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Retraction

Retracted: Construction of Land Ecological Sustainable Evaluation System Based on Dynamic Simulation and TOPSIS Model

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope
(2) Discrepancies in the description of the research reported
(3) Discrepancies between the availability of data and the research described
(4) Inappropriate citations
(5) Incoherent, meaningless and/or irrelevant content included in the article
(6) Manipulated or compromised peer review

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] Z. Qu, "Construction of Land Ecological Sustainable Evaluation System Based on Dynamic Simulation and TOPSIS Model," *Journal of Sensors*, vol. 2023, Article ID 7729194, 10 pages, 2023.

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Research Article

Construction of Land Ecological Sustainable Evaluation System Based on Dynamic Simulation and TOPSIS Model

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Land has always been the resource on which human beings depend for survival and development, which not only provides space for survival but also is the fundamental source of productivity. With the development of commercialization and urbanization, land resources have been destroyed. As a basic living resource, sustainable land use is particularly important. According to the actual situation of regional resource conditions, with the help of TOPSIS model and dynamic simulation, the land ecological evaluation system is established, and the ecological sustainable development is carried out in the whole country, and the research on land greening is deepened. The results show that (1) the economic level of sustainable utilization of land resources has been continuously improved, from 0.15 to 0.38 in the main urban area, from 0.12 to 0.36 in the commercial area, from 0.1 to 0.37 in the suburbs, from 0.11 to 0.38 in the towns, and from 0.25 to 0.5 in the countryside, to provide economic support for ecological protection. (2) According to the use area of relevant land types, forest land and cultivated land occupy the largest with 32830 hm and 13953 hm, respectively, which are the largest usable areas and the most important resources for ecological protection. (3) In the calculation of future ecological construction area by relevant models, the overall coordination control is obtained from the initial high prediction judgment of 0.552 to 0.888. (4) From different development evaluation angles, the economic angle has always provided the greatest support for ecological protection, and its high-level dependence level value is as high as 0.72, compared with 0.55 and 0.6 from the social angle and environmental angle, so the sustainable ecological protection construction needs a lot of economic support.

1. Introduction

Land, as a resource for human society to provide well-being, is irreplaceable due to its own limitation in area. With the high demand of population and the acceleration of development demand, land resources have been destroyed and polluted to some extent, which is also a prerequisite for the sustainable development of green ecology in the future. Working in the whole country will also be generally recognized and accepted by people, and it will also be the determination that the whole people need to push and maintain. Establishing an effective sustainable evaluation system and determining the corresponding evaluation objectives will play a key role in the later maintenance work and promote the rational use of land resources. Using extreme value standardization and entropy weight method to analyze the situation of sustainable land use, the results show that the development of "resources-economy-society" is not coordinated [1]. Spatial law of sustainable land use value was analyzed by software drawing, and the obstacle factors affecting sustainable development were found out [2]. In order to explore the level of sustainable land use in limestone mountainous areas, triangular model and entropy weight method were used to analyze the land use status and identify the existing problems [3]. The matching degree of ecological environment is simulated and evaluated by gravity center model, and the weight is determined by entropy method [4]. Using grid analysis method to extract data and map, the spatial differentiation of land ecosystem health was analyzed, and the spatial relationship between ecosystem health and topography was explored [5]. It reveals the root of urban ecological risks and the negative impact of technological progress on ecological environment [6]. This paper analyzes the interaction and coupling relationship between urban system and regional ecosystem, constructs the coupling model of urbanization and ecology, and calculates its coordination degree [7]. Using the principles of ecological economics and systems engineering methods to change the mode of production and consumption and realize the sustainable use of land must be based on the balance of ecological economy [8]. Analytic Hierarchy Process (AHP) is used to determine the weight of each index to analyze the influencing factors of land remediation sustainability and to build an evaluation index system of land remediation sustainability [9]. The evaluation method of resource carrying capacity is constructed, and the evaluation parameters of land resource carrying capacity based on the value of providing ecological services are established [10]. The catastrophe series method is used to reveal the overall change trend of land ecological security in this area and provide the basis for implementing the construction of regional ecological civilization [11]. With the help of grey target model, the impact of ecological environment is quantified, and the comprehensive index method is used for comparative verification [12]. In order to explore the status of land ecological security in counties under different economic development models, the evaluation system of land ecological security was constructed by DPSIR conceptual model [13]: analyze the hot spots of land ecological research, improve the technical method system of land ecological evaluation, and strengthen supervision [14]. This paper expounds the main laws, characteristics, and future development direction of land ecological security development in China and discusses the determination of future evaluation index weight and safety threshold of land ecological security [15].

2. Theory of Dynamic Simulation and TOPSIS Model

2.1. Evaluation Model of Information System Based on Constraint Theory. TOPSIS model is proposed for the first time in the 20th century, that is, the ranking method of approaching ideal solution, which is an evaluation method of multiobjective decision-making. Mainly used in the economic field of optimization scheme selection, the idea of land resources research is to judge the evaluation of the quality of the target object. It is necessary to consider both subjective and objective factors, to construct the model matrix. The build steps are as follows:

Constructing Decision Matrix [16]:

The objective function has N evaluation objects, forming M standardized matrices and R decision matrices, and the constructed decision matrices are

$$R = \begin{pmatrix} X_{11} & \cdots & X_{1n} \\ \vdots & \ddots & \vdots \\ X_{m1} & \cdots & X_{mn} \end{pmatrix}. \quad (1)$$

Find the best and worst of the normalized value R.

Optimal Solution [17]:

$$R^+ = (R_1^+, R_2^+, \cdots, R_m^+). \quad (2)$$

Worst Solution [18]:

$$R^- = (R_1^-, R_2^-, \cdots, R_m^-). \quad (3)$$

In the formula, R_{ij} is the normalized value of matrix R. Mainly for the evaluation object and target to solve the most suitable system of decision-making results, which is to determine the weight between the combined objects, using sustainable comprehensive index calculation. The Euclidean distance is used to solve the problem with the best and worst results, and the ecological resources are fully utilized when they are close to each other.

Calculate the Euclidean distance between the evaluation object and the good and bad values under the combination weighting. That is, the distance between the i-th evaluation object and the advantages and disadvantages.

$$D_i^+ = \sqrt{\sum_{j=1}^{m} W_j^0 \left(R_j^+ - R_{ij}\right)^2}, \quad (4)$$

$$D_i^- = \sqrt{\sum_{j=1}^{m} W_j^0 \left(R_j^- - R_{ij}\right)^2}, \quad (5)$$

where D^+ and D^- represent the best distance and the worst distance, respectively, and W is the combined weight.

Comprehensive Index of Sustainable Utilization of Land Resources:

$$G_i = \frac{D_i^-}{D_i^+ + D_i^-}. \quad (6)$$

Among them, $0 \le G \le 1$, the closer the comprehensive index is to 1, the more resources can be used, the higher the level of relative sustainable development, and vice versa. The model is processed as shown in Figure 1.

When constructing ecological decision-making environment, we should start from both objectives and related information. Among them, the target data needs to be standardized and the relevant weight coefficient is determined, and then the positive and negative ideal distance and pasting progress can be calculated, so as to get the final sorting work. In the aspect of information processing, it is necessary to reduce attributes to get attribute weights and combine the optimal weight with the system in selecting conditions.

2.1.1. Coordination Coefficient and Obstacle Degree. Sustainable utilization evaluation is a complex system composed of multi-subsystems. The level of sustainable utilization not only depends on the total number of subsystems but also depends on the coordination degree of multiple subsystems, that is, the coordination function of the three subsystems of economy, society, and environmental resources. The

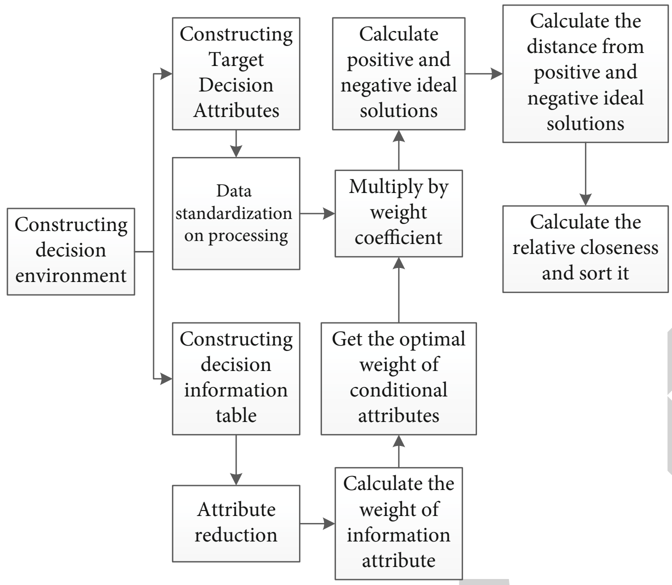

Figure 1: TOPSIS processing method.

coordination coefficient is introduced to evaluate the development among the three.

$$C_i = 1 - \frac{S_i}{\eta_i}. \quad (7)$$

Among them, C is the coordination coefficient of land availability every year; S is the standard deviation of the comprehensive coefficients of the three criterion layers.

Analyzing the obstacles existing in the system can help to understand the obstacles of various indicators and take targeted measures to implement ecology. The experiment adopts the obstacle factors of comprehensive index for diagnosis.

$$T_j = W_j \times U_{ij}, \quad (8)$$

$$I_j = 1 - K_j, \quad (9)$$

$$Q_{ij} = \frac{T_j \times I_j}{\sum_{j=1}^{15} T_j \times I_j}. \quad (10)$$

In the formula, T represents the contribution of unit index, and W is the weight of criterion layer; U is the single index weight of the criterion layer. Because the obstacle degree O is too high, it is difficult to develop sustainably, so it needs to be controlled in a small interval. The coordination coefficient is mainly coordinated according to the situation that resources can be used, and it needs to consider the dynamic changes of local policies and environment to carry out turnover work at all times, so as to achieve maximum efficiency. Barrier factors should consider the obstacles that may occur in the process of information flow, and it is necessary to comprehensively judge and eliminate obstacles between levels, so as to achieve comprehensive and smooth operation of the system.

2.2. Principle and Method of Dynamic Simulation Technology. Cellular automaton is a discrete model composed of many identical units. In simulating the interaction of spatial processes and its wide use, it needs a complete rule of space, domain, time, and transformation process. The algorithm is as follows: the state of the cell at time t and the state of the surrounding domain determine the state in the next period $(t + 1)$.

$$S_{(t+1)} = f\left(S_{(t)}, N\right), \quad (11)$$

where S is the cell state, N is the neighborhood, and F is the state transition rule function of interaction.

Markov model is a special motion process model based on stochastic process theory, which is the result of calculating the probability of state transition. Event development to predict the changes at a certain moment can effectively reduce the state of error in a certain period of land use evolution prediction research can be very good stability and accuracy. The transition probability matrix formula of the model is as follows:

$$P = \begin{pmatrix} P_{11} & \cdots & P_{1n} \\ \vdots & \ddots & \vdots \\ P_{m1} & \cdots & P_{mn} \end{pmatrix}. \quad (12)$$

In the formula, N represents the number of land use types, and P is the ecological use probability that can be converted from the beginning to the end of the study period.

Among them,

$$\sum_{j=1}^{n} P_{ij} = 1, 0 \le P_{ij} \le 1. \quad (13)$$

The Markov process is as follows [19]:

$$P(t+1) = P(t)P, \tag{14}$$

where P represents the predicted state vector at time t, which can effectively utilize the transition probability between types. The use of Markov process is to predict the possible deterioration probability of resources in the process of time and space change, which will affect the effective utilization value, so it is necessary to transform sustainable resources, and then form ecological green recycling resources. What are needed to be considered are the change of time nodes and the accurate prediction of key nodes.

2.2.1. Regression Equation Parameters. Because of the correlation between the spatial categories and environmental factors in the ecological demonstration area, the regression model can be adopted for analysis, and the formula is as follows:

$$\mathrm{Log}\left(\frac{p_N}{1-p_N}\right) = \beta_0 + X_1\beta_1 + X_2\beta_2 +, \cdots, + X_n\beta_n. \tag{15}$$

In the formula, P represents a grid unit where the spatial ground class appears; X is the independent variable, which represents different driving factors here, and β is the regression coefficient.

Before the binary regression analysis, the binary file is formatted. It should be noted that each spatial regression is independent of each other, that is, a certain spatial factor is imported separately, including six spatial classes. The regression analysis equation is as follows:

Agricultural Space [20]:

$$p_0 = \mathrm{Log}\left(\frac{p_0}{1-p_0}\right). \tag{16}$$

Industrial Production Space [21]:

$$p_1 = \mathrm{Log}\left(\frac{p_1}{1-p_1}\right). \tag{17}$$

Urban Living Space [22]:

$$p_2 = \mathrm{Log}\left(\frac{p_2}{1-p_2}\right). \tag{18}$$

Rural Living Space [23]:

$$p_3 = \mathrm{Log}\left(\frac{p_3}{1-p_3}\right). \tag{19}$$

Green Ecological Space [24]:

$$p_4 = \mathrm{Log}\left(\frac{p_4}{1-p_4}\right). \tag{20}$$

Blue Ecological Space [25]:

$$p_5 = \mathrm{Log}\left(\frac{p_5}{1-p_5}\right). \tag{21}$$

According to the regression equation analysis, we can see that all kinds of driving factors in each living space are compared with the total spatial difference, and the final regular changes are reasonably explained to the spatial factors. In the calculation of six space types, relying on the exponential function of regression analysis to solve the space factors can effectively express the regression analysis that can be formed between the driving factors of each space and the whole space. The ecological space expressed in this way has aggregation effect display, and the calculation accuracy of environmental factors is greatly improved.

3. Evaluation and Analysis of Land Ecosystem Service Value

3.1. Determination of Service Equivalent Factor. In the process of ecological evaluation, it mainly includes the determination of equivalent factor, the correction of value coefficient, and the display of existing research results and experimental results of distinguishing research areas. According to the classification and explanation of ecosystem service function, the value index can be effectively evaluated. According to the actual relevant value coefficient, the land resources are adjusted and revised, and the revised data of various equivalent tables are as follows:

According to the revised Table 1, it can be known that the area ratio of paddy field to dry land is decreasing, and the utilization of paddy field is cancelled in cultivated land area, so broad-leaved forest will be studied and carried out reasonably for ecological balance. The revised index also has the basis theory for considering sustainable development in the future, so as to make practical use of it. It can be seen from the correction coefficient that each land type has a specific coefficient correspondence. For example, the correction coefficient of garden land is obtained by bisecting the area of woodland and grassland. After classification explanation and correction, we can evaluate the valuable resource indicators, and then provide a theoretical basis for the establishment of the system.

3.2. Estimation of Ecosystem Service Value. Equivalent factor method is selected for evaluation, and farmland ecosystem is selected as the main economic value generation project, and a single economic value orientation can be obtained by calculating the unit study area. Factor analysis is selected for the evaluation of the total value, and the evaluation formula is as follows:

$$\mathrm{ESV} = \sum_{i=1}^{n} A_i \times \mathrm{VC}_i, \tag{22}$$

$$\mathrm{ESV}_f = \sum_{i=1}^{n} A_i \times \mathrm{VC}_{fi}. \tag{23}$$

Table 1: Revision of resource coefficients.

Value coefficient of ecosystem services	Correction coefficient
Cultivated land	Dry land × paddy field
Woodland	Broad-leaved forest
Garden	(woodland + grassland)/2
Grassland	Bush
Water area	(water system + wetland)/2
Other lands	Bare land

Among them, ESV is the total value of service; A_i is the area of land; VC is the value coefficient of the whole service system. Here, we will be able to reflect the value of the service function, and the whole service will be fully reflected. In order to reflect the ecological value of a single township, we should not only consider the geographical location but also consider the impact of spatial layout, which are related to the planned area of the administrative region. In order to increase the utilization of space and reduce the impact of assessment due to the change of area, the service level of the average ecosystem will be used for assessment, and the calculation formula is as follows:

$$\mathrm{E\bar{S}V} = \frac{\mathrm{ESV}}{S_i}. \tag{24}$$

Among them, S_i represents the planned area of each township area, so that the average land value of each township can be obtained. Then using the network analysis method in the whole administrative region by comparing the differences brought about by network changes, the final realization of the division of the study area. The network division formula is as follows:

$$\mathrm{ESV}_m = \sum_{i=1}^{n} A_{im} \times \mathrm{VC}_i \div 1. \tag{25}$$

Each cell network is used as the data volume of value analysis, so that it can be effectively used in land planning. Among them, m represents multiple network cells, and A_m is the area of land use network, which will obtain the service value of the whole study area. ESV is calculated according to the product of value coefficient and total land area, which not only considers the practicality of geographical location but also needs to investigate the spatial layout. The quadrature of A_i and VC is to comprehensively judge the overall value, which is influenced by both.

3.3. Autocorrelation Analysis of Ecological Local Value. In the location of aggregation and differential distribution of land spatial geographical elements, the global space has certain limitations, and the local spatial autocorrelation reflects the accumulation degree of a certain area and its adjacent areas. In observing the local disequilibrium of the space, identifying the domain eigenvalue and correlation eigenvalue, the essence is to decompose the exponential domain. In order to measure the similarity of the periphery at a later stage and significantly improve the accumulation performance, the following evaluation work can be done: according to scatter plot and accumulation plot, the different aggregation of regional grids is studied, and the analysis is mainly carried out from four types, which are high accumulation (high utilization of sustainable resources in and around the grid itself), low-low accumulation (no connection with available resources in the surrounding environment), high and low accumulation (there are many available resources, but they cannot be combined with the surrounding environment), and bottom height accumulation (the utilization of grid itself is not high, but the surrounding grid resources can be efficiently utilized). The main project development process is shown in Figure 2:

In the circular effect process formed by economy, environment, and people, people are the direct recipients of land use, which is driven by the common expression effect of economy and environment. In the circulation process of rating system, utilization, and transformation resources, the system, as a display to judge the other two, can be further connected to the utilization power, and then form the whole big circulation evaluation system to comprehensively enhance the transformation potential.

3.4. Space for Sustainable Utilization. By dividing the sustainable utilization level of resources into different grades, we can use the relevant comprehensive index to classify and clearly understand the spatial distribution of land. The corresponding horizontal classification is shown in Table 2.

In the process of continuous evolution, the comprehensive improvement of random basic public service facilities and the improvement of resource utilization level have gradually stepped into a strong and sustainable state. The utilization level of education is high, which is the characteristic of centralization and decentralization. In the later work, in order to further narrow the range of extreme difference, it is necessary to strengthen regional coordination, not only local advantages but also gradual optimization of environment, which are the improvement of public resources and service facilities, and further enter a strong and sustainable development state. When the data in the grid is taken as the planning extraction of value judgment, the effect of single service value judgment can be realized. The service value of land resources is to promote the service value of individuals and society with individualized efficiency, so that individuals have the right to use resources independently and society has the right to share land resources, which will fully serve all personnel.

4. Construction of Land Ecological Sustainable Evaluation System

4.1. Analysis on the Change of Comprehensive Economic Index of Land Ecological Resources. From the substantial improvement of the national economy, it also proves that the funds available for ecological protection will also increase. Dividing from different regions can lay an

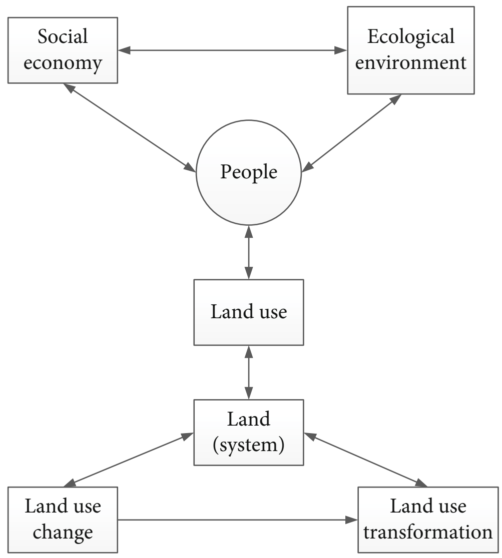

Figure 2: Land transformation potential and its evaluation.

experimental foundation for sustainable goals, and thus infer a relatively high level of comprehensive index. Judging from the annual usage, the economic index shows a fluctuating trend, as shown in Figure 3.

It can be seen from the economic fluctuation that the index fluctuates up and down from 2013 to 2016, and the most obvious decline is the economic index of suburbs, indicating that the construction work is not in place. Among them, the comprehensive index of rural areas has risen from 0.25 to 0.52 at first, which fully shows that rural areas have obvious protection measures in ecological sustainable development and have also received economic support, such as returning farmland to forests, green protection, and plant protection, and other corresponding land ecological work will also achieve comprehensive development.

4.2. Construction of Evaluation Index Matrix. Sustainable utilization of land resources involves a wide range, and there are relatively many affected factors. The experiment is based on the field investigation and draws lessons from the corresponding dynamic simulation of current resource use and the establishment of sustainable development model. In order to meet the real data and related data acquisition, draw lessons from the usage between different levels to form an evaluation index system, and its related system diagram is shown in Figure 4.

It can be seen from the chart results that from 2009 to 2016, the coordination coefficient increased from 0.5 to 0.72, the obstacle factor increased from 0.66 to 0.94, and its comprehensive index also increased from the initial 0.75 to 0.85. Through the relevant land rectification work, it has been comprehensively improved based on the annual economic growth, the change of land pollution, and economic growth in the commercial development of land resources, which leads to coordinated land resources and hinders the development of related improvement measures, which depends on economic changes. Land pollution has brought great challenges to ecological sustainability, and resources cannot be reused or recycled. Improvement is a long-term governance work, which requires a lot of manpower and economy, resulting in a difficult situation.

4.2.1. Evaluation of Land Dynamic Simulation Value. By calculating the quantity error of the model, the difference between the actual area and the predicted area is used to get the quantity error result. In this way, the future development of land use can be predicted. The error results of related types are shown in Figure 5:

The results show that the prediction error is low, and only the construction land error is relatively large, which is 0.87%. The simulation accuracy of forest land and cultivated land is high, and the accuracy of results is over 95%. These simulation results are based on good accuracy, which can effectively predict the future changes of resources availability. In the work of sustainable utilization of resources, reasonably control the use of various regions. For example, the control of urban land use scale is a reasonable control of resources. Reasonable layout of land uses structure to achieve the maximum effect of land resources. The improvement of management mechanism, the disposal of idle land resources, and the reasonable coordination of resource allocation lead to the improvement of land output efficiency.

4.2.2. Analysis of Resource Coordination Degree of Information System Model with Theory of Constraints. In order to continue the coordination division of the sustainable land use coordinated development level, according to the suitable change of the region, the coordination degree of resources under the unused level is analyzed. From the perspective of economy, resource environment, and society, the suitability coefficient of the model for regional coordination is analyzed, and the corresponding experimental results are shown in Figure 6.

Among them, VLKOR model is a subjective preference considering maximization and individual regret at the same time, which has ranking and credibility. The FCE method is a grade evaluation method that will rank the evaluation objects with the help of mathematical models. In the comparison of land area coordination coefficient among the three, TOSSIS model increases with the increase of observation area when the initial value is low, while the other two methods start with a higher coordination number, but it will still fluctuate or even decline due to the influence of area, which is not conducive to the coordination and coordination calculation of related resources in the later period.

4.3. Construction of Sustainable System of Land Resources. In order to protect the ecological environment and sustainable use of resources for the establishment of evaluation system, the experiment will maximize the protection of the environment, enhance the economy, and achieve comprehensive and sustainable development of land and resources. The standard and purpose of establishing the evaluation system is to increase the awareness of the whole people to care for the natural environment and achieve comprehensive and

Table 2: Grading table of land resource utilization level.

Scope	(0.2-0.3]	(0.3-0.4]	(0.4-0.5]	(0.5-0.6]	(0.6-0.7]	(0.7-0.8]
Type	Irrelevant	Weak	Very weak	Correlation	Stronger	Strong

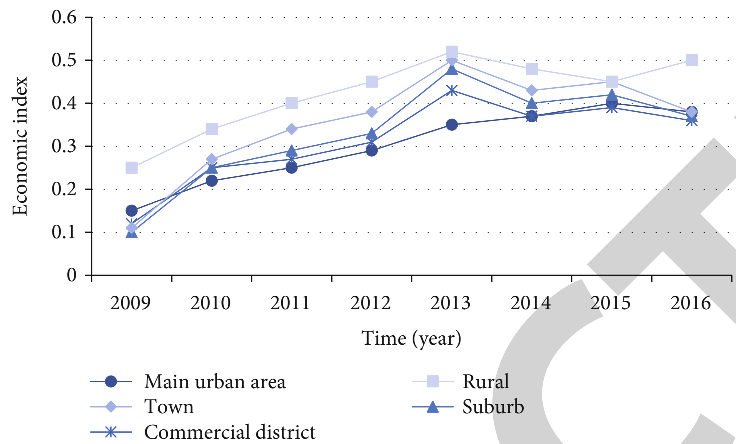

Figure 3: Trend chart of comprehensive index from economic point of view.

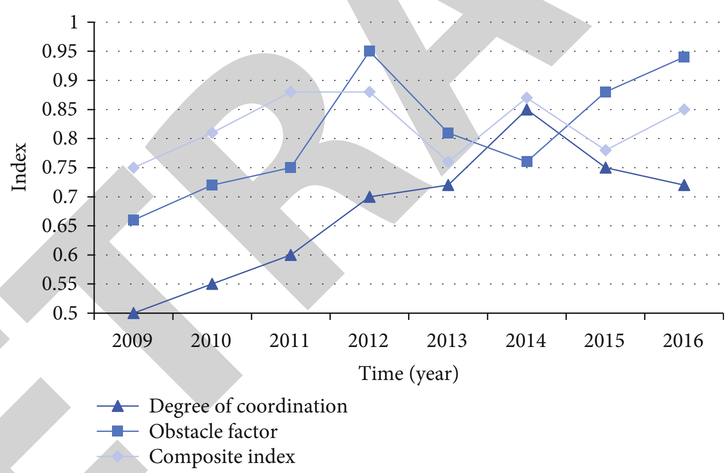

Figure 4: Statistical table of correlation coefficients from 2009 to 2016.

coordinated development with the concept of green ecology. The standard diagram of experimental construction constructed by it is shown in Figure 7.

From the indices of five different system criteria and three related resource conservation starting points, it can be concluded that the economic perspective is the priority factor in any standard level, followed by the resource availability perspective and finally the social level. In these three angles, the indexes corresponding to the high-level are 0.72, 0.55, and 0.6 standard coefficients, respectively, which is a high standard performance of highly sustainable utilization of resources.

4.4. Suggestions on Land Use Development. Under the background of land and space planning, the permanent scale of basic farmland should be determined first to ensure the basic cultivated land area. In the future, we should establish a perfect ecological protection mechanism, reduce the impact of urban construction land on the environment, and implement ecological restoration and governance. By determining the reasonable scale of the garden, it can achieve the optimal and effective realization of the natural ecological environment. According to the system results, the suggested results are shown in Figure 8.

After the implementation of relevant improvement measures, the degree of land availability has also been relatively improved. Among them, the relative exponential growth of corresponding improvement measures is 0.9, 0.27, 0.5, 0.64, and 0.65, and there is no negative growth, which indicates that the proposed development measures are effective

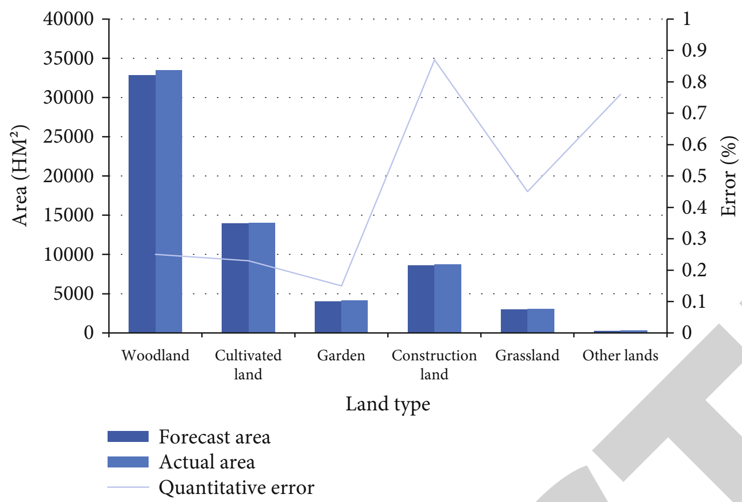

FIGURE 5: Simulation error analysis.

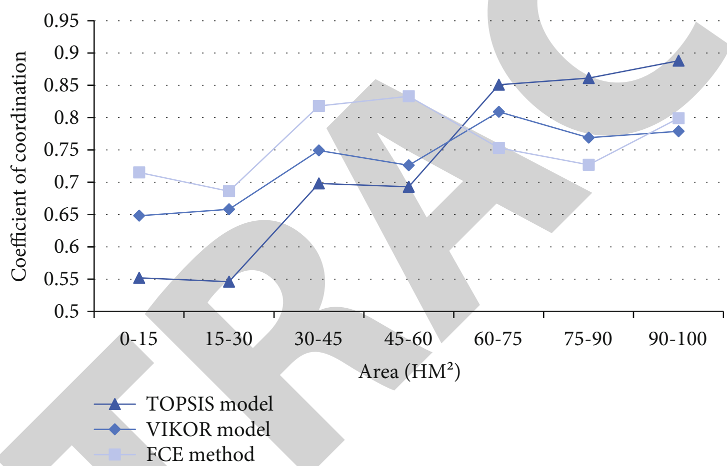

FIGURE 6: Comparison chart of coordination coefficient of related models.

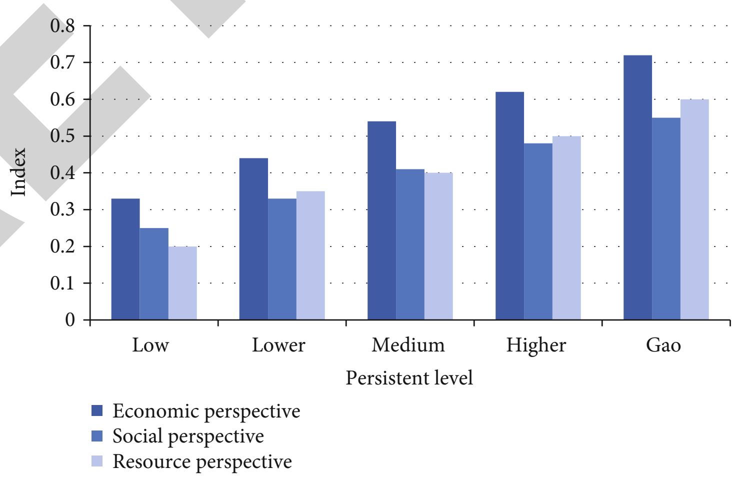

FIGURE 7: Comprehensive level grading standard table.

and the ecological sustainable resources will be utilized to the maximum extent. Land resources in China present a decreasing law from east to west. In economically developed areas, the interference degree of land is also the largest, while that in the central and western regions is smaller. Land use reflects the result of the interaction between regional ecological environment and economic activities, and the development of social activities also brings pressure to ecological

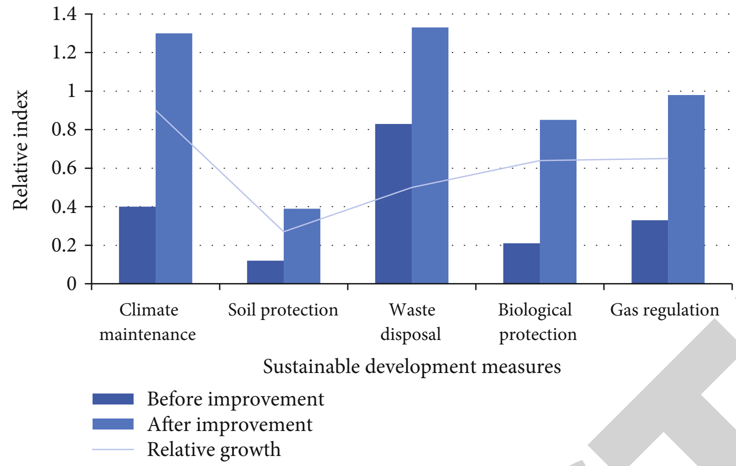

FIGURE 8: Comparison before and after ecological improvement.

construction, so it is a key decision to carry out the rationality of land construction.

5. Summary

The experiment takes the national land resources as the basic research unit, constructs an evaluation system from the perspectives of economy, society, and environment, and evaluates the sustainable direction of resources by using simulation and model. The relevant coordination coefficient is used to analyze the balanced development of resources, and the barrier degree model is used to diagnose the development of sustainable use of land resources. Then, with the help of grid scale, the spatial change characteristics of ecological service value are explored, and the service autocorrelation characteristics are explored from township land, and measures such as improving construction land, cultivated land, and forest land are carried out. Specific conclusions are as follows: (1) starting from the development of urban and rural areas. Around different angles, the evaluation system of land ecological sustainability is constructed. (2) The TOPSIS model is used to evaluate the regression of soil pollution, and the comprehensive index is rising in time and space. (3) From the evaluation results of each level of the system, it is concluded that the characteristics of economic growth are roughly three kinds of fluctuation changes: uniform increase, rapid increase and fluctuation. (4) From the perspective of economy, society, and resources, the calculated obstacle factors obviously show that there are obvious differences in the improvement of ecological sustainable utilization level in different regions.

The deficiencies and prospects of the experiment are as follows: (1) the technical deviation of each land survey, the results, and accuracy of the survey are inconsistent, and it is necessary to realize the accurate transformation of the survey land as the research direction. (2) It is difficult to obtain social and economic data, and there is a lack of long-term monitoring of land resources utilization, so it is necessary to study the periodic long-term and continuous evaluation work. (3) Because the time span of data is not large, its change characteristics are limited, which cannot fully reflect the change characteristics of land use. In estimating the availability of resource area, it is necessary to consider the limitations caused by land pollution in a deeper level. (4) Because the policy factors are constantly changing, it is necessary to fully consider the suitability in creating land use types, and the limitations in the future need to be continuously improved.

Data Availability

The experimental data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declared that there are no conflicts of interest regarding this work.

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