Postprint: New Trends in the Modernization of China' s Spatial Governance System After the 19th Party Congress

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Abstract

"Legislation as the foundation and planning as the precursor" represents the core content of modernizing the spatial governance system. The capacity to rationally regulate territorial space and build a beautiful homeland constitutes a crucial benchmark for measuring governance competence and proficiency. Following the 19th National Congress, China' s spatial governance system and capabilities will accelerate their progression toward scientization, legalization, systematization, and democratization. This will be primarily manifested in the following aspects: the foundational status of major function zones will be strengthened, with major function zone planning serving as a revolving door between development-oriented and layout-oriented planning, the major function zone strategy becoming a major long-term and stable strategy guiding the orderly development of China' s territorial space, and the major function zone system playing a foundational institutional role in ecological civilization construction; a spatial planning system covering the entire national territory will be basically established, with national, provincial, and county levels as China' s basic spatial planning units, supplemented by regional planning across provincial-level administrative regions, across prefecture-level cities, and across county-level domains, thereby standardizing the rational allocation of land resources, rational organization of spatial structure, and rational implementation of regional policies at different spatial scales of national and local levels; and an ecological civilization system centered on the territorial space development and protection system will be established, implementing five major actions: enhancing spatial regulation capacity, improving scientific management levels, expanding resource carrying capacity, improving ecological environment quality, and strengthening market mechanisms.

Full Text

Preamble

New Situation, New Economy, New Drivers, New Mechanism, and New Policy

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New Trends in the Modernization of China' s Spatial Governance System After the 19th CPC National Congress

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Abstract

"Legislation as the foundation, planning as the guide" represents the core of modernizing the spatial governance system. The ability to rationally regulate territorial space and build a beautiful homeland serves as a crucial indicator of governance capacity. Following the 19th CPC National Congress, China's spatial governance system and capabilities will accelerate toward greater scientific rigor, legal institutionalization, systematic integration, and democratic participation. This transformation will manifest primarily in three areas.

First, the foundational status of major function oriented zones will be significantly strengthened. The major function oriented zoning plan will act as a "revolving door" between development-oriented planning and layout-oriented planning, serving as a long-term and stable strategy guiding the orderly development of China' s territorial space. The major function oriented zoning system will play a fundamental role in ecological civilization construction.

Second, a comprehensive spatial planning system covering the entire national territory will be essentially established. With national, provincial, and county levels as the basic planning units, supplemented by regional plans spanning provincial administrative regions, prefecture-level cities, and counties, this system will regulate the rational allocation of territorial resources, organize spatial structures, and implement regional policies across different spatial scales.

Third, an ecological civilization system centered on territorial space development and protection institutions will be established. This system will implement five major actions: enhancing spatial regulation capacity, improving scientific management levels, expanding resource carrying capacity, improving ecological environmental quality, and strengthening market mechanisms.

Keywords: 19th CPC National Congress, spatial governance, major function oriented zones, spatial planning, ecological civilization

1. The Foundational Position of Major Function Oriented Zones Continues to Strengthen

1.1 Using the Major Function Oriented Zoning Map as a "Revolving Door" Between Development-Oriented and Layout-Oriented Planning

During the planned economy era, China emphasized development-oriented planning while neglecting spatial planning. Even after entering a period of large-scale development and construction following reform and opening up, spatial planning remained overlooked. Only when population, economic, and resource-environment contradictions became increasingly severe, directly affecting sustainable development and regional competitiveness, did spatial planning gain attention on the policy agenda. In recent years, the planning system has fallen into disarray, characterized by numerous types of spatial plans with unclear functional definitions and frequent conflicts among them. Meanwhile, as development-oriented plans have incorporated more spatial layout content with inconsistent planning horizons and spatial precision, the relationship between development-oriented and layout-oriented planning has become a pressing issue.

The major function oriented zoning map holds the potential to become the "single map" that General Secretary Xi Jinping demands must be implemented "to the end." Building a strategic system and institutional arrangement that combines goal orientation and problem orientation based on this map will enable high-level positioning, accurate targeting, long-term management, and comprehensive coordination. Major function oriented zones can serve as a revolving door between development-oriented and layout-oriented planning. In development-oriented planning, major function oriented zoning not only spatially implements and comprehensively deploys development strategies and target systems, but the four strategic patterns it articulates—urbanization, agricultural development, ecological security, and natural coastline—also become key components of national development-oriented planning. The goal of "basically forming a major function oriented zone layout" in the first centenary objective represents one of the targets of development-oriented planning.

In layout-oriented planning, major function oriented zones provide scientific designation of primary functional positioning for each county and district in China' s modernization process, enabling horizontal coordination of urbanization, regional coordinated development, ecological environment improvement, and blue economic space layout. These zones can serve as the master map for territorial space development and layout planning and as the basis for spatial regulation policies. Through implementation at lower levels of the spatial planning system and through control of spatial development intensity and proportional relationships among different geographic spaces, they fulfill the top-level design function of orderly territorial development and protection.

1.2 Fully Leveraging the Foundational Role of Major Function Oriented Zone Strategy and Institutions in Spatial Governance

Establishing the Coordinating Position of the Major Function Oriented Zone Strategy. China' s current four-plate regional development strategy (eastern region taking the lead, western development, northeast revitalization, and central region rise) still suffers from insufficient foresight, overly broad top-level design, and lack of specificity and guidance. The 13th Five-Year Plan established "basically forming a major function oriented zone layout" as a goal-oriented target to guide the regional overall strategy and coordinated development of the Beijing-Tianjin-Hebei region. After the 19th CPC National Congress, consideration should be given to replacing the four-plate strategy with "major function oriented zones" to form a long-term, stable overall strategy for territorial space development and protection, expressing the territorial space "single map"for the second centenary goal through major function oriented zones.

Playing the Foundational Institutional Role of Major Function Oriented Zones in System and Mechanism Reform. Among the supporting policies currently implemented in major function oriented zoning plans, the truly "high-value" policy is the special fiscal subsidy for national-level key ecological function zones, which has become the primary motivation for some local governments to request inclusion in ecological function zones. As fiscal subsidy policies for major agricultural production zones are implemented and supporting policies such as early warning and control for different functional zones are introduced, problems of relatively lagging supporting reforms and local governments' inability to attend to all aspects will surface. Therefore, a supporting policy system should be improved through systematic reform. Starting from enhancing the Party' s governance capacity, a differentiated cadre performance evaluation indicator system should be formulated based on functional positioning. With legal construction as the guarantee, a monitoring and early warning system for resource and environmental carrying capacity should be established based on functional zones. Policies and measures for promoting the formation of major function oriented zones should be thoroughly implemented, with the core orientation of government resource allocation being the sharing of reform and opening-up achievements by people in different functional zones, and the key orientation of market mechanisms being the enhancement of economic benefits in different functional zones.

1.3 Discussions on Continuously Improving Major Function Oriented Zoning Plans

Timely Initiation of Major Function Oriented Zoning Plan Revision. The major function oriented zoning plan has been implemented for five years, during which enormous changes have occurred in both domestic and international environments. Ecological civilization construction and the new normal of economic development have become entirely new planning contexts. As China

is about to transcend the middle-income trap and embark on the journey of modernization, new development stages and consumption demands require full recognition of new opportunities and challenges under the new situation. The revision should be goal-oriented toward the blueprint for the second centenary goal, with the basic strategic framework extending to 2049 and basic framework parameters planned to 2030.

The revision should be based on evaluation of the current major function oriented zoning plan: (1) For urbanization, ecological security, and agricultural production strategic patterns, attention should be paid to their mutual support relationships with the four-plate strategy, new urbanization strategy, and sustainable development strategy. (2) For optimized development zones, evaluation should focus on trends and effects of changes in resource and environmental carrying capacity, emphasizing industrial structure optimization. (3) For key development zones, evaluation should focus on capacity to concentrate population and economy, and analyze resource-environment effects in the process of accelerating urbanization and industrialization. (4) For ecological function zones, evaluation should concentrate on changes in ecological service functions and associated changes in poverty levels of people in these zones. (5) For major grain production zones, evaluation should focus on grain production levels and commercialization rates, while also monitoring improvements in people' s income levels. (6) For prohibited development zones, emphasis should be placed on implementation of development prohibition in heritage protection areas and changes in natural and cultural values. Evaluation should trace causes from problems in the plan itself, changes in planning background and implementation environment, and implementation execution issues to provide a basis for revision.

Major function oriented zoning plan revision should fully discuss: (1) In the naming system, whether it is necessary to change the current naming method based on development approach to naming based on functional positioning. (2) In the classification system, whether it is necessary to add a transitional type between key development zones and restricted development zones to revise the current abrupt transition between these two categories and address the problem of unclear single primary functions at the provincial level due to comprehensive functions. (3) At the expression level, there should no longer be point development and area protection expressions within a single county administrative unit; a county should have only one functional positioning, with functional differentiation within the county further divided and differentially planned by county-level spatial planning. (4) In planning format, land and marine major function oriented zoning plans should be integrated into a single map covering the entire national territory.

Furthermore, the four strategic patterns determined by "major function oriented zones" should be improved. For example, the "two horizontals and three verticals" urbanization strategic pattern should adapt to the requirement of "two-way opening" by increasing the number of development axes extending westward

and increasing the number of key frontier areas in the west. To this end, the framework of determining strategic patterns based on current population and economic scale should be broken, and the role and functional scores in future territorial space development and opening patterns should be increased. Additionally, the Fifth Plenary Session of the 18th CPC Central Committee proposed constructing a natural coastline pattern, which is incompatible with the current situation where most coastal counties are designated as key development or optimized development zones. The total scale of coastal zone development, spatial structure, and red lines for shoreline resource protection should be re-examined, forcing coastal counties to readjust their major functional positioning. In terms of supporting policy design, the current state of focusing only on policy support for grain and ecological zones should be changed to increase attention to both weak and strong regions, particularly establishing incentive mechanisms for optimized development zones to boost their global competitiveness and industrial innovation capacity and accelerate industrial structure upgrading and transformation.

2. A Nationwide Spatial Planning System Covering All Territory Will Be Basically Established

2.1 Objective Requirements of Territorial Space Resource Characteristics for Improving the Spatial Planning System

A government' s governance capacity is prominently reflected in its ability to manage and utilize territorial space well. Compared with other natural resources, territorial space resources exhibit more prominent characteristics of fundamentality, strategic importance, commonality, and externality, objectively requiring scientific planning and rational regulation.

The fundamental characteristic of territorial space resources is that they are ubiquitous and integrated with all geographic locations, yet exhibit significant regional differences and continuous temporal changes. All production and living activities depend on territorial space resources. To utilize these resources effectively, they must be used to their full potential while comprehensively considering spatial scale and hierarchy and emphasizing dynamic optimization management.

The strategic characteristic of territorial space resources is that their utilization effects typically require a long time cycle to fully manifest. Once mistakes are made in protection and development, they are difficult to adjust or even irreversible. Once a high-intensity development and utilization pattern is formed, it usually remains stable for a long period and is difficult to substantially change. Therefore, utilizing territorial space resources requires long-term vision and forward-looking layout.

The commonality characteristic of territorial space resources is that various aspects of socio-economic development often share common orientations for de-

veloping and utilizing the same territorial space resources, which easily leads to competition and conflicts among different uses. Coordinating the interests of all parties must not only emphasize the natural suitability attributes of territorial space resources but also fully consider the location selection laws and spatial structure change laws of human production and living activities themselves.

The externality characteristic of territorial space resources is mainly manifested in that the ecological, economic, and social comprehensive benefits of resource protection and utilization vary greatly depending on protection and utilization schemes. The damaged and benefited areas, long-term and short-term interests, overall and local benefits, positive and negative externalities all pose higher and more complex requirements for planning scheme optimization.

Territorial space resources are limited, but the demand for utilizing these resources for human living and production activities is unlimited. Only through planning to manage and utilize territorial space resources well can sustainable utilization of territorial resources be achieved, territorial space quality be improved, territorial resource utilization efficiency be enhanced, conditions be created for enhancing development competitiveness of enterprises, cities, regions, and the nation, and conditions be created for improving human settlements and human well-being.

2.2 Discussion on Improving China' s Spatial Planning System

Improving China' s territorial space planning system and vertically implementing functional zones through spatial plans at different levels and spatial scales is a key measure for effectively playing the role of the spatial governance system. Spatial planning is the scientific planning of territorial space resource protection and utilization, the spatial organization and layout of human production and living activities, and natural ecosystems. Obviously, spatial planning is an important way for the government to conduct macro-control and micro-management and represents control over territorial space resource use. The significance and value of spatial planning have been proven by the practice of developed countries in achieving orderly territory and building beautiful homes, making spatial planning an important policy tool for government administration in developed countries. Although spatial planning systems, content, and implementation methods differ among countries, implementing varying degrees of control over spatial use is a common practice in all developed countries (even those with private land ownership). Subordinating land use to spatial planning control is key to spatial planning playing its role.

"Legislation as the foundation, planning as the guide" has always been the main path to modernization of governance capacity. After the 19th CPC National Congress, improving the nationwide spatial planning system covering all territory as soon as possible should become a top priority in China' s governance capacity modernization process. Objectively speaking, due to different national conditions, development stages, problems faced, and future development oppor-

tunities and challenges, no country' s spatial planning model can be copied and applied directly by China; a spatial planning system with Chinese characteristics must be created. According to China' s territorial area and regional unit characteristics, the spatial planning system can adopt a "4 levels + X types" architecture. The "4 levels" are continuously and systematically compiled comprehensive spatial plans divided by administrative level, including national comprehensive spatial planning, provincial spatial planning, city/county spatial planning, and town/village planning. In the long run, there should be a unified comprehensive plan at the national level, whether by expanding major function oriented zoning to replace other plans or by incorporating major function oriented zones as the overall layout through territorial planning remains to be further demonstrated. However, at the national level, urban system planning and land use planning are unnecessary as independent plans; their core content and main value can be fully incorporated into the national comprehensive plan. This plan should clarify territorial development strategies and principles, determine functional positioning of major types of regions, construct the overall framework for national territorial space development and utilization, and propose major project layout schemes of global significance within the planning period. Furthermore, prefecture-level city planning and city/county planning need not both exist; it is preferable to clarify spatial guidance for prefecture-level city development and construction in provincial planning and then directly compile city/county planning. The "X types" are flexible, goal-oriented spatial plans across administrative units, including regional plans across provincial administrative regions, across prefecture-level cities within provinces, and across counties within prefecture-level cities.

Currently, the General Offices of the CPC Central Committee and the State Council have issued documents to deploy provincial spatial planning pilots. Provincial spatial planning should focus on the following key issues in the future: (1) Emphasize strategic positioning and research on conflict assessment and cause tracing among plans, where linking territorial space resource development strategy with provincial achievement of the two centenary goals has important guiding significance. (2) Emphasize interactive research on determining the base map of "three zones and three lines" ("three zones" refer to urban, agricultural, and ecological space; "three lines" refer to ecological protection red lines, permanent basic farmland, and urban development boundaries) and planning layout, focusing on spatial matching among location points of population and economy, constraint lines of protection and development control, and areas generated by territorial space strategic patterns. (3) Emphasize research on local characteristics and vertical coordination of the planning system, fully integrating local characteristics and highlighting problem orientation in land use classification, selection of special key content, and supporting system and regulation construction. (4) Emphasize the role of leadership, experts, and multi-party participation, as elevating comprehensive planning to the top priority of local government leaders is decisive for planning advancement, quality improvement, and value realization.

2.3 Overcoming Several Challenges Constraining the Formation of China' s Spatial Planning System

(1) Basic Data Issues for Spatial Planning. Spatial planning must rely on objective and highly accurate data resources. However, problems such as missing basic data, difficulty in sharing available data, or inconsistent data specifications seriously affect data use in spatial planning. Currently, China' s resource and environmental monitoring, investigation, and census systems suffer from lack of top-level overall design, with numerous achievements having poor spatial matching and temporal connectivity that prevent them from playing their proper role. In resource and environmental monitoring system construction, problems include incomplete observation station networks, unreasonable spatial layout, and non-standard data collection. National condition data lack comparability, with inconsistent classification systems and standards even within the same department, and sharing channels are not smooth.

(2) The Applied Basic Science System for Spatial Planning Has Not Yet Formed. The applied basic science of spatial planning lags behind the actual progress and objective needs of spatial planning in China, and theoretical and methodological innovations in spatial planning have not yet formed an applied basic science system suitable for China' s development characteristics. When large-scale spatial planning pilots are launched, the applied basic science supporting spatial planning, especially its theoretical innovation, seriously lags behind, becoming a major obstacle to the scientification of spatial planning. Major scientific propositions such as the mechanisms of interaction between human activities and the environment remain unclear—including the calculation and prediction basis for resource and environmental carrying capacity, spatiotemporal differentiation patterns of spatial development intensity and the proportional relationships among "production-living-ecological" spaces, equilibrium theories and models of spatial sustainability, competitiveness, and fairness under open systems, benefit optimization theories and methods for economic-social-ecological spatial organization under multi-objective, multi-constraint, and multi-implementation-path conditions, and the academic foundations and policy systems of spatial regulation—have not been satisfactorily resolved. More seriously, spatial planning requires integration of natural and social sciences and cooperation with technology, as well as integration and cooperation among research, planning, decision-making, and society, but China' s current scientific research system and development strategy still struggle to adapt to this new scientific concept transformation. The negative impact of China' s current binary division of social and natural sciences in organizing disciplinary strategies, organizing research projects, and conducting performance evaluations is increasingly significant.

(3) The Spatial Planning Talent Training System Has Not Yet Formed. Although the spatial planning system is taking shape, specialized talent cultivation for spatial planning remains very weak. The knowledge structure of spatial planning professionals should comprehensively include

theories and methods from geography, urban and rural planning, regional science, and land science, but undergraduate programs targeting the cultivation of new spatial planning talents have not yet been established in universities.

(4) Spatial Planning Processes Are Not Yet Standardized. While there are specialized urban and rural planning design institutions and professional design departments for transportation planning, most spatial planning formulation still follows the routine of government compilation, approval, and execution. Compilation, approval, and execution should be independent in the spatial planning field. Only when technical professional departments formulate spatial planning, legislative departments such as the People' s Congress review and approve spatial planning, and governments implement spatial planning can the benefits of spatial planning be truly realized.

3. The Ecological Civilization System Centered on Territorial Space Development and Protection Institutions Will Be Established

3.1 Main Problems in Current Ecological Civilization System Construction

Since the central government issued and implemented the overall plan for ecological civilization system reform, new concepts have emerged in ecological civilization construction, new deployments have been made for comprehensively deepening system and mechanism reform, new progress has been achieved in major reforms in the ecological civilization field, and new results have been seen in system and mechanism reform measures. However, problems still exist.

(1) Leading Cadres' Understanding Needs Further Improvement. As China' s socio-economic development enters the new normal, especially when economic growth enters a deceleration and gear-shifting stage, China' s decision-making and management departments often place ecological civilization system reform in a subordinate and secondary position, which to some extent separates reform from development. In governance and administration, the "five-in-one" overall layout has not been truly addressed, and ecological civilization construction has not been effectively integrated into political, economic, and cultural construction. Ecological civilization construction emphasizes the design of constraint mechanisms, creating a misconception among decision-makers that it seems to be a measure to inhibit economic development, which is also a major cognitive foundation for inadequate leadership understanding and inactive action.

(2) Ecological Civilization System Reform Needs Further Integration. The eight major institutions and more than 50 measures suffer from lack of overall planning within each measure, among measures within the same institution, and among different institutions. For example, ecological civilization performance assessment, natural asset-liability accounting, resource and

environmental carrying capacity early warning, and leadership accountability investigation share common foundations in basic evaluation, but due to departmental segmentation, each department collects data once, performs calculations once, and creates a pile of formulas, resulting in serious redundant construction. Because local governments cannot understand the technically sophisticated ecological civilization reform documents, they still decompose various reform tasks among different departments and proceed separately, not only causing massive duplication of work but also paying little attention to key content of the reform (such as cause analysis of carrying capacity overload or asset-liability increase).

(3) The Problem of Insufficient Top-Level Design, Comprehensive Coordination, and Overall Reform Is Common. On the one hand, copying the central government's overall plan for ecological civilization reform wholesale, launching it comprehensively, lacks both focus and logical relationships. On the other hand, being disconnected from local realities without differentiated reform designs results in reforms lacking specificity, making it difficult for local special resource-environment conditions and problems at different scales to be fully reflected in ecological civilization reform pilots. Reform measures cannot support refined urban management and precise regional governance. If central supervision and guidance in pilots are inadequate, the enthusiasm of pilot areas will be difficult to reach the level previously seen in development zones. In fact, ecological civilization system reform is more complex and arduous than development zone construction, and the huge contrast between inadequate leadership understanding and operation inevitably affects reform effectiveness.

(4) The Reform Approach of "Wearing New Shoes but Walking the Old Road" Frequently Emerges. For example, spatial planning reform is relatively mature with abundant advanced international experiences to draw upon, and China has also accumulated rich reform pilot experiences. However, at the implementation level, spatial planning concepts have not been fully implemented, and there is a habit of operating according to China' s previous spatial planning paradigms, resulting in persistent problems of technocracy and formalism that prevent reforms from achieving their intended effects.

3.2 Goals for Ecological Civilization System Construction After the 19th CPC National Congress

As a guarantee for spatial governance: (1) The reform of ecological civilization institutions should be accelerated. The "four pillars and eight beams" should be deployed holistically. Forming effective and operable institutions and mechanisms according to different administrative levels, regional characteristics, and sustainable development problems is one of the important goals for fully achieving the task of deepening reform after the 19th CPC National Congress. (2) Goal orientation and problem orientation should be coordinated. Both solving resource-environment problems that people can personally experience and care about most should be the starting point and foothold of current reform, and the long-term development goals of "Beautiful China" and the "Two Centenary

Goals" should be the basis for forward-looking planning and design. A complete ecological civilization system should be constructed with the territorial space development and protection system at its core, the natural resource asset property rights system as the foundation, and ecological civilization performance evaluation and accountability systems as regulatory means, combined with policy tools such as total resource management and comprehensive conservation systems, resource paid-use and ecological compensation systems, environmental governance systems, and environmental governance and ecological protection market systems. (3) Systematic planning and overall deployment should clarify the relationship between central and local reforms. The reform priorities and responsibilities at each level should be defined to form a situation where the central and local governments jointly explore and collaboratively promote ecological civilization system reform. Global and fundamental reforms should be prioritized to address strategic and overall problems in ecological civilization institution construction, while regional, phased, and precise reforms should address local problems of unclear priorities, inadequate implementation, and insufficient precision. (4) Research should focus on incentive mechanisms guided by green development interests and constraint mechanisms with severe ecological and environmental accountability. The boundaries between departments and regions should be broken, and the connection between government and market should be opened. Ecological civilization construction should be integrated into all aspects and the entire process of economic, political, cultural, and social construction, and government management and social morality system construction should be integrated with market mechanisms to comprehensively enhance the systematic, holistic, and coordinated nature of the ecological civilization system.

3.3 Five Major Actions for Ecological Civilization System Reform

(1) Action to Enhance Spatial Regulation Capacity. Improve the spatial planning system, develop a single blueprint for spatial planning, perfect the management system for planning-guided project layout, establish management methods for spatial planning formulation, and create a legal system for planning coordination. Establish a territorial space development and protection system based on planning, implement territorial space development quantity, efficiency, and functional use control, construct a departmental collaborative spatial management mechanism, explore a unified spatial management system, and significantly enhance territorial space regulation capacity.

(2) Action to Enhance Scientific Management Levels. Break departmental boundaries and approach from forward and backward links of scientific management and decision-making, integrate resource-environment data platforms, establish a monitoring and early warning mechanism for resource and environmental carrying capacity, explore compilation of natural resource balance sheets, and build an ecosystem value accounting system and mechanism, thereby consolidating the scientific foundation of ecological civilization construction. Promote ecological civilization performance evaluation and assessment, explore pilot pro-

grams for natural resource asset departure audits for leading cadres, thereby improving post-event assessment and accountability mechanisms for ecological civilization construction, and gradually forming a process management and scientific operation mechanism of "one map" for scientific support of planning layout, "one account book" for resource elements implementing planning, and "one chessboard" for assessment and accountability based on planning.

(3) Action to Expand Resource Carrying Capacity. Guided by development strategy, build a resource-saving and environment-friendly economy and society. Follow the principles of "strictly controlling total quantity, prioritizing conservation, efficient utilization, and improving efficiency," establish bottom-line thinking, and strengthen red line awareness. By using resource carrying capacity as the basic constraint, establish a development model where population and economic development adapt to resource carrying capacity, control pollution from the source, and prevent damage to the environment and ecology, keeping all development and construction activities and development plans within the scope of resource carrying capacity. Formulate effective resource use and environmental protection strategies, standardize and constrain resource development and utilization behaviors, form a pattern of sustainable resource development and utilization, base on current resource carrying capacity status, scientifically and rationally utilize resources, optimize resource development and utilization structure, and improve comprehensive resource utilization capacity and efficiency.

(4) Action to Improve Ecological Environmental Quality. With improving ecological environmental quality and promoting green development as the fundamental goals, and with mechanism reform, institutional innovation, system supply, and model exploration as the action priorities, control pollution from the source, improve air pollution prevention, river basin water environment, and soil treatment mechanisms, establish a land-sea coordinated pollution prevention mechanism and a total control system for key pollutant marine discharge, construct a rural environmental governance institution and mechanism, and standardize environmental information disclosure systems. Improve environmental protection management systems, focus on integrating management resources, enhancing regulatory efficiency, and eliminating environmental supervision blind spots, scientifically establish a grid-based environmental supervision system, form a large environmental supervision pattern organized and implemented by governments at all levels, coordinated uniformly by environmental protection departments, with each responsible department fulfilling its duties and the whole society participating extensively. Improve the ecological environment governance system, comprehensively promote the modernization of environmental governance capacity, focus on strengthening pollutant prevention and ecological environment safety management, significantly improve human settlement and investment environment quality, and strive to create a beautiful and livable ecological environment with blue sky, green land, and clean water.

(5) Action to Enhance Market Mechanism Functions. Focusing on market entities and market mechanism construction, cultivate resource-environment product trading and investment and financing entities by coordinating and advancing natural resource rights confirmation and registration and accelerating the construction of a green financial system. Following the approach of "price adjustment for what can be priced" and "improving ecological compensation for what cannot be priced," accelerate resource price reform, improve trading systems for energy use rights, carbon emission rights, and pollution discharge rights, and the paid land use system, achieve breakthroughs in resource-environment market system construction, and significantly enhance market functions in system and mechanism reform.

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Note: Figure translations are in progress. See original paper for figures.