

# Government Challenges In Expanding Urban Green Open Spaces

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## **Abstract**

The background of this research is how to maintain and preserve the environment for the balance of the universe, by expanding green open spaces in urban areas. In order to support sustainable development implemented by the government in urban areas. This research method is a descriptive type with a qualitative approach, the research procedure produces descriptive data that is rich in narrative with written studies derived from interviews, observations and documentation. Based on the five assessment criteria in the policy evaluation, namely personnel, institutional, infrastructure, financial and regulatory resources, it is seen that the achievement of green open space expansion is still low. The government's seriousness in providing green open space is very important, so that the management of green open space can be optimized. Green open space can maintain the quality of the ecosystem, and carry out the sustainability of ecological, social, economic, cultural, and aesthetic processes. The main function of green open space is as a green area that provides benefits for sustainable living. So that in every city, it is hoped that there will be green open spaces with clean, healthy, comfortable open natural environments, and the beauty of their ecosystems is maintained for the general public and future generations.

**Keywords:** Government Cooperation, Sustainable Development, Expansion of Green Open Space.

## **1. Introduction**

The provisions of the South Sulawesi Provincial Regulation Number 9 of 2009 concerning the 2009-2029 Green Open Spatial Plan, is a minimal step to maintain environmental balance. South Sulawesi has several cities, namely Makassar and Pare-Pare which are the research locus areas because it is known that both cities are actively developing in all fields, but the development process does not seem to be in line with the amount of green open space. Green open space management is very important to be considered and implemented in building and maintaining urban sustainability. Indonesia is also experiencing a climate crisis due to consumption patterns, natural resource extraction, agricultural practices, industrial growth, transportation, unfriendly energy use, and reduced

biodiversity, all of which have an impact on the trend of rising temperatures of around 0.03 °C/year and sea level also increased by about 0.8-1.2 cm/year.

Government policy innovation is needed by referring to various changes taking into account the climate change fiscal framework, carbon pricing, energy transition mechanisms, and pooling funds for disasters. Likewise, with population growth in Indonesia which continues and grows rapidly where 65% live in coastal areas, climate change is a major threat with the risk of hydrometeorological disasters for life and livelihoods. Policies are also needed in managing the various primary needs of the community, starting from food, clothing, and housing, then secondary needs such as adequate infrastructure or facilities, and various facilities to meet the increasingly diverse demands of life in urban areas.

The current trend is that spatial planning responds to global development issues, and leads to the creation of sustainable development (Firoiu, Ionescu, Băndoi, Florea, & Jianu, 2019; Hopwood, Mellor, & O'Brien, 2005; Redclift, 2002). The current reality confirms several strategic issues in the implementation of national spatial planning (Douvere, 2008; Nobre et al., 2016). First, the occurrence of conflicts of interest between sectors, such as mining, environment, forestry, regional infrastructure, and so on; second, the spatial planning function is not yet optimal in the context of harmonization, synchronization, and integration of various sector plans and programs; third, the occurrence of irregularities in the use of space from the provisions and norms that should be enforced (Andi et al., 2021). In this case, it is necessary to harmonize the use of space in the form of studies in the form of rules that bind the government (Ehrenfreund & Peter, 2009; He & Warren, 2011; Krisch & Kingsbury, 2006; Tahir, Nahrudin, & Ekawaty, 2016). It is hoped that in every city there will be green open space with a clean, healthy, comfortable open natural environment, and the beauty of its ecosystem is maintained for the general public.

## 2. Material And Method

Green Open Space is part of the formation of open space in an urban area filled with plants, gardens, and vegetation to support ecological, socio-cultural, and architectural benefits that can provide economic benefits for the community. Green open space usually dominates urban areas, but is now decreasing along with the increasing human need for land or space to carry out various activities such as settlements, offices, and industries which cause an increase in CO, Nox, Sox, HC, and pollution in urban areas. This causes pollution and has a negative impact on the environment for life in urban areas.

Then the wave of urbanization to urban areas is caused by infrastructure development, both facilities, infrastructure, and urban facilities. This has always been an attraction as well as a driving force for residents to migrate from villages to cities to get a better chance of living. This phenomenon causes city development to seem without direction and results in

uncontrolled development and the formation of "associations" of settlements that always look slum, dense, and poor on the other side of the splendor of the city. In the long term it can cause "chaos" which is starting to be felt at this time. Vulnerability of urban conditions can cause various hazards, such as air pollution, flooding, infectious diseases, due to a decrease in environmental functions. The non-integration of government programs from various development agencies also makes the implementation of development even more overlapping. Likewise, the result of "spatial imbalance", also has an impact on the decline in the quality of life physically, economically and socio-culturally, known as "urban disaster".

### a. Green Open Space Policy and Issues

According to Anderson, policy is a series of actions taken by an actor or a number of actors related to the problem at hand. Suskind, a writer close to the White House official at the time of George W. Bush, "when we take action we create a reality and when we create a new action, we create a new reality" (Higgins, 1992); (Scharpf, 2018); (Scheele, 1975). Friedrich defines policy as an action that leads to goals proposed by a person, group or government in a certain environment in relation to obstacles while looking for opportunities to achieve the desired goals or objectives (Satispi & Chandra, 2020). Define policy as a plan of action taken by government officials to achieve broader goals that substantially affect the lives of citizens. From several views on policy, a common thread can be drawn that a policy must be linked to an action plan directed at realizing certain goals (Da Silva & Toda, 2021; Ellen, 1994; Noi, Liliweri, & Tammunu, 2019). In a general sense, policy refers to a network of decisions or actions that provide direction, coherence, and continuity. In this connection, define policy as a set of actions or non-actions that are more than a specific decision. In a special sense, policy ideas relate to means and ends, with a focus on selecting goals and means to achieve the desired goals (Satispi & Chandra, 2020).

Gianttaya states "policy as tactics and strategies directed to achieve a goal". Therefore, a policy contains three elements, namely: (1) identification of the objectives to be achieved, (2) tactics or strategies of various steps to

achieve the desired goals, (3) providing various inputs to enable the actual implementation of tactics or strategies. public policy strategy. Simon by emphasizing the decision-making process centered on the idea of rationality, Kugelberg and Lindblom (1959) support the approach of "incrementalism", and Easton and Dennis (1965) who conceptualize the relationship between inputs, policy making, policy outcomes, and the wider environment. The policy formulation process is often referred to as a policy circle (Kaenton et al., 2004). Marcus and Francis (1997) stated "Green Open Space is a space that is planned because of the need for a meeting place and joint activities in the open". Green open space is an area that extends in the form of a path or grouped area. Green open space is one component whose level of availability both in quality and quantity must always be taken into account in the urban planning process. According to Rusnanda and Ridwan (2019), green open space is part of the open space of an urban area filled with plants, herbs and vegetation (endemic, introduced) which functions to support the direct and indirect benefits generated by green open space: security, comfort, freshness, prosperity, and beauty of urban areas.

In line with Arif Zulkifli, according to Krier (1979) in Surya et al. (2020) "Green Open Space is an underdeveloped part of the city that functions to support comfort, welfare, environmental quality improvement and nature conservation". Green open space in urban areas aims, among others: (1) to improve the quality of the urban environment and as an urban environmental protected area; (2) Creating harmony between the natural environment and the built environment that is beneficial to the interests of the community.

### **b. Green Open Space Function**

According to Clawson (1969) in Surya et al. (2020) suggests five types of green open space function classes, including: 1) Green open space as a medium for providing air and lighting (providing air and light in buildings); 2) Green open space to reduce the impression of high density (to eliminate the feeling of tightness); 3) Green open space as a medium of recreation (recreational function) in various forms for human needs; 4) Green open space as an ecological function includes: (a) The

intended ecological function is related to the conditions of the natural environment, such as climatological, hydrological, and biological functions; (b) The hydrological function also plays an important role in the environment, especially the water absorption function which will affect the amount of surface water and ground water; (c) The infiltration function serves to reduce surface water and can reduce the duration of inundation; (d) The biological function that is always a concern is biodiversity; 5) Green open space as a medium for forming the physical appearance of the city (the function of forming a city, the existence of open space is actually identical with land reserves that can be used for various development purposes by the city government, the possibility of government allocation for various purposes also functions as a land bank.

### **c. The Role of Green Open Space**

Branch (1995), in Surya et al. (2020) stated that the role of green open space has many benefits. Plants in green open spaces in urban areas can not only survive in productive functions, in terms of economic value, aesthetic function on ecological functions, but also function to maintain microclimate changes, air pollution by gas, dust and noise variations, increase and decrease air temperature, glare, erosion, landslides, windbreaks that are too strong, and minimize the impression of a slum city. According to Budiharjo (1993) in Surya et al. (2020), that the loss of green open space in urban areas causes psychological, emotional, and dimensional instability, so that the space for people to move and think is very limited.

### **d. Benefits of Green Open Space**

Tajima (2003) states that "Green open space has many benefits, including: aesthetic, orological, climatological, ecological, protective, hygienic, and educational benefits", as well as green areas as part of the ecological environment. Efforts are made as a medium for harmonizing and balancing the density of buildings in urban areas. The ability of green open spaces to absorb emissions of gases that cause global warming must be maintained and preserved. Green open space is a public place to carry out activities related to social interaction, recreation and entertainment activities. According to a Government Regulation, the

benefits of green open space are described as follows: 1) Green Open Space is land overgrown with various plants, in various strata, ranging from ground cover, shrubs, flowers, and trees; 2) An open landscape without buildings having certain sizes, shapes, and geographical boundaries with any status of control, in which there are woody green plants and trees as the main characterizing plants and other plants, as complementary plants, as well as other objects that are also complement and support the existence of green open spaces.

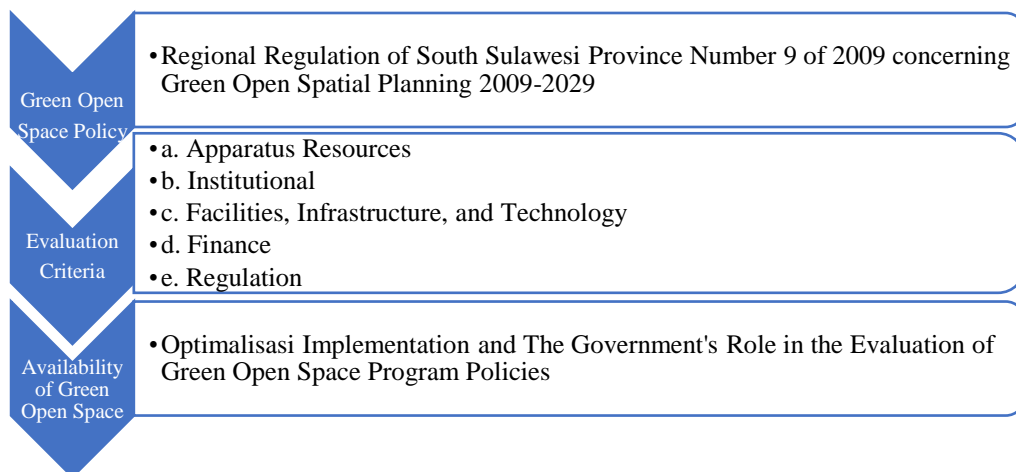
The benefits of green open space based on its function are divided into the following categories: 1) Green open space has direct benefits, namely creating beauty and comfort (shady, fresh, cool) and obtaining materials for sale (wood, flowers, and fruit); 2) Green open space has indirect benefits, namely cleaning the air which is effective for the environment, preserving environmental functions and all the contents of existing flora and fauna. Guidelines for the Provision and Utilization of Green Open Spaces in Urban Areas, the types include: 1) Macro Green Open Spaces, such as areas for agriculture, fisheries, protected forests, urban forests, and airport security areas; 2) Medium green open space, such as parks, sports facilities, and public funeral facilities; 3) Micro green open space, open land in which every

residential area is provided in the form of public facilities such as playgrounds, environmental parks, and sports fields. In the context of utilization, the scope is wider, including: (a) as a filler for reforestation for plants; (b) utilization of open space for community activities. Green open space in the city can be classified: (1) open space in coastal areas; (2) river flood plain; (3) freeway safety open space; and (4) the safety hazard of the open space environment at the end of the airport runway.

**3. Metode Research**

The research method used in this research is descriptive qualitative. A qualitative approach is a research procedure that produces descriptive data in the form of written or spoken words from informants, namely people who become informants and are related to the problem that is the focus of research (J. W. Creswell & J. D. Creswell, 2017). Researchers conducted direct interviews with the implementers of green open space expansion, first the Spatial Planning Service, then the Environment Service, and the Third Regional Development Planning Agency, then asked for opinions from the community, and stakeholders in South Sulawesi. The following is an overview of research activities:

**Policy Evaluation Criteria**



**Road Map that will be used as a reference in research**



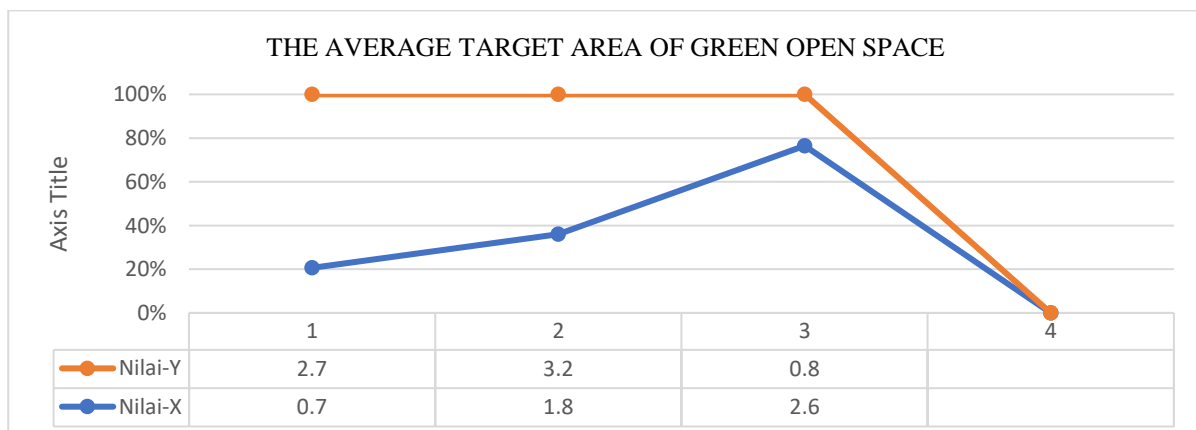
<p>Study The Government's Role in Policy Evaluation of the Green Open Space Program in South Sulawesi</p>	<p>Evaluation Implementation and The Government's Role in the Evaluation of Green Open Space Program Policies</p>	<p>Advanced Research Scheme</p>
<ul style="list-style-type: none"> <li>□ Discovering new knowledge</li> <li>□ Finding ways to solve problems</li> <li>□ Policies in local regulations</li> <li>□ Role of Government Policy in strategic management</li> </ul>	<ul style="list-style-type: none"> <li>▪ Documentation</li> <li>▪ Tracer study</li> <li>▪ Interviews</li> <li>▪ FGD</li> </ul>	<ul style="list-style-type: none"> <li>▪ Publication</li> <li>▪ Presentation on conference national and international</li> </ul>

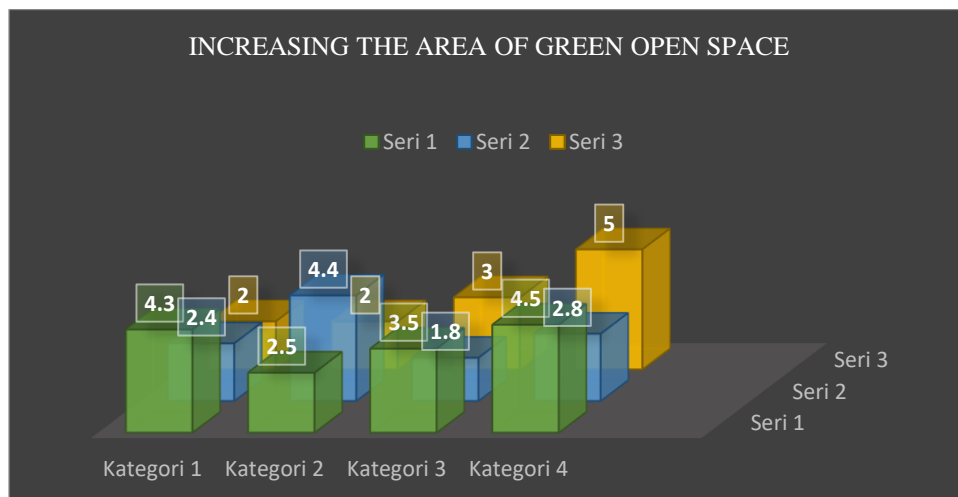
#### 4. Results

The implementation of the Green Open Space policy has not been achieved optimally due to budget problems, inadequate facilities and infrastructure. These obstacles sometimes occur in the implementation of a policy issued by the government. Due to the limited available budget, and the existence of several priority scales in the implementation of development-related programs and activities that are considered the most important and urgent to be implemented. A solution is needed by coordinating between institutions, and optimizing the participation of the community and stakeholders to contribute optimally in the formulation and implementation of policies. So that efforts to carry out targeted and targeted planning in development are very important, in addition to policies with effective and efficient strategic management.

#### 5. Discussion

Green open space is a public facility that functions to accommodate the needs of urban communities, such as places for social interaction, sports facilities, and recreation spaces. Public green open space is owned and managed by the city/district government which is used for the benefit of the community in general. Examples of public green open spaces are city parks, urban forests, green lines, green open spaces around rivers, cemeteries, and so on. Meanwhile, private green open space is green open space owned by certain institutions or individuals that is intended for a limited number of people, including government and private gardens or buildings that are planted with plants. Here are some data related to green open space in South Sulawesi:





Data Source: Report of Research on Evaluation of Green Open Space Policies In South Sulawesi, by Andi Cudai Nur, LP2M UNM Year 2021.

There are five policy evaluation criteria proposed by Leo Agustino, to measure the achievement of green open space and its expansion targets in South Sulawesi, namely: 1) apparatus resources, have understood the main tasks and functions in managing and implementing green open space expansion; 2) institutional, institutional optimization through coordination, flexibility, systematic discretion, and synergy between institutions to contribute in a positive direction. According to Acemoglu et al. (2012), the success of a country to develop and develop is not due to the possession of rich natural resources, technological sophistication, and a supportive climate. Institutional management is required by political elites as decision makers. Good synergy and coordination between institutions in implementing green open space policies in South Sulawesi. This has been supported by the Coordination Team Forum which functions as coordination of each agency related to the handling of green open spaces in Makassar City and the Green Community Forum in Pare-Pare City; 3) facilities and infrastructure, in Makassar and Pare-Pare City, are already available, although they are still limited and the equipment is still simple. The availability of modern facilities and infrastructure in accordance with the needs and development of the community is very much needed to achieve the targets set by the government; 4) finance is a very important criterion in measuring and assessing the implementation of a policy.

Funding and budgeting for the implementation of green open space policies in Makassar City and Pare Pare City only comes from the Regional Revenue and Expenditure Budget, the budgeting mechanism is only based on plans, funding sources are very limited so that it has an impact on efforts to expand green open space areas; and 5) regulation is a process to ensure the existence of standards as legal requirements that must be met for public service activities. All program activities can be synergized and integrated by relevant agencies such as the Regional Development Planning Agency, Spatial Planning, and the Environment Agency to run smoothly. Optimizing regulations to encourage community participation in managing, monitoring, and increasing the availability of green open spaces in South Sulawesi.

The availability of green open space in South Sulawesi Province currently ranges from 7-13% when added to the entire area of green open space in residential areas and green alleys. Green open space management is very important to be considered and implemented in order to support ecological, social, economic, cultural and aesthetic processes, with the main functions as areas: a) oxygen provider and microclimate regulator; b) prevention and neutralization of pollution; c) water absorption and protection; d) conservation and bioculture; e) education, sports and recreation/tourism; and f) protecting landscapes (Wolch et al., 2014).

## 6. Conclusion

The expansion of green open space in a sustainable manner can be pursued by maximizing government policies through strategic management that is right on target, easier to implement, and optimizing community participation in cooperation networks. Planning the financial budgeting of green open space intelligently, so that there are no shortages and obstacles, especially in the land acquisition budget which is considered very appropriate and has been designated as a green open space area. The availability of adequate and more modern facilities and infrastructure in accordance with the development of people's lives that are increasingly advanced. In addition, coordination and leadership commitment are needed to support the integration of the planning, implementation, management, and monitoring system to oversee the policy and implementation of green open space in accordance with the objectives in the rules that have been set.

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## References

1. Acemoglu, D., Johnson, S., & Robinson, J. A. (2012). *An african success story: Botswana*. Princeton University Press.
2. Creswell, J. W., Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
3. Cudai Nur, A., & Risma Niswaty. (2021). *Report of Research on Evaluation of Green Open Space Policies in South Sulawesi*. General Research, LP2M UNM.
4. Cudai Nur, A., & Niswaty, R. (2021). Effect of Inadequate Availability of Facilities Infrastructure and Finance on the Implementation of Green Open Space Policy. In: *Proceedings of the International Joined Conference on Social Science (ICSS 2021)* (pp. 571-575). Springer Nature Atlantis Press.
5. Da Silva, L. M., & Toda, H. (2021). Policy implementation of local governments in waste management in Dili City, Timor Leste. *Journal of Governance and Accountability Studies*, 1(1), 1–13.
6. Douvere, F. (2008). The importance of marine spatial planning in advancing ecosystem-based sea use management. *Marine Policy*, 32(5), 762–771.
7. Ehrenfreund, P., & Peter, N. (2009). Toward a paradigm shift in managing future global space exploration endeavors. *Space Policy*, 25(4), 244–256.
8. Ellen, P. S. (1994). Do we know what we need to know? Objective and subjective knowledge effects on pro-ecological behaviors. *Journal of Business Research*, 30(1), 43–52. Firoiu, D., Ionescu, G. H., Băndoi, A.,
9. Easton, D., & Dennis, J. (1965). The child's image of government. *ANNALS of the American Academy of Political and Social Science*, 361(1), 40–57.
10. Florea, N. M., & Jianu, E. (2019). Achieving sustainable development goals (SDG): Implementation of the 2030 Agenda in Romania. *Sustainability*, 11(7), 2156.
11. He, B., & Warren, M. E. (2011). Authoritarian deliberation: The deliberative turn in Chinese political development. *Perspectives on Politics*, 9(2), 269–289.
12. Higgins, E. T. (1992). Achieving 'shared reality' in the communication game: A social action that create; meaning. *Journal of Language and Social Psychology*, 11(3), 107–131.
13. Hopwood, B., Mellor, M., & O'Brien, G. (2005). Sustainable development: mapping different approaches. *Sustainable Development*, 13(1), 38–52.
14. Kaenton, J., Semma, E., Timchenko, V., El Ganaoui, M., Leonardi, E., & de Vahl Davis, G. (2004). Effects of anisotropy and

- solid/liquid thermal conductivity ratio on flow instabilities during inverted Bridgman growth. *International Journal of Heat and Mass Transfer*, 47(14–16), 3403–3413.
15. Krisch, N., & Kingsbury, B. (2006). Introduction: global governance and global administrative law in the international legal order. *European Journal of International Law*, 17(1), 1–13.
  16. Kugelberg, E., & Lindblom, U. (1959). The mechanism of the pain in trigeminal neuralgia', *J. Neurol. Neurosurg. Psychiatry*, 22(1), 36. <https://doi.org/10.35912/jgas.v1i1.343>
  17. Marcus, C. C., & Francis, C. (1997). *People places: design guidelines for urban open space*. John Wiley & Sons.
  18. Nobre, C. A., Sampaio, G., Borma, L. S., Castilla-Rubio, J. C., Silva, J. S., & Cardoso, M. (2016). Land-use and climate change risks in the Amazon and the need of a novel sustainable development paradigm. *Proceedings of the National Academy of Sciences*, 113(39), 10759–10768.
  19. Noi, E. N., Liliwari, A., & Tammunu, L. N. (2019). Implementation of the regulations of the board of directors of TVRI public agency on Non-Civil Servant in public television broadcasting agency in Indonesia. *Annals of Management and Organization Research*, 1(2), 95–106. <https://doi.org/10.35912/amor.v1i2.272>
  20. Redclift, M. (2002). *Sustainable development: Exploring the contradictions*. Routledge.
  21. Rusnanda, R., & Ridwan, N. (2019). Identification of Quality Open Green Space in Blang Padang Areas. *Jurnal Inovasi Teknologi dan Rekayasa*, 4(2), 84–89. <https://doi.org/10.31572/inotera.Vol4.Iss2.2019.ID83>
  22. Satispi, E., & Chandra, I. (2020). Implementation of Bureaucratic Reform in Government of South Tangerang City. In: *Proceedings of the 2nd International Conference on Social Sciences, ICSS 2019*, Jakarta, Indonesia.
  23. Scharpf, F. W. (2018). *Games real actors play: Actor-centered institutionalism in policy research*. Routledge.
  24. Scheele, D. (1975). II. C. Reality Construction as a Product of Delphi Interaction. *Delphi Method Techniques and Applications*, p. 37.
  25. Surya, B., Hadijah, H., Suriani, S., Baharuddin, B., Fitriyah, A. T., Menne, F., & Rasyidi, E. S. (2020). Spatial Transformation of a New City in 2006–2020: Perspectives on the Spatial Dynamics, Environmental Quality Degradation, and Socio—Economic Sustainability of Local Communities in Makassar City, Indonesia. *Land*, 9(9), 324. <https://doi.org/10.3390/land9090324>
  26. Tahir, M. M., Nahrudin, Z., & Ekawaty, D. (2016). Adaptive Governance: Implementation of Green Open Space Program. In: *International Conference on Ethics in Governance (ICONEG 2016)* (pp. 303–307).