

## Postprint: A Discussion on the Trend of Increasing Complexity in Decision-Making Contexts and Scientific Approaches to Think Tank Development

**Authors:** Fan Jie

**Date:** 2016-12-26T00:00:00+00:00

### Abstract

Combining centralized learning and professional practice, this article constructs a think tank analytical framework to serve decision-making in the fields of regional development strategy and spatial planning. Regarding the international environment, it discusses issues including the impact of geostrategic adjustments on geopolitical relations, the shift of economic globalization toward national and local protectionism, the global shared responsibility for sustainable development, and the new round of industrial revolution triggered by the new technological revolution, elaborating the judgment that global development is entering an unprecedented new stage. Concerning domestic development, centered on the main thread of governance capacity modernization, it examines the long-standing defects in governance capacity, the dilemmas confronting current institutional and mechanism reforms, the challenges facing future optimization of development paths, as well as new contradictions and problems, thereby demonstrating the importance of governance capacity modernization in achieving China's second centenary goal. Based on an analysis of the trend toward increasing complexity in decision-making contexts, it proposes four recommendations for scientifically addressing think tank construction: the bottom line for think tank construction is to avoid speaking as laypersons; without in-depth and meticulous research there is no right to speak; think tanks of the Chinese Academy of Sciences should place greater emphasis on building fundamental capabilities; and the vitality of think tank construction also lies in forming mechanisms for self-supervision and continuous improvement.

## Full Text

# Discussion on the Complication of Decision-Making Backgrounds and Scientific Responses in Think Tank Construction

Fan Jie<sup>1,2,3</sup>

## Abstract

Based on intensive study and professional practice, this paper constructs an analytical framework for think tanks serving decision-making in regional development strategy and spatial planning. Regarding the international environment, the paper examines the influence of geopolitical strategic adjustments on geopolitical relations, the shift of economic globalization toward national and local protectionism, the global common responsibility for sustainable development, and the new round of industrial revolution triggered by the new technological revolution, concluding that global development is entering an unprecedented new stage. In terms of domestic development, focusing on the modernization of governance capability as the central theme, the paper discusses the long-standing defects in governance capability, the current dilemmas facing institutional reform, the challenges confronting future optimization of development paths, and emerging contradictions and problems, thereby demonstrating the critical importance of governance capability modernization for achieving China's second centenary goal. Building upon an analysis of the increasingly complicated decision-making context, the paper proposes four recommendations for the scientific development of think tanks: the bottom line is to avoid layman's talk; without in-depth and meticulous research there can be no legitimate voice; think tanks of the Chinese Academy of Sciences should place greater emphasis on building fundamental capacities; and the vitality of think tank construction also lies in forming mechanisms for self-supervision and continuous improvement.

**Keywords:** decision-making, think tank, scientization

**DOI:** 10.16418/j.issn.1000-3045.2016.12.011

From August 28 to September 8, 2016, I participated in the 21st Theoretical Research Program for Non-Party Personages. The carefully designed curriculum by the Sixth Bureau of the United Front Work Department of the CPC Central Committee and the lectures by academic masters provided me with substantial knowledge and, more importantly, an analytical framework for policy consultation. Integrating and expanding upon my long-term professional practice in formulating regional development strategies and major urbanization and territorial development plans, particularly insights accumulated from involvement in the development and deliberation of major function zoning, resource and environmental carrying capacity evaluation and early warning, spatial planning systems, Beijing-Tianjin-Hebei coordinated development strategy, poverty alleviation, and ecological compensation mechanism innovation, I have come to

recognize deeply that both domestic and international decision-making contexts are growing increasingly complex and uncertain, placing us once again in a new era of major transformation and transition. Distilling and elevating this analytical framework for policy consultation can generate considerable enlightenment for the scientific development of think tanks serving decision-making. This paper follows this analytical framework [Figure 1: see original paper] to discuss the domestic and international backgrounds and practical demands for decision-making scientization, and subsequently explores strategies for think tank development.

## **Global Development Entering an Unprecedented New Stage**

Since World War II, the global order has undergone earth-shaking reconstruction, and global development is now entering an unprecedented new stage. The shift in globalization may reshape geopolitical relations since the end of the Cold War [1]; the pressure of adapting to limited resources and environment during accelerated modernization will greatly stimulate the arrival of a new technological revolution; and the commitment to global common responsibility alongside the re-examination of human welfare at advanced stages is also pushing humanity toward a new civilization era. In summary, development against a global backdrop is making objectives increasingly pluralistic and processes increasingly diverse, thereby intensifying the urgency of scientific demands for decision-making and governance.

## **Geopolitical Relations Shifting Toward Emphasis on Rights to Survival and Development and Resource Control**

For a long period, geopolitics fundamentally determined the basic characteristics of global geopolitical relations. The Western bloc led by the United States and the Eastern bloc headed by the Soviet Union shaped the basic interest relationships between nations and regions through the Cold War and its derivatives [2]. Moreover, superimposing Chairman Mao Zedong's three-world division of the globe upon the basic East-West Cold War structure effectively characterized the fundamental features of global geopolitical and interest relationships. In other words, ideology, social systems, and economic development levels could explain global geopolitical features in previous decades with considerable explanatory power. With the end of the East-West Cold War, international geopolitical relations, global strategic patterns, and national defense security strategies has become more complex. Under the premise of "one Earth," the pursuit of global influence and control signifies the strength of capacity to occupy and dominate developmental resources, the magnitude of rights and space for survival and development, and the fundamental interests of national and ethnic prosperity. The camp relationships defined by politics as "enemy" or "friend" have been blurred by multiple interest demands and multiple responsibility commitments, making geopolitical features in state relations more difficult to identify than dur-

ing the Cold War era. In these new geopolitical relations, seeking pathways that conform to the fundamental interests of the Chinese nation requires even more timely, location-specific, and issue-specific choices between short-term tactics and long-term strategic arrangements.

### **Emergence of Anti-Globalization Trends with Rising National Protectionism and Local Barriers**

The economic globalization process of the past half-century has boosted world economic growth and prosperity in some countries. Under globalization—which optimizes the allocation of global production factors through two resources and two markets—global industry has entered the most vigorous development period in human history. The growth rate of capacity to provide production and living materials in the industrial economy has begun to exceed the growth rate of capacity to improve people’s living standards, making comprehensive overcapacity an important outcome of economic globalization. For developed countries that have completed industrialization and urbanization, stabilizing the resource and market pattern has become an objective demand during the overcapacity period. The rapid development of newly industrialized countries and the entry of less-developed countries into mid-stage industrialization means that patterns of resource occupation and market division will face redistribution. During overcapacity periods, such redistribution often implies large-scale job losses in manufacturing and raw material industries in developed countries, shrinking middle-class ranks and resulting instability, which could potentially shake the social foundation and development capacity of nations. Consequently, protectionism among countries and regions that are vested interests of globalization may become their common choice. This objectively requires China to transform its development model and path in response to globalization, innovating new opening strategies and national rejuvenation pathways under new backgrounds.

### **Countries Increasingly Shouldering Common Responsibility for Greenhouse Gas Emission Reduction**

Another important sign that world development has entered a new stage is the establishment of protecting Earth’s environment, reducing carbon emissions, and maintaining global sustainable development as responsibilities commonly undertaken by all nations, which has received commitments from major powers including China and the United States. When the concept of sustainable development was proposed in the 1970s and adopted as a United Nations common program in the 1980s, China’s understanding of sustainable development prioritized development as the primary task, placing sustainability in a secondary position [3]. This understanding and corresponding policies also applied globally, meaning that a relationship existed between environmental protection responsibility and development rights: the more economically developed a nation was, the more actively it pursued sustainability. Ironically, these developed countries contributed more to global warming [4]. When advocating common responsibility,

this largely challenges late-developing countries on what industrialization path to follow, implying they cannot or should not continue growth models that sacrifice resources and environment, while resource-saving and environment-friendly development models will increase development costs. In the context of global competition, increased development costs mean decreased competitiveness and weakened development rights. This principle also applies to China's future modernization process vis-à-vis developed countries, meaning that the difficulty of achieving modernization while bearing common responsibility will undoubtedly increase.

### **Innovation-Driven Development as the Inevitable Choice Triggered by New Technological Revolution**

Every industrial revolution worldwide has been triggered by a technological revolution. We currently stand on the eve of a new technological revolution. Technologies such as 3D printing manufacturing, quantum communication, big data and cloud computing, and new energy and materials will reshape industrial systems and global production networks [5]. Whether enhancing national industrial competitiveness or improving people's living standards while meeting ecological civilization requirements, transforming economic development drivers toward technological innovation has become the necessary path for China and most countries worldwide. However, a difficult obstacle to overcome is the enormous gap in national scientific and technological innovation capabilities globally, a gap often larger than that in current economic development levels. This means that in the new round of competition to achieve innovation-driven development, developing and less-developed countries start from a disadvantaged position at the transformation starting line, which may lead to continuously widening gaps in national development levels [6]. Whether China can enhance its development competitiveness through scientific and technological innovation and play a leading role in promoting development in developing countries through scientific and technological innovation remains unclear in strategy, planning, and implementation.

Furthermore, whether developed countries will carve out alternative paths in future development to occupy the commanding heights of development concepts and comprehensive development levels may pose unprecedented challenges to China's development model that heavily relies on traditional or classical development pathways. Japan is researching development models and objectives for how to achieve even greater happiness in post-modernization than today under conditions of stagnant income and stable basic consumption structures. If we overlook this, a possible outcome is that when we achieve high urbanization and industrialization as measured by quantitative indicators, the quality of modernization may be low.

## Modernization of Governance Capability as an Urgent Priority

Building a moderately prosperous society in all respects and basically achieving modernization constitute China's "two centenary" goals, with the latter being more arduous. The greatest gap in China's modernization level, or the weakest link in achieving modernization, is that the modernization level of governance capability and governance systems remains insufficient [7]. China's governance capability not only lags behind developed countries in many aspects but also falls considerably short of its own economic development level and national quality standards [8]. From the perspective of regional strategy and spatial planning alone, when Germany became the world's second-largest economy after World War II, Germany's spatial control system was already fully mature, with basic improvements in legislation for spatial planning, strategic and major project evaluation, and development control, playing important roles in national and local territorial development and protection [9]. When Japan replaced Germany as the world's second-largest economy, it had already conducted three national territorial spatial master plans, establishing a regional governance system including strict environmental protection systems that effectively ensured orderly development of a beautiful homeland during Japan's modernization process. Although China has become the world's second-largest economy, its unsound spatial control system, lack of top-level design, and fragmented regional policies have become major constraints on China's modernization process. Therefore, the Party Central Committee's decision to elevate governance capability modernization to the primary position in socioeconomic modernization is entirely correct. The reason governance capability modernization lags so far behind economic development is that it faces even greater difficulties than economic development; without scientific design and guidance, the process of governance capability modernization may be rather arduous.

### Unsound Governance System as the Main Constraint on Modernization

Evaluating China's governance capability construction from the perspective of regional strategy and spatial planning reveals that the main problem is an unsound governance system, manifested primarily in four aspects. First, long-term strategic vision is lacking. Although China was once a completely planned economy, it still lacks a territorial spatial development and utilization blueprint to guide development for the next 20-30 years, while "America 2050," "EU 2050," and "Netherlands 2040" have already emerged [10]. The landscapes and homelands of today's developed countries were shaped under the guidance of plans formulated decades ago. Due to this lack of long-term strategy, short-term decision-making behaviors and mindsets have formed from top to bottom, making it normal for each provincial or municipal leadership term to have its own approach. Short-term decision-making without long-term strategic guidance, once mistaken, often results in fundamental errors causing enormous losses.

General Secretary Xi Jinping's requirement to "work according to one blueprint to the end" aims precisely to solve this problem.

Second, there is no planning system based on top-level design. Whether urban planning or gradually emerging regional planning in China, they tend to be fragmentary and not systematic. This creates blindness in lower-level planning—for instance, almost all urban plans simply choose urban scale growth as a planning objective. Aggregating population growth forecasts and land demand from every city's plan nationwide yields an excessively large result. Some plans appear systematic, but from strategy to planning to implementation schemes, they often maintain the same "resolution" throughout, failing to ground themselves, specify details, or provide operational feasibility, making them difficult to use as action bases. Once top-level design strategic errors or major deviations occur during implementation, there are no error-correction mechanisms. China often adopts new strategies and slogans to replace old ones, while inherited innovation, learning from lessons, and drawing on experience to improve planning quality are largely ignored.

Third, decision-making processes often emphasize single factors. The era of pursuing GDP ignored ecological and social benefits, while current orientations pursue urbanization speed and level while overlooking urbanization quality and urban construction standards. Decision-making and management often neglect comprehensive benefits, exhibiting tendencies toward simplification.

Fourth, policies frequently suffer from one-size-fits-all mistakes. Decision-making lacks precision. China is a vast country with great differences in development conditions and foundations. A policy applicable in one region may be unsuitable or even wrong in another, yet one-size-fits-all decision-making has long become a common problem. In essence, the core problem with China's governance capability and system is that the government has not properly resolved issues of absence and overstepping in the governance system. Despite more than half a century of socialist construction and the reality of being the second-largest economy, the positioning of government decision-making remains unresolved, becoming the most critical issue in China's modernization process.

### **Lack of Error Correction Mechanisms During Comprehensive Deepening of Institutional Reform**

Since the 18th Party Congress, the Party Central Committee's series of brilliant decisions have been guiding the modernization of China's governance capability and governance system, including anti-corruption efforts to improve governance capacity, comprehensive deepening of institutional reform to perfect the social governance system, strengthening rule of law to confine power within institutional cages, and the "five-in-one" strategic layout for ecological civilization construction [11-13]. In reality, there exists a certain gap between brilliant strategic deployment and implementation outcomes. One reason is China's lack

of error correction and deviation rectification mechanisms. Even when top-level design and strategic decisions are reasonable, implementation still follows the pattern of “wearing new shoes but walking the old path.” Because institutional inertia and policy implementation subjects continue functioning without timely and effective error prevention and correction mechanisms, the implementation process across different layers becomes a process of amplifying deviations from the moment policies are issued. The longer the time, the greater the potential deviation that continuously brews and occasionally erupts. Additionally, many managers are accustomed to the approach of “either do nothing, or if doing, race against time,” leaving no time for policy adjustment or mechanism improvement. Continuous mistakes and continuously unmet new policies may weaken public confidence and trust in reform, thereby creating new difficulties and obstacles for deepening reform and establishing governance systems.

### **Challenges in Mobilizing Subjective Initiative and Innovative Development Concepts**

Modernization of governance capability depends on people, first and foremost on decision-makers and managers. Failure of decision-makers and managers to govern according to systems represents a manifestation of unsound rule of law, causing significant damage to social progress and national modernization. Social development transformation and building modern governance systems first face obstacles from vested interests that lose benefits. Therefore, China’s urgent need to advance governance capability modernization requires concerted efforts from Party and national leaders at all levels. Yet precisely during this period, negative sentiments among vested interests and passive attitudes among some managers during transformation have made reform initiative somewhat weaker compared to the era of reform and opening-up and vigorous economic development. Moreover, just as transforming mindsets was the primary prerequisite for achieving the “Four Modernizations,” governance capability modernization also requires conceptual innovation. The difficulty lies in the fact that while transforming mindsets in the past had theories to follow and paths to imitate, governance capability modernization today and in the future has few ready-made, applicable theories for guidance. It requires theoretical innovation to arm minds and must eliminate dogmatism and formalism in “dealing with reform” [14]. For instance, how do we understand and properly leverage the superiority of our system to expand it in the journey toward realizing the Chinese Dream of the great rejuvenation of the Chinese nation? How do the developmental conditions and implementation roadmaps for our more advanced socialist career objectives manifest? How does the “new” in China’s new-type urbanization and new rural construction reasonably reflect and conform to modernization laws? Without solving these propositions, we cannot have clear understanding of goal orientation, making it difficult to reasonably plan the blueprint for a beautiful China and grasp the vision for the second centenary goal.

## **New Contradictions in Development Pose New Challenges for Governance**

In China's modernization process, the development model of sacrificing resources and environment for economic growth has been recognized as unsustainable. Therefore, the focus of green development is to resolve the relationship between population-economy and resources-environment. In major function zoning, we designated optimized development zones and key development zones. The original conception was that optimized development zones had reached peak resource-environment constraints and must transform, optimize, and upgrade development, while key development zones still had resource-environment potential and could serve as main recipients for further population-economic agglomeration [15]. Further in-depth research shows that China's urbanization, particularly in urban agglomeration areas, basically falls within the range of overloaded resource-environment carrying capacity, and the resource-environment carrying capacity of key axial belts connecting urban agglomerations is also critically overloaded. This means unprecedented difficulties lie ahead for achieving stable economic growth and steady urbanization improvement under green development requirements. When the central government proposed innovation-driven development requiring economic growth through scientific and technological innovation, the western regions designated for major development and the northeast requiring revitalization are both areas with lagging scientific and technological innovation capabilities in China. The gap in scientific and technological innovation capabilities between these regions and the developed eastern regions is far greater than the gap in current economic development levels. If the innovation strategy does not account for this developmental gap, it will create inconsistencies with the concepts of shared and coordinated development. Furthermore, economic development and social progress are not synchronized, and the social responsibility of wealthy classes has not been established. When implementing opening-up strategies, particularly in the "Belt and Road" initiative, ignoring social responsibility, development concepts, and mutual respect among people may trigger conflicts with local governments, populations, and employees in investment destinations. If such conflicts intensify, they will feedback as factors hindering opening-up strategy implementation. Further consideration of the impact of opening-up strategies on strengthening China's national industries and state-owned economy is an even more complex systematic project. In summary, these new problems emerging in the new development stage are more complex and lack reference benchmarks compared to the difficulties faced during the past 30-plus years of reform and opening-up, making the challenge of solving them even greater.

## **Scientific Strategies for Think Tank Construction**

Faced with demands for decision-making scientization and governance capability modernization, think tank construction should first adhere to grounding policy consultation in professional perspectives and professional issues.

### **The Bottom Line: Avoiding Layman's Talk**

A professional perspective means examining complex governance and decision-making issues from one's professional viewpoint—that is, from a specific dimension and aspect. In fact, only through profound understanding of any complex matter from different dimensions and aspects can we outline its holographic image, reveal its intricate internal relationships, and reflect its multifaceted impacts [16]. Therefore, examining complex matters from a professional perspective without demanding comprehensive judgments, as long as the discussion of an aspect is thorough, will be helpful for rational decision-making. In a sense, synthesizing cognitions from different aspects and integrating conclusions from different dimensions is precisely what government and public management should rightfully do. Profound understanding of one aspect of a complex matter from a professional perspective forms the cornerstone of scientific government decision-making.

Policy consultation on professional issues extends from professional field problems to policy-related research and advice. Learning analytical methods for policy backgrounds, policy levers, and policy effects regarding rational development in professional fields and supplementing knowledge deficits in policy research within professional research fields are undoubtedly the main pathways for think tanks with professional knowledge and backgrounds to improve their policy consultation capabilities [17]. In short, think tanks focusing on different industries can examine resource-environment and socioeconomic development issues from professional perspectives and pay attention to and propose corresponding consultation suggestions for policies concerning professional development, which is undoubtedly the necessary path to ensuring decision-making scientization. In summary, the bottom line for think tank construction is to avoid layman's talk. We should avoid idle chatter detached from professional perspectives and issues and avoid an excessive proportion of non-professional consultation suggestions, which will affect the efficiency of decision-making scientization and even hinder its progress. Moreover, since everyone lives and works in specific regions and departments, they are often constrained by regional and departmental limitations. While adhering to avoiding layman's talk, it is understandable and acceptable to be influenced by regional and departmental interests. However, if too many suggestions are made with “one's seat directing one's mind,” it will cause the greatest harm to think tanks themselves by pushing decision-makers to the forefront of consultation.

To combine professional talk with policy substance, we must conduct solid research. Scientific attitude and theoretical methods must serve as the foundation for policy participation and consultation. In terms of research, focusing on long-term accumulation in professional issues enhances the height of one's position and depth of problem understanding; emphasizing theoretical and analytical framework innovation effectively reveals development laws of new things in new eras [18]; focusing on combining goal orientation and problem orientation enables forward-looking and strategic perspectives while speaking in grounded

terms; emphasizing systematic research and concise enhancement extends consultation topics from research to policy domains; and emphasizing organic integration of major project research with soft science research ensures scientific organization of research methods guarantees scientific research results.

From personal research and decision-serving experience, only deep research can better serve decision-making. A classic geographical thinking is adapting measures to local conditions, and an important scientific method is “regionalization”—dividing development and utilization purposes through suitability evaluation of different regions to guide rational layout of production and living activities [19,20]. Based on such fundamental theories and methods, we spent approximately ten years constructing major function zoning theory, forming technical regulations for major function zoning, drafting the first national major function zoning plan, and formulating a policy system for implementing major function zoning, revealing from a research perspective the rationality of major function zoning theory and its policy operability [21]. This ensured that major function zoning evolved from national planning to strategy and institution. Further in-depth research revealed that supervision and evaluation during implementation is a critical link. Over the past three years, we have systematically studied technical schemes and policy systems for resource and environmental carrying capacity monitoring and early warning mechanisms, significantly elevating China’s modernization level of spatial governance systems. Carrying capacity research results show that overload and critical overload in China constrain implementation of major strategies such as the “Belt and Road,” “Beijing-Tianjin-Hebei Coordinated Development,” and “Targeted Poverty Alleviation.” Through “systematic restoration and governance of mountains, rivers, forests, farmlands, and lakes,” it may be possible to enhance China’s carrying capacity level. Therefore, balancing population-economy and resources-environment and unifying economic, social, and ecological benefits have become important topics in our research on ecological civilization institutional reform. The major policy reports produced during this process have been adopted by the state and will influence the formation of major national policies.

Combining learning gains, I have organized the basic thinking patterns for research and decision-serving as follows: (1) grasp the basic processes and laws of research objects and decision-serving propositions, which are entirely scientific issues; (2) pay close attention to characteristics manifested in China regarding these propositions, where identifying characteristics of development stages and regional differences are key points for deepening research and policy implementation; (3) fully analyze and address several basic relationships in conjunction with policy substance—the relationship between positive and negative effects, short-term and long-term benefits, beneficiaries and affected groups, and necessary and sufficient conditions; and (4) anticipate potential obstacles in future implementation and strategies to overcome them. Naturally, applying reverse thinking or even disruptive innovation reaches an advanced level. In summary, we must establish “three perspectives”: strategic perspective, temporal-spatial

perspective, and systematic perspective.

### **CAS Think Tanks Should Focus More on Building Fundamental Capacities**

Domestic and international development environments are increasingly complex, with innovation and uncertainty in dynamic changes significantly strengthening, making government decision-making and management noticeably more difficult and consequently raising demands for government decision-making scientization. Otherwise, our resources and environment cannot bear the burden, nor can our social and economic problems or international pressures. Government decision-making scientization poses objective requirements for policy participation and consultation. Only scientific consultation suggestions can guarantee decision-making scientization and serve as the touchstone of think tank capability. We should also recognize that management decision-makers are thinking more rationally, rational decision-making processes are becoming more democratic, and the overall national quality is improving in terms of understanding national affairs and development issues related to people's livelihoods, placing higher demands on think tank construction. Neglecting synchronous or even leading improvement in think tank construction capabilities is not conducive to China's governance capability and governance system modernization process and prevents think tanks from properly fulfilling their responsibilities in the national decision-making system.

Think tank construction thinking should be forward-looking, superior, and different. Therefore, think tank construction should adhere to inheriting reasonable components of China's excellent traditional culture, especially the advanced realm of Chinese philosophical concepts and the essence of traditional culture; drawing on the essence of advanced human civilization, particularly learning from developed countries' experiences and lessons during their modernization processes; grounding in China's socialist characteristics by fully understanding faced problems and realistic development backgrounds; and scientifically predicting future development trends, pathways, and prospects according to basic laws of development of matters.

Leveraging trends in big data, cloud computing, informatization, and intelligence to strengthen fundamental think tank capacities is also an effective way to improve policy consultation capabilities. Data collection and processing platforms, decision-support and simulation systems, and human-computer interactive visualization conditions are crucial for scientific decision-making. From a data perspective alone, China's population figures vary significantly across different departments; resource-environment basic data are lacking or outdated; data specifications including temporal-spatial precision and collection site distribution are uncoordinated; and data sharing is difficult even when available. Dynamic data reflecting national conditions changes are not obtained timely, processed properly, or predicted effectively by models, all seriously constraining China's decision-making scientization and management modernization levels.

The academic background and dominant direction of CAS think tanks require accurate and objective data for demonstration. Therefore, building first-hand data collection systems, enhancing data analysis and process simulation capabilities, and improving human-computer interactive and visualization expression capabilities in decision-making processes are undoubtedly strengths for elevating CAS think tank construction standards and technological content of think tank products.

Learning is always a shortcut to improving fundamental capacities. Strengthening exchanges, particularly increasing cross-disciplinary exchanges and multi-field cooperation within CAS, facilitates innovation and improvement. Through fundamental capacity building, we can effectively “break free from disciplinary biases, departmental biases, and rank biases,” enabling us to speak with data and facts.

### **Think Tank Construction Should Quickly Form Self-Supervision and Continuous Improvement Mechanisms**

Science has gradually established supervision and evaluation mechanisms, and decision-making management is continuously improving supervision, accountability, and assessment mechanisms [22]. Think tank construction and policy consultation cannot be vacuum zones where one can say whatever they want without responsibility or rewards and punishments. This cannot be tolerated long-term. Because the prestige of any think tank and the growth process of any living organism, divorced from eliminating the old and absorbing the new and survival of the fittest, lacking supervision, assessment, and clear rewards and punishments, will face catastrophe and possibly self-destruction. Therefore, we should gradually adopt the ability to speak “three kinds of words” as the supervision and assessment direction: speaking truth, speaking words with professional knowledge and policy substance, and speaking words with insightful height and grounded practicality.

---

### **References**

1. Fan Jie, Guo Rui. Several Key Issues for Innovating Regional Governance Systems Towards the 13th Five-Year Plan. *Economic Geography*, 2015, 35(1): 1-6.
2. Zhang Zhiqiang, Su Na. Development Trend Characteristics of International Think Tanks and Construction of China’s New-Type Think Tanks. *Think Tank: Theory & Practice*, 2016, (1): 9-23.
3. Xu Guanhua, Ge Quansheng, Gong Peng, et al. Global Change and Human Sustainable Development: Challenges and Countermeasures. *Chinese Science Bulletin*, 2013, (21): 2100-2106.
4. Qin Dahe. Climate Change Science and Human Sustainable Development. *Progress in Geography*, 2014, (07): 874-883.

5. Bai Chunli. Leading Scientific and Technological Innovation Leapfrog Development with “Four Firsts”. *Bulletin of Chinese Academy of Sciences*, 2016, (S1): 1-6.
6. Fan Jie, Liu Hanchu. Impact and Adaptation of Science and Technology Innovation Drive on China’s Regional Development Pattern Changes During the 13th Five-Year Plan Period. *Economic Geography*, 2016, 36(1): 1-9.
7. Liu Weidong. *Economic Geography and Spatial Governance*. *Acta Geographica Sinica*, 2014, 69(8): 1109-1116.
8. Fan Jie, et al. *Academic Exploration and Social Contribution of Chinese Human and Economic Geographers*. Beijing: The Commercial Press, 2016.
9. Publicity Department of the CPC Central Committee. *Reader of General Secretary Xi Jinping’s Series of Important Speeches*. Beijing: Study Press, 2016.
10. Bureau of Cadre Education, Organization Department of the CPC Central Committee. *Selected Cases of the Five Development Concepts - Piloting China*. Beijing: Party Building Books Publishing House, 2016.
11. Li Guoqiang. Understanding and Exploration of “Strengthening the Construction of New-Type Think Tanks with Chinese Characteristics”. *Chinese Public Administration*, 2014, (5): 16-19.
12. Fan Jie. Response Strategies for the 13th Five-Year Plan. *Bulletin of Chinese Academy of Sciences*, 2016, 31(1): 36-43.
13. Fan Jie. *Think Tank: Theory & Practice*, 2016, (2): 1-7.
14. Fan Jie, Guo Rui. Several Key Issues for Innovating Regional Governance Systems Towards the 13th Five-Year Plan. *Economic Geography*, 2015, 35(1): 1-6.
15. Fan Jie, Liu Hanchu. Impact and Adaptation of Science and Technology Innovation Drive on China’s Regional Development Pattern Changes During the 13th Five-Year Plan Period. *Economic Geography*, 2016, 36(1): 1-9.
16. Fan Jie, Guo Rui. Several Key Issues for Innovating Regional Governance Systems Towards the 13th Five-Year Plan. *Economic Geography*, 2015, 35(1): 1-6.
17. Zhang Zhiqiang, Su Na. Development Trend Characteristics of International Think Tanks and Construction of China’s New-Type Think Tanks. *Think Tank: Theory & Practice*, 2016, (1): 9-23.
18. Fan Jie, Liu Hanchu. Impact and Adaptation of Science and Technology Innovation Drive on China’s Regional Development Pattern Changes During the 13th Five-Year Plan Period. *Economic Geography*, 2016, 36(1): 1-9.
19. Liu Weidong. *Economic Geography and Spatial Governance*. *Acta Geographica Sinica*, 2014, 69(8): 1109-1116.
20. Fan Jie, et al. *Academic Exploration and Social Contribution of Chinese Human and Economic Geographers*. Beijing: The Commercial Press, 2016.

21. Fan Jie. Major Function Zoning Strategy and Institution. Beijing: Science Press, 2009.
22. Fan Jie, Guo Rui. Several Key Issues for Innovating Regional Governance Systems Towards the 13th Five-Year Plan. *Economic Geography*, 2015, 35(1): 1-6.

---

**Fan Jie**<sup>1,2,3</sup>

(1 Institutes of Science and Development, Chinese Academy of Sciences, Beijing 100190, China; 2 Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China; 3 University of Chinese Academy of Sciences, Beijing 100049, China)

**Abstract:** Based on intensive study and professional practice, this paper constructs an analytical framework for think tanks serving decision-making in regional development strategy and spatial planning. Regarding the international environment, the paper examines the influence of geopolitical strategic adjustments on geopolitical relations, the shift of economic globalization toward national and local protectionism, the global common responsibility for sustainable development, and the new round of industrial revolution triggered by the new technological revolution, concluding that global development is entering an unprecedented new stage. In terms of domestic development, focusing on the modernization of governance capability as the central theme, the paper discusses the long-standing defects in governance capability, the current dilemmas facing institutional reform, the challenges confronting future optimization of development paths, and emerging contradictions and problems, thereby demonstrating the critical importance of governance capability modernization for achieving China's second centenary goal. Building upon an analysis of the increasingly complicated decision-making context, the paper proposes four recommendations for the scientific development of think tanks: (1) think tank construction should be placed on a professional perspective (not to say layman words); (2) think tank construction should be based on intensive study (no intensive study, no voice); (3) think tanks of the Chinese Academy of Sciences should pay more attention to the construction of basic abilities; and (4) the vitality of think tank construction depends on its self-supervision and self-improvement.

**Keywords:** decision making, think-tank, scientize

**Fan Jie** Deputy Director of Institutes of Science and Development, Chinese Academy of Sciences; Research Fellow of Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences; Director of Key Laboratory of Regional Sustainable Development Modeling, Chinese Academy of Sciences. Born in 1961. Graduated from the Department of Geography, Peking University in 1982, and has been studying and working at the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences ever since. Member of the National Committee of Experts for the 13th Five-Year Plan, Member of the National Leading Cadres' Resources and

Environment Audit Expert Committee, Member of the National Mountains-Rivers-Forests-Farmlands-Lakes Project Expert Committee. Mainly engaged in human and economic geography, and research on China's regional sustainable development. Has presided over and completed major scientific research tasks including "National Major Function Zoning," "National Resources and Environmental Carrying Capacity Early Warning," and "Specialized Evaluation of Resources and Environmental Carrying Capacity for Post-Disaster Reconstruction Planning of Wenchuan, Yushu, Zhouqu, Lushan, and Ludian." Delivered a lecture on "International Regional Development Situation and Promoting Coordinated Regional Development in China" during a collective study session of the Political Bureau of the CPC Central Committee. The consultation report he authored received important instructions from General Secretary Xi Jinping. E-mail: fanj@igsnr.ac.cn

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

*Source: ChinaXiv — Machine translation. Verify with original.*