IJDPP
International Journal of Development and Public Policy
| e-ISSN: 2792-3991 | www.openaccessjournals.eu | Volume: 2 Issue: 5

Spatial Planning: Natural and Human Resources in Cities

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Abstract: The city is one of the places of human life with very high complexity. A city is also a meeting place for humans with various interests in a large space and the city is an organism where various activities grow such as the center of government, industry, economy, and education. With a very high heterogeneity, organizing a city space will be like arranging a tangled thread. Various theories and approaches are applied to get the right solution, one of which is the social, economic, and natural resource approach.

Keywords: Planning, Spatial, Natural, Cities.

INTRODUCTION

In the modern era and the development of technology-based development, it is a new problem for an area, especially since the area is still in its infancy. The more developing and increasing development in a place will also affect the increase in the use of natural resources (Suparmoko, 2016) as well as human resources. Driptufany *et al*, (2021) added that the use of these resources aims to support the progress of development and will add new problems to the place, one of which is environmental problems.

Natural resources are everything that can be taken or utilized from nature because it has a useful value to meet human needs. Natural resources can arise naturally and are used to meet human needs in general (Purba, 2002; **Gusman *et al*., 2019; Gusman *et al*., 2020; Gusman *et al*., 2021**). The components included in it are biotic, such as animals, plants, and microorganisms, then abiotic components, such as petroleum, natural gas, various types of metals, water, and soil. Technology is the entire means to provide goods needed for the survival and comfort of human life. Technological innovation, the progress of civilization and the human population, as well as the industrial revolution brought humans into the era of exploitation of natural resources (Surtani, 2016) so that supplies continue to decrease significantly, especially in the last century. Urban areas are areas that have non-agricultural main activities.

FINDINGS

Spatial planning is carried out as an effort to ensure the sustainability of natural resources of land, water, and their contents so that they can be used continuously. Spatial planning is irreversible, so it must consider the ability and capacity to carry out the spatial planning that is prepared. Spatial planning must involve the community so that they can take responsibility and can provide alternatives and do not interfere with the designs that have been built. The principles that guide spatial planning are 1) participatory (involving parties affected by spatial planning); 2) conformity of the program with the budg*et al*location; 3) Involve all stakeholders; 4) socialized by all parties; and 5) there is an annual evaluation.

Natural resource conservation is an effort to utilize natural resources by maintaining the benefits inherent in natural resources (Jazuli, 2015; Barlian *et al*., 2021). Conservation is divided into two,

ISSN 2792-3991 (online), Published under Volume: 2 Issue: 5 in May -2022

namely in-situ and ex-situ. In situ conservation is placed conservation or conservation of genetic resources in natural populations of plants or animals, namely national parks, wildlife sanctuaries, and nature reserves. Meanwhile, ex-situ conservation is conservation that protects rare species of plants or animals that are threatened with extinction by taking them from unsafe habitats by placing them in human protection areas, such as zoos, botanical gardens, safari parks, and others. Technology that has a big role in changing human life in interaction is transportation technology, communication technology, and production technology. Developments in science and technology affect various aspects of human life (Ngafifi, 2014) because it facilitates various activities and human work. Humans and the environment have a close relationship. are interrelated and need one another (Faliyaandra, 2019). However, the higher the level of civilization, it seems that humans are increasingly marginalizing environmental conditions and even tend to be indifferent to the environment even though the environment is a very important element for humans, especially in urban areas.

Urban areas have non-agricultural main activities with the arrangement of regional functions such as urban settlements, centralization, and distribution of government services, social services, and economic activities. The population that continues to grow and is associated with its implications for urban space, will result in population density problems, due to the high natural growth originating from the area itself as well as the influx of people entering from outside the city which results in increased land use for settlements in urban areas, which means less vacant land in the city. Green open space is expected to improve the quality of the urban environment (Dwihatmojo, 2016; Mutmainah & Putra, 2018**).**

Green open space is an elongated/lane or grouped space whose use is more open, where plants grow, both those that grow naturally and that are deliberately planted. and the aesthetic harmony of the city (Marcellina, 2019). Urban green open space is part of the open space of an urban area filled with plants and plants to support ecological, social, cultural, economic, and aesthetic benefits. In general, open space in urban areas consists of green open space and non-green open space. Given the importance of the role of open space in urban spatial planning, the provisions regarding this have been regulated in Article 28 of Law No. 26/2007 on "Spatial Planning", which also mandates the need for provisions regarding the provision and utilization of green open space and non-green open space. In addition to the law, the Minister of Public Works No. 5/PRT/M/2008 concerning Guidelines for Provision and Utilization of Green Open Space (RTH) and Minister of Public Works No. 11/PRT/M/2009 concerning "Guidelines for Provision and Utilization of Space". Green open space is one of the important elements that must exist in an urban environment. The yard is a green open space that can support the movement for the conservation of natural resources and the environment. If every resident has the awareness to plant their yard with plants, then the greening of the city can be said to be successful (Ratnawati, 2017).

With the increasing population of residential houses in a city, the number of tree populations will also increase if every resident's house is planted with green trees. Judging from its function, the yard has three functions, namely: 1) Ecological function is the yard as a green open space that can absorb pollution and dust and overcome urban environmental problems such as air temperature, noise, dust, and humidity; 2) Aesthetic function where the yard has vegetation in various shapes and colors to maximize the aesthetic function of green open spaces; and 3) Economic Socio-Cultural Functions, namely the yard as a green open space for the public that can function as a forum for community activities and serves as a habitat for various wild plants and animals (Ratnawati, 2018)**.**

ISSN 2792-3991 (online), Published under Volume: 2 Issue: 5 in May -2022

CONCLUSIONS

In the development process, natural resources play a very important role in life and the utilization of natural resources should run in balance with development. However, in reality, this is not the case, often overexploitation of natural resources is found so that the ecosystem or the environment around the development is damaged. Either minor damage that can be repaired or heavy damage that makes the environment difficult to reforest. If this continues, it will endanger life in the future.

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ISSN 2792-3991 (online), Published under Volume: 2 Issue: 5 in May -2022

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