10.70711/frim.v2i7.5023

Urban and Rural Planning Strategy from the Perspective of Sustainable Development

Hui Zeng

Xihua University, Chengdu, Sichuan 610039

Abstract: This paper discusses the urban and rural planning strategies from the perspective of sustainable development. By analyzing the characteristics of sustainable development, we propose planning strategies to meet the needs of urban and rural development. This paper emphasizes the importance of ecological environment protection, efficient utilization of resources and social equity development, and puts forward specific strategies such as green infrastructure construction, mixed functional zone planning and public transport oriented development. These strategies aim to promote the coordinated development of urban and rural areas, improve the quality of life of residents, and achieve sustainable economic, social and environmental development.

Keywords: Sustainable development; Urban and rural planning; Coordinated development

Introduction

With the acceleration of urbanization, urban and rural development is faced with many challenges such as resource shortage, environmental pollution and social inequality. The traditional urban and rural planning mode has been difficult to adapt to the development needs of the new period. The concept of sustainable development provides a new idea for solving these problems. It emphasizes the coordinated development of economy, society and environment, and points out the direction for urban and rural planning.

1. Characteristics of sustainable development

1.1 Long-term and comprehensive nature

Sustainable development is a long-term and dynamic process, which needs to examine its impact from the time dimension. It focuses not only on the needs of contemporary people, but also on the well-being of future generations, and ensures intergenerational equity in resources and opportunities. Sustainable development also reflects the characteristics of comprehensiveness, emphasizing the common development of the three pillars of economy, society and environment. While pursuing economic growth, we should attach importance to social fairness and justice, eliminate poverty, provide quality education and medical services, and create an inclusive and safe social environment [11]. At the same time, sustainable development attaches great importance to the construction of ecological civilization, and is committed to reducing resource consumption, reducing environmental pollution, protecting biodiversity, and realizing the harmonious coexistence between man and nature. Only by taking into account economic prosperity, social progress and environmental friendliness can we achieve all-round and multi-level sustainable development.

1.2 Coordination and balance

The inherent requirement of sustainable development is to realize the coordinated development and dynamic balance between various elements. In the process of development, the relationship between economic development and social equity, resource utilization and environmental protection, contemporary needs and the interests of future generations should be handled as a whole. Coordination emphasizes the mutual promotion and benign interaction between the subsystems, and avoids the development of the other party at the expense of one party. Balance requires balancing the advantages and disadvantages in development, taking into account short-term goals and long-term interests, while pursuing economic benefits, and treating social benefits and ecological benefits equally, so as to realize the optimization of overall interests to the maximum extent. Only by constantly coordinating the demands of all parties in the dynamic process and balancing multiple goals in the course of development can we find a path of sustainable development with a smooth road, remarkable results and a solid foundation.

1.3 Innovation and adaptability

Sustainable development is essentially a process of continuous innovation and keeping pace with The Times. In the face of multiple challenges such as resource depletion, environmental deterioration, and the gap between the rich and the poor, it is difficult to continue by relying

solely on traditional development models and paths. We must give full play to the engine role of scientific and technological innovation, accelerate the breeding and application of new technologies, new forms of business, and new models, and improve the quality and efficiency of development. At the same time, sustainable development also requires a strong adaptability and resilience of ^[2]. In a complex and volatile external environment, we should adjust our development thinking and policy orientation in a timely manner, take flexible countermeasures, turn crises into a turning point and challenges into opportunities, and seize the initiative in development in the midst of turbulent changes. Only in this way can we continue a new chapter of sustainable development in the changing current of The Times.

2. Urban and rural planning strategy from the perspective of sustainable development

2.1 Ecological priority of land use

Urban and rural planning should uphold the concept of giving priority to ecology, scientifically delimit the red line for ecological protection, strictly control the occupation of ecological space, and maintain the regional ecological security pattern. Within the boundary of urban development, urban and rural construction land should be reasonably arranged to improve the efficiency and intensity of land use, and avoid excessive expansion and disorderly spread. At the same time, we should strictly protect cultivated land, especially basic farmland, consolidate the foundation of food security, and promote the combination of urban and rural land use control with ecological conservation [3]. In rural areas, comprehensive land improvement should be carried out in light of local conditions, put existing construction land to good use, strictly control the scale of incremental land use, and strengthen the protection of cultivated land and ecological land, so as to realize rural ecological revitalization. By optimizing the pattern of territorial space development and protection, balancing production, living and ecological space between urban and rural areas, we will build a new spatial pattern of integrated urban and rural development, laying a solid foundation for sustainable development.

2.2 Green infrastructure construction

Urban and rural planning should pay attention to the systematic layout and construction of green infrastructure, and organically integrate ecological elements into urban and rural space. In urban areas, the urban green space system should be scientifically planned, and the urban green open space network composed of park green space, protective green space and square garden should be constructed, so as to improve the urban ecological service function. At the same time, it is necessary to strengthen the ecological management of the urban water system, build waterfront landscape corridors, give full play to the role of regulating, storing and purifying rivers, lakes and wetlands, and enhance the resilience of the urban environment. In rural areas, we should vigorously implement the concept of "clear waters and green mountains are golden mountains and silver mountains", strengthen the protection of natural ecological space, build ecological agricultural landscape, build pastoral complex, and realize the transformation of rural ecological value. Urban and rural areas should strengthen the connectivity of green infrastructure, build a regional ecological network, improve the integrity and stability of the ecosystem, and create a comfortable and pleasant working and living environment for residents^[3].

2.3 Mixed functional area planning

Urban and rural planning should advocate the development mode of mixed functional areas, promote the reasonable mix and compact layout of residential, employment, public service and other functions, and improve the efficiency of land use and urban and rural vitality. In the urban center, multiple functions such as housing, commerce, office and culture should be rationally distributed, and the three-dimensional utilization of buildings should be encouraged to build a compound community. In the outer areas of the city, the comprehensive service centers should be laid out in combination with the rail transit stations to guide the compact development of the surrounding areas and realize the integrated development of the rail stations and cities. At the same time, public service facilities such as education, medical care and elderly care should be rationally allocated to promote the balance between jobs and housing and reduce the commuting distance of residents. In rural areas, mixed functional areas should be developed according to local conditions, combining the village layout and industrial characteristics, rural public service facilities should be improved, the integrated development of rural primary, secondary and tertiary industries should be encouraged, and the livability and sense of gain in rural areas should be improved. Through the planning and construction of mixed functional areas, a compact, efficient and dynamic urban and rural space form will be shaped to promote the coordinated development of urban and rural areas^[4].

2.4 Development of public transport oriented

Urban and rural planning should adhere to the development strategy of public transport oriented, give priority to the development of large-volume public transport system, and guide the optimization of urban and rural spatial structure and intensive and efficient development. In urban areas, large-volume bus corridors such as rail transit should be scientifically arranged to guide urban functions and population to gather at bus stations, so as to form a sustainable spatial pattern of bus leading, land use and bus coordination. At the same time, we should

improve the conventional bus and slow traffic system, build a three-dimensional green travel network that connects and transfers with rail transit, and encourage green and low-carbon travel mode [4]. In rural areas, the rural passenger transport and micro-bus system should be improved by combining the characteristics of passenger flow demand to improve the accessibility and accessibility of rural residents. In the urban-rural fringe, the connection between the bus and slow traffic system and the urban main road should be strengthened, and an integrated green travel mode of "bus + slow traffic" should be created. Lead urban and rural development through public transport, reduce car travel, reduce energy consumption and carbon emissions in the transport sector, and promote low-carbon transformation development in urban and rural areas.

3. Conclusion

In a word, the urban-rural planning strategy from the perspective of sustainable development provides new ideas for solving the current problems faced by urban and rural development. Through measures such as land use and green infrastructure construction, we can effectively promote the coordinated development of rural and urban areas, improve the efficiency of resource utilization and protect the ecological environment. However, the implementation of these strategies also requires the joint efforts of the government, enterprises and the general public. In the future, we should continue to explore innovative planning methods to contribute to the construction of sustainable urban and rural areas.

References

- [1] Huang Zhikai. Innovation of rural revitalization planning strategy under the concept of sustainable development [J]. Agricultural economy, 2023, (05): 57-58.
- [2] Chen Wenjun. On the strategy of urban and rural scientific planning to promote sustainable industrial development in Chongxin County [J]. Comprehensive Agricultural Development in China, 2022, (11): 58-60.
- [3] Wan Chao. Construction strategies for sustainable living environment in urban and rural planning [J]. Smart City, 2021, 7 (10): 113-114.
- [4] Geng Yang. Research on the spatial evolution and development strategy of urban and rural settlements in Gucheng County based on multi-source data [D]. Tianjin University, 2021.