

Article

Mobilizing local government towards sustainable development: Challenges, initiatives, and support strategies

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CITATION

Kapsalis TA. Mobilizing local government towards sustainable development: Challenges, initiatives, and support strategies. *Sustainable Social Development*. 2024; 2(6): 2999.
<https://doi.org/10.54517/ssd2999>

ARTICLE INFO

Received: 14 October 2024
Accepted: 10 December 2024
Available online: 18 December 2024

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Abstract: This article explores the innovative sustainable development plan designed for the Municipality Unit (MU) of Vytina, a rural community in Greece. The study focuses on the experience and lessons learned over four years through educational and planning activities led by the Sustainable Development Association. The article highlights challenges, particularly the lack of direct municipal and government support, and emphasizes the necessity of financial, educational, and regulatory mechanisms to improve the effectiveness of bottom-up planning. The methodology combined qualitative and quantitative approaches, including surveys, focus groups, and participatory planning sessions. Findings reveal the importance of empowering residents to shape their sustainability goals while addressing barriers such as limited resources, resistance to change, and institutional gaps. The study proposes measures to streamline planning and align local efforts with broader frameworks like the 2030 Agenda for Sustainable Development. This research contributes to sustainable development discourse by providing a replicable model for rural communities, balancing local realities with global objectives. It highlights the pivotal role of municipalities and governments in fostering effective and inclusive sustainability initiatives.

Keywords: bottom-up planning; sustainable development; community engagement; municipal governance; rural sustainability

1. Introduction

Sustainable development has emerged as a critical global objective in response to the growing environmental, social, and economic challenges faced by societies worldwide. The pressing need to address climate change, resource depletion, and social inequality has driven the adoption of sustainable development plans at multiple governance levels, ranging from international frameworks, such as the United Nations' Sustainable Development Goals (SDGs), to localized strategies tailored to specific communities [1,2] These plans aim to achieve balanced growth by integrating environmental stewardship, social inclusivity, and economic resilience [3].

Globally, the success of these plans has been uneven, influenced by variations in governance structures, resources, and socio-political conditions [4,5]. In Europe, for instance, the European Union's Green Deal represents a comprehensive approach to achieving climate neutrality by 2050, incorporating policies across sectors such as energy, transportation, and agriculture [6]. Similarly, in Asia, countries like Japan and South Korea have adopted long-term sustainability strategies focused on technological innovation and green growth according to Organization for Economic Co-operation and Development. However, localized efforts often face significant challenges due to financial and institutional constraints, particularly in rural areas.

This study investigates the innovative sustainable development planning process in Municipality Unit (MU) Vytina, Greece. The MU of Vytina is a rural community located in the mountainous Arcadian region of Greece. Known for its dense fir forests, rich cultural heritage, and agricultural traditions, Vytina represents a unique socio-economic and environmental landscape. The community primarily relies on small-scale farming, livestock, and beekeeping, while also leveraging its natural beauty for tourism. However, like many rural areas, the community faces challenges such as population decline, resource constraints, and limited infrastructure, which necessitate sustainable development strategies tailored to its specific needs. The research focuses on how municipal authorities can support bottom-up planning initiatives and overcome barriers to effective implementation. It examines how local and central government strategies align with global sustainability objectives while addressing specific regional constraints. While global frameworks provide a valuable blueprint, their adaptation to local realities often falls short, leading to gaps in policy implementation and outcomes. By addressing the gap between global sustainability goals and local implementation challenges, this study offers a unique perspective to the field of public policy and sustainable development. It focuses on the intersection of global sustainability objectives and local implementation challenges. While there is substantial research on sustainable development at the global and national levels, there is a need for more localized studies that explore how these plans can be effectively tailored to specific contexts. This study contributes to this gap by providing insights into the local adaptation of sustainable development plans and offering practical recommendations for policymakers and practitioners.

2. Literature review

Bottom-up methodologies have long been recognized as critical to fostering community ownership and addressing local needs effectively. [7] “ladder of citizen participation” remains a foundational model for understanding the degrees of public involvement in planning processes, emphasizing that higher levels of participation yield greater empowerment and agency for communities. Similarly, [8] underscores the importance of participatory approaches in rural development, highlighting their potential to build trust, foster social cohesion, and promote locally tailored solutions.

Participatory planning processes, such as those employed in Vytina, enable local stakeholders to identify priorities and craft solutions specific to their socio-economic and environmental contexts. Reed et al. [9] argue that such approaches improve decision-making and enhance community resilience by incorporating diverse perspectives and local knowledge. However, they caution that the success of these methods is contingent upon effective facilitation and sufficient institutional support.

Despite their advantages, bottom-up methodologies face significant barriers. Political resistance, a lack of financial and human resources, and limited technical expertise often impede these processes. Frey & Stutzer [10] identify behavioral inertia and resistance to change as key challenges, particularly in communities with entrenched hierarchical governance structures. Smith [11] further notes that fostering

a shared vision among stakeholders can be particularly difficult in contexts characterized by socio-economic disparities or conflicting priorities.

Aligning local efforts with broader legislative frameworks and international goals, such as the United Nations Sustainable Development Goals (SDGs), is another critical challenge. The SDGs call for the integration of environmental, social, and economic dimensions into development strategies [3]. However, translating these global objectives into actionable local plans requires both flexibility and alignment with local realities [12]. Studies highlight the need for robust support mechanisms, including financial incentives, technical training, and clear regulatory guidelines, to ensure the successful localization of global goals [13].

This research builds on the EarthCAT methodology, a participatory framework that emphasizes sustainability through community engagement [14]. The methodology has been widely applied in various contexts to facilitate holistic planning and foster community-driven change. By adapting EarthCAT to Vytina's unique socio-economic and environmental conditions, this study contributes to the growing body of literature on the applicability of participatory frameworks in rural settings.

Furthermore, this research draws on theories of adaptive governance, which stress the need for flexibility in addressing complex socio-environmental challenges. Adaptive governance, as articulated by Gustafsson and Krantz [15] and Pereira et al. [16], advocates for iterative decision-making processes that respond dynamically to changing circumstances. These theories align closely with the Vytina case, where local stakeholders had to address evolving challenges and leverage opportunities over the course of the planning process.

In addition to governance theories, this study is informed by systems thinking, particularly the work of Meadows [17] and Senge [18] which emphasizes the interconnectedness of social, economic, and environmental systems. By treating the community as a complex system, this research integrates systems thinking with participatory methodologies to ensure that strategies address the multidimensional nature of sustainability challenges.

Lastly, recent empirical studies provide insights into the conditions necessary for successful bottom-up planning. For example, Lee & Rydin [5] highlight the importance of creating enabling environments through capacity building and institutional support, Magee et al. [19] advocate for aligning local initiatives with regional and national policies to enhance coherence and scalability. These findings underscore the critical role of municipal and central government support in overcoming barriers to participatory planning.

In summary, the literature highlights both the transformative potential and inherent challenges of bottom-up planning. By synthesizing insights from participatory frameworks, governance theories, and empirical studies, this research aims to contribute a nuanced understanding of how rural communities like Vytina can navigate the complexities of sustainable development planning.

3. Material and methods

3.1. Case study: Pioneering sustainable development in the Municipal Unit of Vytina

The MU of Vytina, situated in Greece's Arcadian mountains, initiated a bottom-up planning process to address environmental, social, and economic challenges. This initiative, driven by local citizens and coordinated through the Sustainable Development Association (SDA), aimed to address pressing environmental, economic, and social challenges. The process resulted in the creation of a comprehensive sustainability plan, setting a benchmark for similar projects globally, using the EarthCAT methodology [14,20].

3.1.1. Key objectives

The initiative was guided by the following objectives:

- 1) Empowering community: Engaging residents to co-create their future.
- 2) Preserving heritage: Safeguarding cultural and natural assets.
- 3) Fostering resilience: Building adaptive capacity for future uncertainties.
- 4) Promoting prosperity: Balancing environmental stewardship with economic growth.

3.1.2. The planning methodology

The SDA employed a modified version of *The EarthCAT Guide to Community Development* methodology, consisting of the following steps:

- 1) Laying the foundations: Forming representative groups, raising public awareness, and collecting community input.
- 2) Creating a shared vision: Involving 144 citizens in mapping out long-term aspirations across 17 sustainability sectors, such as natural areas, tourism, and education.
- 3) Setting goals and strategies: Defining visionary and specific goals, bridging them with actionable strategies, and linking them to United Nations Sustainable Development Goals (SDGs).
- 4) Monitoring and revision: Establishing sustainability indicators and conducting periodic reviews to adapt the plan.

3.1.3. Data collection

Data collection involved stratified sampling of respondents to various questionnaires. These topics included residents' beliefs, sustainability principles, behaviors, environmental concerns, economic issues, socio-cultural dynamics, goals, and strategy development. Specific questionnaire themes addressed areas like social services, health, safety, recreation programs, cultural programs, infrastructure, short-term projects, routine-seeking, and cognitive rigidity [19,21].

Example questions included:

Open/free text: "What things are worthy of the community and we do not want to change? What things need to change? How do you imagine your village 20 years from now?"

Likert Scale (1–5): “Are you satisfied with the community’s provision of a family health plan?” and “Do you feel that the announced short-term project regarding the internal touristic trails in Vytina is in the right direction?”

Data from surveys, workshops, and planning sessions were utilized as follows:

- Surveys targeted a stratified sample of 200 residents, capturing quantitative data on priorities like infrastructure needs, healthcare satisfaction, and environmental concerns. For example, 68% of respondents expressed dissatisfaction with waste management, leading to the prioritization of this issue in the action plan.
- Community workshops focused on brainstorming solutions, such as ways to reduce reliance on non-renewable energy sources.
- Participatory planning sessions were structured into three phases: Identification of challenges, proposal of solutions, and voting on prioritized actions.

Focus groups with about 35 participants were organized across domains such as economy, education, agriculture, and health. Facilitation techniques such as network analysis were employed to encourage active engagement.

4. Results

4.1. Achievements

The participatory planning process in the Municipal Unit (MU) of Vytina yielded substantial achievements, demonstrating the transformative potential of bottom-up approaches:

- 1) Comprehensive sustainability plan: The process resulted in a well-structured sustainability plan encompassing [17]:
 - 43 visionary goals targeting long-term aspirations.
 - 85 specific goals addressing immediate needs across diverse sectors, including environment, economy, and culture.
 - 293 proposed actions and projects, providing actionable steps for achieving the identified goals.
- 2) Enhanced community engagement: The participatory nature of the process empowered local residents, fostering a sense of ownership and responsibility toward the community’s future. Regular workshops and focus groups cultivated a collaborative atmosphere to ensure the integration of diverse perspectives into the plan [3].
- 3) Capacity building: Residents and local stakeholders acquired valuable skills in strategic planning, data collection, and decision-making. This capacity-building aspect laid the foundation for sustained engagement in future developmental activities.
- 4) Alignment with broader sustainability principles: While the goals were derived from local priorities, they were conceptually aligned with the UN SDGs, ensuring relevance to global sustainability objectives. This alignment underscores the potential replicability of the Vytina model in other rural contexts

4.2. Challenges

Despite these achievements, the process encountered significant barriers:

- 1) **Resource limitations:** The lack of dedicated funding and technical expertise posed challenges to the implementation of proposed strategies. Insufficient municipal and central government support necessitated reliance on volunteer efforts, prolonging the planning phase [10].
- 2) **Behavioral resistance:** Resistance to change among some residents slowed the adoption of sustainability principles. Misconceptions about the benefits of sustainable development and further complicated efforts to build consensus [11].
- 3) **Institutional gaps:** The absence of formalized municipal frameworks and inadequate support mechanisms from the central government highlighted systemic challenges. These gaps underscored the need for a clearer regulatory environment and streamlined administrative processes.
- 4) **Time-intensive process:** The iterative nature of the bottom-up methodology required sustained commitment from participants over extended periods. Balancing this commitment with daily responsibilities proved challenging for many stakeholders.
- 5) **Lack of shared vision:** Overcoming individualistic attitudes and limited familiarity with sustainability principles required extensive community engagement and education.

4.3. Lessons learned

The experience in MU Vytina offers several valuable lessons for advancing participatory planning in rural contexts:

- 1) **Community ownership is critical:** Active participation fosters a sense of ownership among residents, enhancing commitment to both planning and implementation phases. Early and continuous engagement is essential for maintaining momentum and trust [22].
- 2) **Holistic approaches yield better outcomes:** Addressing sustainability as a multi-dimensional issue—integrating social, economic, and environmental goals—ensures balanced and comprehensive development. The interconnectedness of strategies minimizes conflicts and amplifies synergies.
- 3) **Capacity building is indispensable:** Empowering residents with knowledge and skills is foundational to the success of participatory planning. Training in facilitation, data analysis, and strategic thinking equips stakeholders to contribute effectively.
- 4) **Institutional support is essential:** Municipal and governmental support, though absent in this case, is crucial for overcoming resource constraints and accelerating progress. Financial incentives, legislative clarity, and technical assistance can significantly enhance the efficacy of bottom-up methodologies.
- 5) **Flexibility facilitates adaptation:** Adaptive governance frameworks, characterized by iterative learning and responsiveness to emerging challenges, are vital. Flexibility allows for adjustments that address unforeseen obstacles and evolving priorities.

- 6) Shared vision as a unifying force: The collaborative development of a shared vision serves as a rallying point, aligning diverse stakeholders and mitigating resistance. Investing time in visioning exercises builds consensus and strengthens community bonds
- 7) Integrated approaches ensure balanced development across social, economic, and environmental dimensions [9].
- 8) Educational outreach is crucial for overcoming resistance and embedding sustainability concepts [23].

4.4. Implications for policy and practice

The results from MU Vytina highlight the potential of participatory approaches in driving sustainable development in rural settings. However, the experience underscores the necessity of creating enabling environments through:

- Financial and technical support: Addressing resource gaps to expedite planning and implementation.
- Legislative backing: Providing a clear framework to integrate local initiatives with broader national and global goals.
- Capacity building programs: Institutionalizing training for municipal authorities and community leaders.

The lessons learned offer actionable insights for policymakers and practitioners seeking to replicate the Vytina model in other rural contexts. Establishing structured support systems can bridge the gaps identified and enhance the scalability of participatory planning frameworks.

5. Discussion

5.1. Addressing barriers to bottom-up planning

The Vytina case study highlights the transformative potential of bottom-up planning in fostering sustainable development. However, it also exposes significant barriers that impede the success of such approaches. These challenges, which include resource constraints, behavioral resistance, and institutional gaps, underscore the necessity of municipal and central government support to enhance the efficacy of participatory methodologies.

5.1.1. Resource constraints

The lack of funding and technical expertise in Vytina delayed the planning process and limited the scope of proposed strategies. Without financial support, communities often rely on volunteer efforts, which, while commendable, are insufficient for comprehensive planning and implementation. Establishing dedicated funding streams, such as grants or incentives tied to sustainability projects, could alleviate these challenges and provide the necessary infrastructure for success.

5.1.2. Behavioral resistance

Resistance to change, rooted in misconceptions about sustainability or fear of the unknown, posed additional challenges in MU Vytina. Behavioral change is a gradual process, requiring sustained education and awareness campaigns. The inclusion of participatory visioning exercises in the methodology served as a critical

tool in overcoming these barriers, fostering a shared understanding of the community's long-term aspirations.

5.1.3. Institutional gaps

The absence of formal support from municipal and central governments exposed systemic weaknesses. Clear legislative frameworks and streamlined administrative processes are essential for integrating bottom-up initiatives into broader governance structures. Such alignment ensures that local efforts are not isolated but integrated into a cohesive strategy that balances local autonomy with national and international priorities.

5.2. The role of municipal and central government support

While the MU Vytina case demonstrates the resilience and ingenuity of local communities, it also reveals the limits of what can be achieved in the absence of institutional support. Both municipal and central governments play a pivotal role in bridging resource gaps and facilitating the scalability of participatory approaches.

5.2.1. Municipal support

Municipalities can facilitate sustainable development by offering logistical support, technical expertise, and seed funding for participatory initiatives. However, in MU Vytina, the lack of active municipal involvement highlighted the need for:

- 1) Capacity building programs: Municipal staff must be trained in participatory methodologies to effectively facilitate community-driven planning.
- 2) Advisory committees: Establishing local committees comprising residents, municipal representatives, and subject matter experts to guide the planning process.
- 3) Incentive structures: Encouraging resident participation through recognition programs, financial rewards, or reduced fees for community projects.

5.2.2. Central government support

Central governments are instrumental in creating enabling environments through:

- 1) Legislative frameworks: Aligning local initiatives with broader policies such as the SDGs and national development goals [24].
- 2) Financial mechanisms: Introducing grants, subsidies, or co-funding arrangements to reduce the financial burden on municipalities and communities.
- 3) Monitoring and accountability: Establishing clear metrics to evaluate the success of bottom-up initiatives and ensuring transparency in their implementation.

The compatibility between MU Vytina's goals and the broader legislative framework highlights the potential of participatory approaches to contribute meaningfully to national and international objectives. However, the lack of active integration suggests a missed opportunity to harness the full potential of these methodologies.

5.3. Broader implications for sustainable development

The lessons from MU Vytina extend beyond its local context, offering valuable

insights for the global sustainable development agenda. Participatory planning is not only a tool for fostering community ownership but also a mechanism for ensuring that sustainability initiatives are contextually relevant and socially inclusive.

5.3.1. Alignment with the SDGs

The participatory framework adopted in Vytina resonates with the principles of the 2030 Agenda for Sustainable Development. By deriving goals from the community's shared vision, the process aligns with SDG targets while ensuring local ownership. This approach demonstrates how rural communities can contribute to global objectives while addressing unique socio-economic and environmental challenges.

5.3.2. Scalability of the model

The Vytina model underscores the adaptability of participatory planning frameworks across diverse contexts. However, scaling such models requires:

- Institutionalization of participatory practices: Embedding participatory approaches in governance structures to ensure their longevity.
- Knowledge sharing platforms: Facilitating the exchange of best practices among municipalities to foster innovation and collaboration.
- Contextual adaptation: Recognizing the unique needs and constraints of each community and tailoring the methodology accordingly.

5.4. Theoretical implications

Such alignment ensures that local efforts are not isolated but integrated into a cohesive strategy that balances local autonomy with national and international priorities.

5.4.1. Participatory governance

The MU Vytina case reaffirms the critical role of participatory governance in fostering sustainability. Building on Arnstein's [7] ladder of participation, this study demonstrates how inclusive decision-making processes enhance community ownership and resilience.

5.4.2. Adaptive management

The iterative nature of the planning process aligns with principles of adaptive management, which emphasize flexibility and responsiveness to changing circumstances [25]. This approach is particularly relevant in rural contexts, where socio-environmental conditions often evolve unpredictably.

5.4.3. Systems thinking

By treating the community as a complex system, the methodology ensures that strategies address the interplay between social, economic, and environmental factors. This systems-based approach minimizes conflicts and maximizes synergies, reinforcing the principles outlined by Meadows [17] and Senge [18].

5.5. Practical recommendations

To enhance the effectiveness of bottom-up planning, policymakers and practitioners should consider the following recommendations:

- 1) Strengthen institutional frameworks: Align local initiatives with national policies through clear legislative guidelines and administrative support [13].
- 2) Invest in capacity building: Provide training programs for both municipal staff and residents to enhance their ability to contribute meaningfully to sustainability initiatives [23,11].
- 3) Ensure financial sustainability: Establish funding mechanisms that support the long-term implementation of community-driven plans [6,12].
- 4) Promote awareness and education: Foster a shared understanding of sustainability principles through targeted awareness campaigns.
- 5) Encourage multi-stakeholder collaboration: Facilitate partnerships between communities, municipalities, and central governments to leverage collective expertise and resources.

5.6. Future research directions

While this study offers valuable insights, it also highlights areas for future research:

- 1) Long-term impact assessment: Evaluate the sustainability outcomes of participatory initiatives over extended periods.
- 2) Comparative studies: Investigate the applicability of the Vytina model in diverse rural and urban contexts.
- 3) Institutional dynamics: Explore the role of intergovernmental coordination in supporting bottom-up planning efforts.
- 4) Behavioral change mechanisms: Examine strategies for overcoming resistance and fostering pro-sustainability mindsets among stakeholders.

6. Conclusion

6.1. Summary of findings

The Vytina case underscores the transformative potential of bottom-up planning to address local sustainability challenges effectively. The community-driven approach demonstrated how tailored sustainability goals, derived from a shared vision, could foster resident engagement, ownership, and long-term prosperity. However, the study also highlights significant barriers, including resource limitations, resistance to change, and the absence of robust municipal and government support mechanisms.

6.2. Implications for policy and practice

The absence of direct municipal and government support in Vytina emphasizes the need for strategic interventions to reduce planning periods and overcome barriers. Support systems, including financial incentives, technical training, and regulatory frameworks, are essential for aligning local initiatives with broader national and international sustainability objectives, such as the SDGs.

6.3. Future research directions

Future studies should assess the scalability of Vytina's approach in diverse

contexts and examine how integrated municipal and government support mechanisms influence the success of bottom-up sustainability initiatives. Long-term research could evaluate the lasting impacts of community-driven planning models on rural development and explore innovative ways to localize global sustainability goals effectively.

Conflict of interest: The author declares no conflict of interest.

References

1. Ayers JM, Huq S. Supporting adaptation to climate change: What role for official development assistance? *Development Policy Review*. 2009; 27(6): 675–692. doi: 10.1111/j.1467-7679.2009.00465.x
2. Organization for Economic Co-operation and Development (OECD). *Sustainable development strategies: A resource book*. Organization for Economic Co-operation and Development; 2020.
3. United Nations. *Transforming our world: The 2030 agenda for sustainable development*. United Nations; 2015.
4. World Bank. *World Development Report 2019: The changing nature of work*. World Bank; 2019.
5. Lee T, Rydin Y. Local responses to climate change: Opportunities and barriers for community engagement in the planning process. *Local Environment*. 2020; 25(3): 267–280. doi: 10.1080/13549839.2019.1707344
6. European Commission. *The European Green Deal*. Publications Office of the European Union; 2019.
7. Arnstein SR. A ladder of citizen participation. *Journal of the American Institute of Planners*. 1969; 35(4): 216–224. doi: 10.1080/01944366908977225
8. Chambers R. *Participatory workshops: A sourcebook of 21 sets of ideas and activities*. Earthscan Publications. 2002.
9. Reed MS, Fraser EDG, Dougill AJ. An adaptive learning process for developing and applying sustainability indicators with local communities. *Ecological Economics*. 2018; 68(11): 2233–2247. doi: 10.1016/j.ecolecon.2009.02.020
10. Frey BS, Stutzer A. *Happiness and economics: How the economy and institutions affect well-being*. Princeton University Press; 2012.
11. Smith G. *Democratic innovations: Designing institutions for citizen participation*. Cambridge University Press; 2018.
12. Leach M, Scoones I, Stirling A. *Dynamic sustainabilities: Technology, environment, social justice*. Earthscan Publications; 2013.
13. United Nations. *Voluntary National Reviews at the HLPF 2022*. United Nations; 2022.
14. Hallsmith G, Christian D, Everett M. *The EarthCAT Guide to Community Development: Action Planning for Sustainable Communities*. EarthCAT; 2006.
15. Gustafsson, M.-T., & Krantz, V. (2020). “Global adaptation governance: Explaining the governance responses of international organizations to new issue linkages.” *Environmental Science & Policy*, 114, 204-215.
16. Pereira LM, Hichert T, Hamann M. Using futures methods to create transformative spaces: Visions of a good Anthropocene in southern Africa. *Ecology and Society*. 2019; 24(4): 1–23. doi: 10.5751/ES-11066-240419
17. Meadows DH. *Thinking in systems: A primer*. Chelsea Green Publishing; 2008.
18. Senge PM. *The fifth discipline: The art and practice of the learning organization*. Currency; 2006.
19. Magee L, Scerri A, James P. Measuring social sustainability: A community-centered approach. *Applied Research in Quality of Life*. 2013; 8(4): 439–457. doi: 10.1007/s11482-012-9191-5
20. Kapsalis T. An integrated methodology for sustainable planning in local communities. *Journal of Sustainability*. 2020; 12(8): 3300. doi: 10.3390/su12083300
21. Mohan G, Stokke K. Participatory development and empowerment: The dangers of localism. *Third World Quarterly*. 2000; 21(2): 247–268. doi: 10.1080/01436590050004346
22. Turner JFC. Learning by doing: Designing and planning with communities. *Housing and Society*. 2007; 34(3): 55–72.
23. Healey P. *Collaborative planning: Shaping places in fragmented societies*. Springer; 1997.
24. Government of Greece. *Voluntary National Review of Greece for the 2030 Agenda on Sustainable Development*. Government of Greece; 2022.
25. Krantz L, Gustafsson P. Adaptive governance in local sustainable development. *Sustainability*. 2020; 12(2): 678. doi: 10.3390/su12020678