, protection of the environment, nature and natural resources, the concentration of capacities to improve the health and social care system, and also an urgent need for effective cooperation, partnership and participation.

- at the regional level:

The most frequently proposed measures in the first two places of the imaginary ranking relate to improving the quality of public administration and the need for cooperation, partnership and participation. The following is a recommendation to improve health and social care, as well as care for the environment. Improvement of strategic planning, quality of education, and awareness spread were among the top proposed solutions at the regional level.

When summarizing the outputs from this point, it can be stated that a total of 21 respondents suggest improving the level of education, training, science and awareness as a top priority, while 20 respondents suggest changing state management and improving the performance of public administration. 15 respondents suggest improving cooperation/partnership/participation, 14 suggest improving health and social care, 13 suggest improving environmental care as well as reducing raw materials and energy consumption, and 12 suggest improving strategic planning.

If we were to try to summarize the related answers into basic areas (clusters) at this point as well, then the improvement/reform of the functioning of public administration at the national, regional and local levels, together with greater competence of the governing entities and with improved cooperation and better strategic planning is suggested by a total of 54 respondents, the improvement of public services in the sphere of education, health and

social care is proposed by a total of 35 respondents, and the improvement of environmental care (including the reduction of the raw materials and energy consumption), is proposed by 13 respondents.

3. Similarities and differences of various parts of the participation process and its importance in the context of the ongoing preparation of the document "Vision and Development Strategy of the Slovak Republic until 2050 - Slovakia 2050"

As we stated in the introduction, the whole process basically consisted of two approaches organized by different entities. The first was provided by the organization Participation Factory, Ltd. and the second team of the Institute of Management of the Slovak University of Technology in Bratislava, in cooperation with experts working for the Ministry of Investments, Regional Development and Informatization of the Slovak Republic. The similarities and differences between the two approaches can be compared from the point of view of the organization, the forms of investigation, the number of participants, the method of creating questionnaires, and the method of evaluating the knowledge gained.

Similarities:

First of all, the objective of the investigation itself was identical, which was the same in both cases: to obtain as many opinions and recommendations as possible from the most representative circle of competent persons, participants in moderated discussions, or respondents of the questionnaire survey as part of the ongoing process of preparing the document *Vision and Development Strategy of the Slovak Republic until 2050 - Slovakia 2050*. The forms of inquiry were also similar, with moderate discussions and a questionnaire survey in both cases. In the case of both approaches, the number of actors was also similar. Finally, in both cases, the organizers identified, classified, and summarized the findings obtained in the form of a text file and a graphic representation.

Differences:

The first difference is more or less formal. The first case of questions was a combined form of discussions, where the first four were conducted in person and related to general questions, and the other six were conducted online and related to selected thematic areas, corresponding to six national priorities selected from a set of 17 global sustainable development goals (SDGs) forming the UN 2030 Agenda. In the second case, it was a one-day discussion forum consisting of a plenary part and a moderated discussion within four working groups corresponding to four key sectors of society (academic, public administration, business sector and civil/third sector).

The second difference is the percentage of participants/respondents among those addressed. In the first case, more than 400 potential participants/respondents were approached, and in the second case, 70 were approached. It follows that with similar participation (note: in the first case, the number of participants was not defined quite precisely, but it can be qualifiedly estimated at 50, which is the number almost identical to the number of participants in the 2nd case - 51) the proportion of respondents was realistically dramatically different to those involved. The third difference is the method used for creating questionnaires. In the first case, it was an anonymous questionnaire consisting exclusively of closed questions; in the second case, it was a questionnaire in which the first five questions were open and only the last, the sixth, was closed. Another difference concerns the evaluation of the acquired knowledge. While in the first case, the ambition was not to interpret the received answers in more detail, to look for causal relationships between them, or to create clusters based on the content relatedness of the answers, in the second case, there was such an ambition.

When comparing both approaches, it can also be noted that in the first case, the discussion only concerned the national level, although in an international context and only partially regional, while in the second, it was explicitly also about the transnational level (global and EU level) as well as the regional level. In the first case, the part devoted to future cooperation with the participant/respondent is missing, while in the second, it is present. Finally, in the first case, compared to the second case, less attention was paid to basic "sociological" features within the questionnaire. Nevertheless, this comparison can still be inspiring. In the context of the ongoing preparation of the document *Vision and Development Strategy of the Slovak Republic until 2050 - Slovakia 2050*, the overall contribution of the participation process can be noted, as approximately one hundred respondents participated in it in various forms (in person, online, by correspondence) and to varying degrees (from one-time to repeated), which by Slovak standards represents a relatively large group, the composition of which can be considered representative for our research.

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The representation of the participants according to the relevant signs was relatively balanced. Regarding the gender structure, men slightly prevailed over women, and regarding the age structure, the representation of older age groups slightly prevailed over younger ones. The biggest disproportions were in the representation of respondents according to the place of permanent residence, as the Bratislava self-governing region prevailed (in the case of the face-to-face form of the discussion forum, this is logical due to the venue). The educational structure shows the largest (positive) deviation from the average. This is because, unlike standard sociological research or the public opinion poll, the participatory process interpreted and evaluated in the paper was measured against experts in that field. This means that it was not a public opinion survey on a representative sample of the population but an analysis of the opinions of the participating competent persons - experts. We also consider ~~it~~ necessary to state that the set of respondents was significantly wider, but not all were willing or they had the opportunity to participate in this process.

Certainly, even such a relatively large set of competent experts could not cover all important thematic areas quite evenly and sufficiently qualified. On the other hand, however, it is important that these were undoubtedly competent persons, covering a wide range of issues, while many of them expressed an interest in continuing the cooperation. In this sense, the already implemented and still ongoing participation process represents a valuable source of knowledge that, in a qualified manner, helps to create a framework in the context of preparing the Vision and Strategy of a Sustainable Slovakia until 2050 – Slovakia 2050. At the same time, discussions about this vision have the potential to significantly frame the creation of still-absent integrated territorial concepts innovation-oriented clusters, the urgency of which in the conditions of Slovakia is directly or indirectly pointed out by practically all the outputs from the discussions.

Conclusions

The topic of a sustainable (or at least a more sustainable) way of existence is urgent in the current era of global trends and challenges everywhere in the world – Slovakia is not excluded. Either we learn to live sustainably, or our presence on this planet will soon threaten our development. As part of the global community, we are obligated to contribute to solutions mitigating the manifestations of climate change, population ageing, the onset of digitization and artificial intelligence, and other escalating manifestations or accompanying signs of modern civilization. The question of the extent to which Slovakia is ready to respond to these challenges has not been on the table since today, but unfortunately, we are not adequately prepared to answer it. The results of the participation process, which were analyzed in this post, fully confirmed this.

The hypothesis of the authors of the paper, as well as the initiators/organizers of the entire negotiated participation process, was also confirmed that despite the large number of adopted strategic documents at the governmental, ministerial or self-governing levels, as well as numerous research and other activities on the ground of academic and departmental research institutions and the third sector, practice in Slovakia, in a number of critical areas, progress is not in a satisfactory, sustainable direction. As confirmed by several researchers, our lagging behind the EU average or in the world rankings has generally increased rather than decreased in recent years. (IMD World Competitiveness Centre, 2023); WIPO, 2021; EUROSTAT, 2021). This situation in 2020 was further aggravated by several parallel and sometimes synergistically occurring unexpected crises for which Slovakia was not prepared.

In addition to the notorious crises: environmental, climate, security, energy, pandemic, migration or demographic, our deficits in the sphere of education, health and social care, innovation, but also in the management of society at all hierarchical levels were most often mentioned during the debates under investigation. Nevertheless, the deeper causes of the undesirable state and development were discussed less often: from value aspects, through unsustainable patterns of production and consumption to the dominant and, in many ways, deformed neoliberal economic model, refusal of cooperation and excessive individualism.

The participatory process pointed to a wide range of problems and challenges, identified their main causes and also brought framework proposals for solutions and measures, thanks to which the redirection of Slovakia to a trajectory of more sustainable development on the horizon of the next two to three decades could be successful. Virtually all participants in the participation process agreed that the basic condition for such a change in direction is the transformation of society and its management in all relevant areas, resulting in a paradigmatic change in the development trajectory.

However, a necessary prerequisite is adequate comprehensive (i. e., not only educational or qualification) preparation of all participants, personal maturity, thinking and acting at the level of the first half of the 21st century, significantly better flexibility, foresight and overall ability to face challenges, but also effective cooperation and a

tendency to search and finding consensus. It means the question is not only "what" needs to be done, but above all "who" will ensure the necessary changes in practice and in reality/physically.

In light of the results of the participatory process presented in this paper, the authors concluded that Slovakia, in the third millennium, needs courageous and educated leaders at all levels who are willing and able to make strategic and operational decisions and bear responsibility for them. Therefore, as topics for further discussion, we propose topics that also proved to be key in the results of the researched participation process - the system and level of education, the preparedness of leaders for crisis management, or the management of change, the state of awareness in issues of trends and challenges that we also face in Slovakia as a result of global threats (climatic, environmental, economic, social, etc.) - especially to reduce the current alarmingly high level of confidence of the Slovak population in conspiracy theories (MEDIAN SK, 2019; GLOBSEC, 2019; 2021; EUROBAROMETER, 2023), readiness for change in the actions of individual subjects across sectors (i.e. in the direction from hypertrophied competition to greater cooperation) and, last but not least, the search for and networking of examples of good practice. Despite the very unflattering and seemingly hopeless situation, when the level of education, the level of critical thinking in the Slovak population, or the ability to anticipate and face changes as well as to make responsible decisions degrades and, in many areas foreshadows a deep crisis of the elites, exacerbated by the ongoing brain drain towards abroad, there are positive examples, many successful solutions at the local level, but also individual scientific, economic, business, academic achievements and other examples of good practice are a beacon of hope that the future of Slovakia is not yet lost.

Into the next discussion, we also bring the thesis that without accelerated education reform, without an urgent increase in the scope and level of awareness about the real state of society and the world, without bold political and governmental decisions freeing the hands and also relevant financial resources to lower levels of public administration as well as private, academic, research, development and the third sector, without integrated projects implemented in constructive and effective cooperation at all levels - for example in the form of innovation-oriented territorial or industry clusters, without streamlining the management of public services, but above all without improving services in the healthcare and social spheres, which are in desolate state, Slovakia's stagnation will only deepen, and the thesis about moving towards a sustainable future will remain only an unfulfilled vision or an empty fashionable slogan without substantive content.

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