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SUSTAINABLE ALLOCATION OF ECONOMY, SOCIETY, ENVIRONMENT AND RESOURCE: A SYSTEM DYNAMICS APPROACH

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Abstract

In order to solve the problem of increasingly serious resource pressure and urban development imbalance in Beijing, further promote the sustainable development of the city and improve the allocation efficiency of resource factors, this paper divides the resource factors system of Beijing into four parts: economic subsystem, social subsystem, environmental subsystem and resource subsystem. Based on System Dynamics, this paper establishes a System Dynamics model for optimizing the efficiency of capital resource factor allocation, sets up five simulation scenarios combining the misallocation of capital resource factor resources, and analyses how to further optimize resource allocation through system simulation and empirical methods. It is found that the System Dynamics model of capital resource factor allocation efficiency optimization has satisfactory predictability. Additionally, social benefit enhancement type and resource-saving type can realize efficient allocation of economic, social, environmental and resource elements, and provide a conducive idea for further promoting urban sustainable development policies.

Key words: resource allocation efficiency, sustainable development, system dynamics

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