

Polycentric Governance for High-Quality Coordinated Development of Tongzhou and the Three Northern Counties of Langfang

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Abstract. In recent years, despite the achievements made in Beijing-Tianjin-Hebei coordinated development, there remains a certain gap in development among regions. Tongzhou District of Beijing and the Three Northern Counties of Langfang City are geographically adjacent, with the expectation and foundation for coordinated development. Taking the two places as a pilot demonstration area can accumulate experience for promoting Beijing-Tianjin-Hebei coordinated development. Polycentric governance theory emphasizes cooperative governance by multiple subjects, attempts to break the traditional pattern of government power, and forms a governance network with multiple power centers. Based on this theory, this study analyzes the current mechanism obstacles, including strong administrative color in resource allocation, low participation of market subjects, absence of social organization intervention, and weak public participation awareness. It also proposes innovative paths under the guidance of polycentric governance theory: giving full play to the decisive role of the market in resource allocation, avoiding homogeneous competition through overall regional functional positioning and staggered urban functional development, attaching importance to and leveraging the role of market and social forces, and ensuring the stability and continuity of policy implementation.

Keywords: Polycentric Governance, Beijing-Tianjin-Hebei Coordinated Development, Realistic Dilemmas, Mechanism Innovation

1. Introduction

On May 12, 2023, General Secretary Xi Jinping stressed at the symposium on in-depth promotion of Beijing-Tianjin-Hebei coordinated development that the construction of Beijing Municipal Administrative Sub-center should properly handle relations with surrounding areas, promote Beijing-Tianjin-Hebei coordinated development to reach new heights, and strive to make Beijing-Tianjin-Hebei a pilot area and demonstration zone for Chinese-style modernization. In recent years, remarkable results have been achieved in Beijing-Tianjin-Hebei coordinated development, but the "cliff-like" development gap among regions has not been fundamentally narrowed. Combined with domestic research on regional governance in Beijing-Tianjin-Hebei and field investigations, it is found that scholars have conducted in-depth research and reflection on regional governance in

Beijing-Tianjin-Hebei from the initial strategic conception to the selection of regional governance models, construction of coordination systems and discussion of key points. However, there is a lack of reference paths for efficiently integrating multiple forces including market subjects, social forces and the public besides the government into the process of Beijing-Tianjin-Hebei coordinated development.

The year 2024 marks the 10th anniversary of the implementation of the Beijing-Tianjin-Hebei coordinated development strategy. Faced with new opportunities and challenges, it is necessary to scientifically understand the new goals and requirements of Beijing-Tianjin-Hebei coordinated development. Tongzhou District of Beijing and the Three Northern Counties of Langfang City are geographically and culturally connected, featuring typical characteristics and common challenges of Beijing-Tianjin-Hebei coordinated development. Therefore, taking Tongzhou District and the Three Northern Counties as a pilot demonstration area to tackle key problems in Beijing-Tianjin-Hebei coordinated development will help drive the in-depth advancement of Beijing-Tianjin-Hebei coordinated development through high-quality coordinated development of the two places, and accumulate valuable experience for regional coordination in other parts of the country.

2. Review of domestic and foreign research status

2.1. Research on Beijing-Tianjin-Hebei coordinated development

Since Beijing-Tianjin-Hebei coordinated development became a national strategy in 2014, abundant research results have been achieved, mainly focusing on three aspects: the connotation and process of Beijing-Tianjin-Hebei coordinated development, measurement of coordinated development level, and innovation of coordinated development systems and mechanisms.

Connotation and process of Beijing-Tianjin-Hebei coordinated development. Coordinated development is an important prerequisite for Beijing-Tianjin-Hebei to become a world-class urban agglomeration and enhance national competitiveness. Coordinated development is a non-linear spiral upward process of "game-coordination-mutation", which tightens urban connections, rationalizes division of labor, narrows development gaps, and ultimately builds a community with all-round coordinated development in regional planning, transportation, industry, market, scientific and technological innovation, ecological environment and other aspects [1]. Some studies divide Beijing-Tianjin-Hebei coordinated development into three periods: the embryonic stage of regional cooperation from 1984 to 2000; the comprehensive launch and practice stage of regional governance from 2001 to 2013; and the comprehensive promotion stage of win-win cooperation from 2014 to the present [2].

Measurement of Beijing-Tianjin-Hebei coordinated development level. Yang Zhang and Deqi Wang quantitatively measured based on the composite system synergy degree model and found that the synergy degree of Beijing-Tianjin-Hebei is continuously rising, with a faster growth rate from 2010 to 2015 than that from 2005 to 2010 [3]. Daoling Yang et al. constructed a regional industrial coordination index system by introducing multi-dimensional big data, and found that Beijing-Tianjin-Hebei still has deficiencies in interconnection, factor utilization efficiency and innovation diffusion [4, 5].

Innovation of Beijing-Tianjin-Hebei coordinated development mechanisms. Jiuwen Sun and Hongjun Ding put forward suggestions for the integrated development of Beijing-Tianjin-Hebei from the perspective of relieving non-capital functions [6]. Hong Zhao emphasized the need to relieve Beijing's non-core functions, regulate industries and optimize urban space [7]. Jincheng Xiao proposed constructing a regional development pattern of "one axis, two belts, three cities and four

districts" [8]. With deepening research, Zebo Wang et al., from the perspective of governance behavior, argued that the single-center governance model must be transformed into a "four-center" collaborative governance model composed of governments, enterprises, the public and non-governmental environmental organizations [9]. Xuebin Tian et al. recognized the severe inequality of basic public services in Beijing-Tianjin-Hebei, and pointed out that the three regions should strengthen fiscal coordination and cooperation [10].

2.2. Research on coordinated development of Tongzhou District and the Three Northern Counties

Due to the short time of promoting high-quality integrated development of Tongzhou District and the Three Northern Counties, relevant research is scarce, mainly focusing on macro-level issues of coordinated development between the two places. Existing studies generally believe that promoting coordinated development of Tongzhou District and the Three Northern Counties is an important part of the Beijing-Tianjin-Hebei coordinated development strategy, which is conducive to piloting cross-border governance and accumulating experience for national regional collaborative governance [11, 12]. Current realistic dilemmas in coordinated development between the two places exist in both governance mechanisms and practical operations, such as imperfect cross-regional overall coordination mechanisms, low level of industrial coordinated development, unequal public services, and failure to realize joint construction, governance and sharing of the ecological environment [13-15]. Countermeasures and suggestions include innovating regional interest coordination mechanisms and cross-border control governance mechanisms, accelerating the transformation of government functions, and strengthening the leading role of the market [16].

2.3. Review of relevant research

A comprehensive review of domestic research on regional governance in Beijing-Tianjin-Hebei shows that research in this field has gradually deepened into multiple levels such as regional governance models, coordination systems and key points, laying a solid foundation for this study.

However, most existing research results excessively highlight the core position of government intervention mechanisms, and tend to rely solely on government forces to achieve goals such as optimal resource allocation, rational industrial relocation and efficient regional governance. Admittedly, in the initial stage of Beijing-Tianjin-Hebei coordinated development, active government intervention and regulation are essential. Nevertheless, as coordinated development advances in depth, it is increasingly necessary to attach importance to the role of market mechanisms, and actively advocate and encourage multiple subjects such as enterprises, the public and non-governmental organizations to participate more actively and efficiently in the broad practice of Beijing-Tianjin-Hebei collaborative governance.

3. Theoretical basis: polycentric governance theory

3.1. Core propositions of polycentric governance theory

The core of the polycentric governance structure lies in promoting coordination and interaction across departments and among multiple stakeholders, aiming to jointly promote and achieve jointly set governance visions. Its key characteristics include: First, diversity and inclusiveness of governance subjects. The polycentric governance model significantly expands the breadth and depth

of participation of different social roles, aiming to avoid governance failures caused by a single government or market mechanism. Under this framework, social organizations, the private sector and individual citizens all play important roles, jointly participating in and assuming responsibilities for public management and service provision. Second, significant self-organizing characteristics of governance methods. Faced with specific public issues, multiple subjects can independently form self-organizing networks in accordance with established rules, effectively curb rent-seeking behavior, reduce free-riding phenomena, and prevent potential harm of individual rationality to collective well-being through equal and open dialogue and consultation mechanisms. Third, interconnected network characteristics of governance structures. Although the polycentric governance system includes multiple independent decision-making nodes, these nodes are not isolated but interconnected into a tight network structure. As key hubs in the network, each decision-making node can freely exchange information, build trust, carry out cooperation and implement mutual supervision. Fourth, long-term sustainability of governance goals. By integrating and optimizing governance resources and forces, polycentric governance achieves efficient allocation and full utilization of resources, while focusing on improving governance efficiency and quality, reducing negative behaviors such as free-riding, thus ensuring the sustained realization of governance goals and long-term stability of governance effects.

3.2. Enlightenment of polycentric governance theory to this study

Polycentric governance theory completely breaks the traditional governance pattern with a single government or market center, introducing richer and more flexible governance methods into public affairs management. The core of this change lies in recognizing that a single subject is often inadequate in responding to complex and changing public issues, while the joint participation of multiple subjects can effectively stimulate governance vitality and improve governance efficiency. Meanwhile, diversified supply subjects introduce market competition mechanisms, encouraging enterprises, social organizations and even individuals to participate in the supply of public goods and services, diversifying supply methods. This can effectively alleviate supply shortages caused by free-riding behavior, and improve the quality and efficiency of public goods and services through market competition. In addition, polycentric governance greatly enhances public participation and decision-making democratization, encouraging the public to actively participate in the decision-making and management process of public affairs by broadening public participation channels and improving public participation mechanisms.

Applying polycentric governance theory to the field of Beijing-Tianjin-Hebei coordinated development has important practical and theoretical guiding significance. This framework requires cross-regional governance to break free from the inertial constraints of administrative boundaries and departmental interests, and truly enable enterprises, social organizations and the public to stand on a joint governance platform parallel to the government. Introducing the two driving forces of market competition and public participation can effectively activate the will and creativity of all parties, and promote regional resources to flow into a pattern of more efficient allocation and rational utilization. Thus, polycentric governance opens a new path different from the traditional single-center model for reshaping regional governance structures and improving overall collaborative efficiency.

Based on this, this study attempts to construct a polycentric collaborative governance framework for the two places from the perspective of polycentric governance theory. In line with polycentric governance theory and the needs of collaborative governance, combined with the current situation of coordinated development between the two places, a four-center diamond-shaped framework system

composed of governments, enterprises, the public and social organizations is established. These subjects form an interconnected "community of interests", exploring practical paths to promote Beijing-Tianjin-Hebei coordinated development to reach new heights.

4. Realistic dilemmas and mechanism obstacles in coordinated development of Tongzhou District and the Three Northern Counties

The high-quality integrated development of Tongzhou District and the Three Northern Counties is a long-term systematic project. Although breakthrough progress has been made, there are still institutional and mechanism shortcomings and practical dilemmas.

4.1. Government dominance remains, with strong administrative color in resource allocation

At present, the integrated development of Tongzhou District and the Three Northern Counties mainly presents a government-led multi-subject collaborative pattern. However, in the process of such government-led governance, there are still problems such as strong administrative color in resource allocation and loopholes in inter-governmental coordination mechanisms. Under China's unitary state structure, the bureaucratic system leads to vertical division of powers and responsibilities, with governance tasks transmitted layer by layer from top to bottom. In this process, governance resources are mismatched with responsibilities, especially for grassroots institutions, which bear heavy governance responsibilities disproportionate to their resources. Regional integrated development involves multiple fields such as economy, society and ecology, requiring huge coordination tasks in terms of management scope and limits. However, in the actual process of integrated development between the two places, there are still phenomena of overlapping functions and powers, unclear responsibilities, mutual buck-passing and conflicting policies. Under the influence of government self-interest, regional game dilemmas inevitably exist, inter-governmental relations are prone to conflicts and confrontations, and overall cooperative awareness is weak. In addition, many resource allocations have the attributes of public goods, which easily lead to blurred responsibilities and inadequate supervision, resulting in fragmented work that should be carried out jointly, lacking synergy.

4.2. Low participation of market subjects and lack of social responsibility

With the continuous improvement of the policy system for coordinated development between the two places, enterprises' enthusiasm for participation has increased, but only a small number of enterprises take the initiative to assume responsibilities in the governance pattern. Most enterprises remain passive responders, mainly complying with established government policies, rarely participating in core policy formulation links, and their actions focus on profit-oriented commercial operations, lacking social responsibility and self-discipline. Although policies such as green finance and green credit aim to encourage enterprises to transform towards green development, the profit-driven nature of the market leads many small and medium-sized enterprises to prioritize economic interests over social responsibility. They indirectly enjoy collaborative dividends through free-riding strategies, resulting in enterprises' lack of in-depth understanding and active actions in ecological protection. Some even evade responsibilities and discharge pollutants in violation of regulations, reflecting the indifference of some enterprises to ecological awareness and vague understanding of legal boundaries.

4.3. Absence of social organization intervention and weak public participation awareness

For a long time, governments have assumed most functions in the coordinated development process of the two places, making it difficult for social organizations to participate and exert their due effects. Governments have limited financial, human and technical resources. As the third sector, a large number of social organizations have inherent organizational advantages that can make up for government vacancies and market failures. According to field investigations, governments of the two places have not fully recognized the importance of social organizations in regional coordinated development, underestimating their role, resulting in lack of guidance for social organizations. Governments delegate few powers to social organizations, leading to slow development and lack of vitality of social organizations. Their activities lack policy and financial support, with uncertain funding guarantees.

The public are both participants and primary beneficiaries of coordinated development between the two places. From the perspective of polycentric governance, the public need to play a dominant role and deeply participate in decision-making, deployment, implementation and supervision of coordinated development between the two places. However, field investigations find that most members of the public believe coordinated development between the two places is mainly the responsibility of government departments and has little to do with themselves. Some members of the public report that they do not fully understand the policies, systems and mechanisms of coordinated development between the two places, meaning government departments have not timely and thoroughly publicized relevant policies and benefits to society. In addition, some members of the public state that they do not know how to express and reflect their demands and suggestions, or the ways to supervise policy implementation effects.

5. High-quality coordinated development paths for Tongzhou District and the Three Northern Counties from the perspective of polycentric governance theory

5.1. Optimize resource allocation mechanism and give full play to the decisive role of the market in resource allocation

In promoting regional coordinated development, the key lies in efficient integration and smooth flow of regional resources, which inevitably requires establishing a governance framework with the market as the leading factor and the government as the auxiliary factor, accelerating the improvement of market mechanisms, and ensuring the market occupies a core position in resource allocation. In response to the unbalanced and unnatural development pattern formed over a long period as the national capital, it is urgent to optimize the layout of regional economic space, build a cross-regional symbiotic economic development system, and promote complementary advantages, win-win cooperation and synchronous prosperity among regions. In this process, governments should strengthen their functions of overall coordination, planning guidance and policy support. For institutions undertaking administrative and public service functions, reasonable relocation should be carried out through planning guidance and comprehensive policy implementation; for enterprises, resource allocation should rely more on market mechanisms. In addition, multi-dimensional strategies should be adopted to stimulate the vitality of the private economy: accurately incubate and support private enterprises based on regional characteristics; deepen financial system reform and open up diversified financing channels; scientifically layout the cluster development of small and medium-sized enterprises relying on unique regional advantageous resources; build a favorable

external environment for the development of the private economy, and stimulate its enthusiasm and motivation to participate in cross-regional coordinated development.

5.2. Rationalize cooperation mechanisms and avoid homogeneous competition through overall regional functional positioning and staggered urban functional development

The implementation of a series of policies such as *Coordinated Development Plan for Tongzhou District of Beijing and Sanhe, Dachang and Xianghe Counties of Hebei Province* has further clarified the functional positioning of Tongzhou District and the Three Northern Counties. There is a significant industrial gradient gap and large complementary space between the two places, making two-way industrial transfer a core breakthrough to address coordination bottlenecks. Efforts should be made to promote industrial structure upgrading and rationalization through precise matching of supply and demand and resource reallocation. Focusing on the positioning of the municipal administrative sub-center, we should prioritize modern service industries such as business, science and technology, cultural tourism, commercial logistics and green services, and cultivate high-end industrial clusters. For the Three Northern Counties of Langfang, industrial upgrading should deeply leverage Beijing's scientific and technological innovation resources, actively undertake pilot-scale production bases, scientific and technological achievement transformation projects and supporting links for high-end manufacturing, so as to realize integrated coordination of innovation chains, industrial chains and factor allocation. Industrial land that does not conform to functional positioning and environmental protection bottom lines should be prioritized for pollution source control, illegal building demolition and inefficient production capacity withdrawal. Tongzhou District should actively undertake orderly relocated non-capital functions and guide suitable industries to extend their layout to the Three Northern Counties. The Three Northern Counties should promote the transformation of traditional manufacturing towards intelligence and greening, develop green industries such as health care and leisure tourism relying on natural ecological advantages, and precisely layout strategic emerging industries such as new generation information technology, high-end equipment manufacturing and biomedicine. Importantly, it is necessary to guide Beijing to reasonably build clusters of life service industries in the Three Northern Counties to timely meet the growing demand for quality life among residents in the capital.

5.3. Supplement development dynamic mechanism and attach importance to and leverage the role of market and social forces

Faced with a complex pattern of multiple regions, multiple levels and diversified interests, the single government governance model has shown limitations, requiring in-depth integration of market and social forces. Governments' implementation of streamlining administration and delegating powers and transforming functions, and voluntarily ceding partial functional space, is not only an inevitable requirement of governance modernization, but also provides a broad stage for the rise of market and social forces. In the process of integrated coordinated development of Tongzhou District and the Three Northern Counties, with the relocation of high-quality public resources, the resulting gaps in social services urgently need to be filled, which is exactly where social forces can give full play. The increasingly diverse public demand for public services prompts market subjects, social organizations and others to intervene in the field of public services in a flexible and changeable manner, becoming indispensable supply subjects. To achieve the grand goal of regional coordinated development, on the one hand, we should make full use of the flexibility and innovation of market subjects, broaden channels for social capital to participate in public service supply, encourage enterprises in various

fields to engage in public services, and ensure all market subjects can leverage their advantages in fair competition by improving market mechanisms and supporting policies. On the other hand, the closeness to the people and professionalism of social organizations are irreplaceable in public services. They can quickly respond to changes in social needs and flexibly adjust service models and content guided by professional knowledge. We should increase government procurement of social services, actively cultivate community-oriented social organizations, promote their healthy development and functional improvement through policy support and incubation mechanisms, and form a multi-governance pattern of government guidance, market leadership and social participation.

5.4. Improve institutional system and ensure the stability and continuity of policy implementation

As the cornerstone and guide of all innovative activities, institutional innovation is crucial to the stability and sustainability of regional development. Given the urgent need for a stable and consistent policy environment for regional development, it is inevitable to bring regional development policies into the track of rule of law. Faced with complex challenges of interest distribution and compensation in inter-local government cooperation, relying solely on informal consultation mechanisms is difficult to reach consensus and form a long-term mechanism. Therefore, it is urgent to construct a legal framework for cross-regional public governance. Through joint efforts of Hebei Province, Beijing Municipality and governments of the two places, cross-regional issues should be addressed in an institutionalized, standardized and legalized manner, so as to improve overall regional governance efficiency. We can innovatively establish a regional ecological compensation mechanism to ensure balanced interests in development and encourage advantageous regions to provide reasonable compensation for ecologically contributing but economically underdeveloped regions. In terms of fiscal and tax systems, we also need to explore innovative paths, such as establishing special fiscal systems for specific regions and constructing horizontal tax distribution mechanisms among local governments to fairly distribute incremental taxes generated by cross-regional cooperation projects. Meanwhile, we should strengthen vertical and horizontal fiscal transfer payment systems, with economically active regions providing horizontal support to restricted or prohibited development zones, and increase vertical fiscal investment in infrastructure and public services in grassroots areas to promote balanced regional development.

6. Conclusion

Beijing-Tianjin-Hebei coordinated development has entered a critical stage of in-depth advancement. As a pilot demonstration area, the effect of collaborative governance between Tongzhou District and the Three Northern Counties is directly related to the breakthrough of the overall regional strategy. From the perspective of polycentric governance theory, this study systematically examines the realistic dilemmas and mechanism obstacles in coordinated development between the two places, revealing deep-seated problems such as administrative resource allocation under the government-led model, insufficient participation of market subjects, absence of social organizations and weak public participation awareness. The multi-subject cooperation, self-organizing networks and networked structure advocated by polycentric governance theory provide theoretical guidance for solving these dilemmas. On this basis, this paper proposes four innovative paths: optimizing resource allocation mechanisms, rationalizing cooperation and

staggered development paths, supplementing market and social dynamic mechanisms, and improving institutional guarantee systems. It emphasizes that governments should transform from "the sole leader" to "guides and coordinators", enabling the market, social organizations and the public to truly integrate into the collaborative governance network. It should be noted that polycentric governance does not weaken the role of the government, but requires the government to play differentiated overall planning and empowering functions at different levels. Future research can further focus on the design of specific mechanisms for multi-subject participation, the dynamic game process of cross-regional interest distribution and the follow-up evaluation of policy implementation, so as to provide more practical practical references for Beijing-Tianjin-Hebei and even national regional coordinated development.

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