
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202403.00342

Strengthening the National Park Governance System for High-Quality Development of the World's Largest National Park System (Post-print)

Authors: Huang Baorong

Date: 2024-03-27T00:00:00+00:00

Abstract

Improving the national park governance system represents an inevitable requirement for China's high-quality construction of the world's largest national park system. Drawing upon years of research across national parks, national park system pilot zones, and candidate zones, this article analyzes the primary challenges and problems currently facing China's national park governance. Under the overarching logic of modernizing China's national governance system and governance capacity, and learning from international experiences in regional and watershed public goods as well as good governance in national parks, it proposes a theoretical framework for China's national park governance system featuring a "four-in-one" integration: coordinated decision-making mechanisms, management and implementation mechanisms, scientific decision-making and consultation mechanisms, and social participation mechanisms. Building upon this foundation, it puts forward five recommendations for deepening reform of China's national park governance system: (1) Establish a coordinated decision-making mechanism to address the coordination challenges in national park construction; (2) Deepen management system reforms to build a government governance system for national parks with clearly defined responsibilities and law-based administration; (3) Improve the institutional system for multi-party, whole-process participation in national park governance to promote co-construction, co-governance, and shared benefits; (4) Strengthen scientific decision-making and consultation mechanisms to advance scientific, democratic, and law-based decision-making; (5) Expand the spatial governance scope of national parks to foster a harmonious and mutually beneficial park-community relationship.

Full Text

Preamble

Special Issue on Modernizing National Park Governance System

China has made positive progress in building its national park system, yet still faces a series of governance challenges that constrain the development of the world's largest national park system. Establishing a modern national park governance system suited to China's national conditions is key to resolving various contradictions and challenges in national park construction, reducing construction and management costs, and thereby building the world's largest national park system with high quality. Based on this, *Bulletin of Chinese Academy of Sciences* has organized this special issue on "Modernizing National Park Governance System," conducting systematic research on major issues including the theory and reform pathways for building China's modern national park governance system, international experience, scientific decision-making and consultation mechanisms, and governance practices of the Qinghai-Tibet Plateau national park group, aiming to provide governance theories and decision-making support for China's high-quality construction of the world's largest national park system. This special issue was guided by Professor Huang Baorong, Academic Director of the Institute of Sustainable Development Strategy, Institutes of Science and Development, Chinese Academy of Sciences.

Citation: Huang B R. Improve governance system of national parks, build the world's largest national park system with high quality. *Bulletin of Chinese Academy of Sciences*, 2024, 39(2): 219-229, doi: 10.16418/j.issn.1000-3045.20230618001.

Affiliation: Institutes of Science and Development, Chinese Academy of Sciences, Beijing 100190, China

Abstract

Improving the national park governance system is an inevitable requirement for China to build the world's largest national park system with high quality. Based on years of investigation into national parks, national park system pilot areas, and candidate areas, this article analyzes the main challenges and problems currently facing China's national park governance. Under the overall logic of modernizing China's national governance system and governance capabilities, and drawing on international experience in sound governance of regional and watershed public goods and national parks, this article proposes a theoretical framework for a "four-in-one" Chinese national park governance system comprising a coordinated decision-making mechanism, a management and execution mechanism, a scientific decision-making and consultation mechanism, and a social participation mechanism. On this basis, the article puts forward five recommendations for deepening the reform of China's national park governance system: (1) Establish a coordinated decision-making mechanism to solve the co-

ordination challenges in national park construction; (2) Deepen management system reform to establish a government governance system for national parks with clearly defined responsibilities and administration according to law; (3) Improve the institutional system for multi-party participation throughout the entire process to promote collaborative construction, governance, and benefit-sharing; (4) Improve scientific decision-making and consultation mechanisms to promote scientific, democratic, and lawful decision-making; and (5) Expand the spatial governance scope of national parks to establish harmonious and mutually beneficial park-locality relationships.

Keywords: national parks, governance system, theoretical framework, deepening reform

DOI: 10.16418/j.issn.1000-3045.20230618001

CSTR: 32128.14.CASbulletin.20230618001

Funding: Strategic Priority Research Program (Class A) of the Chinese Academy of Sciences (XDA20020303), Second Tibetan Plateau Scientific Expedition and Research Program (2019QZKK0401), Key Program of the National Natural Science Foundation of China (42230510), Joint Project of Paradise Foundation and The Nature Conservancy (THY/BELJING/CASISD051221)

Received: January 21, 2024

1. The Necessity and Importance of Improving China' s National Park Governance System

1.1 Improving the National Park Governance System is an Inevitable Requirement for Building a World-Class National Park System in China

(1) **China possesses the basic conditions for establishing a world-class national park system.** First, natural conditions: China has a vast territory with complex and diverse landforms and climates, making it one of the countries with the richest biodiversity and ecosystem types in the world. It boasts numerous endemic and rare species and natural wonders, with 14 world natural heritage sites and 4 mixed natural and cultural heritage sites, as well as 41 world geoparks—all ranking first in the world. Second, cultural foundation: China' s national park construction is rooted in the fertile soil of Chinese culture. The Chinese nation has long upheld the philosophy of “following the way of nature and achieving harmony between humanity and nature,” which continues to this day. This cultural and practical principle provides an important cultural guarantee for establishing national parks featuring harmonious coexistence between humans and nature. While protecting natural heritage, China' s national parks also protect numerous material and intangible cultural heritages that have been

passed down for millennia and can enhance the parks' value, giving them unparalleled cultural advantages over other countries. Third, nature conservation foundation: Since the 18th CPC National Congress, China has attached great importance to ecological civilization construction. Concepts such as “respecting, accommodating, and protecting nature” have become deeply rooted in people's hearts, and the “four beams and eight columns” of the ecological civilization institutional framework have been basically established. Meanwhile, China has placed high priority on biodiversity conservation, establishing nearly 10,000 various types of protected areas, building ecosystem research networks and China Biodiversity Monitoring and Research Networks, and releasing a series of species inventories including the *China Biodiversity Red List*, laying a solid conservation foundation for establishing world-class national parks. Fourth, political will: Since the Third Plenary Session of the 18th CPC Central Committee, General Secretary Xi Jinping has attached great importance to national park construction and has personally planned and deployed it. The General Office of the CPC Central Committee and the General Office of the State Council have issued multiple important documents to promote national park construction, and strong political will provides reliable guarantee for building a world-class national park system.

(2) Building a world-class national park system requires a world-class governance system. Compared with nature reserves, national parks have higher goals and more diversified functional positioning, involving more subjects and stakeholders (Table 1), making them complex public affairs. The research group on China's national park governance system (hereinafter referred to as “the research group”) found through investigations in national parks, pilot areas, and candidate areas that traditional administrative management models for nature reserves face great difficulties in handling the complex public affairs of national parks—not only is it difficult to promote work and management costs are high, but it also easily causes estrangement between national parks and local governments and communities, weakening local governments' enthusiasm for supporting national park construction. International experience shows that the sharp contradictions between French national parks and surrounding municipalities and communities caused by the initial “circle-drawing protection” approach serve as a lesson, while its later experience in promoting multi-governance of national parks through reform is worth learning from [10]. Numerous studies and cases have confirmed that establishing a governance system with multiple subjects including government, society, and market participating together, performing their respective duties and responsibilities, and coordinating with each other will effectively resolve various contradictions in national park or protected area governance, improve governance effectiveness, and thus maximize ecological, social, and economic benefits [11-13].

1.2 Improving the National Park Governance System is a Necessary Measure to Solve a Series of Governance Challenges Facing National Parks

China's national park construction faces special national conditions including large populations, complex land tenure, prominent human-land contradictions, and many historical legacy issues. Managing a national park system covering more than 1,000,000 km² with extremely important ecological status and extremely complex human-land relationships faces numerous governance challenges. For example: How to establish an effective coordination mechanism to solve the current cross-departmental, cross-regional, and central-local coordination difficulties in national park system construction? How to establish an effective mechanism to balance ecological conservation and community development, promoting sustainable development of communities inside and around parks while implementing stricter protection to achieve the vision of common prosperity? How to properly handle the complex issues of land ownership, contract rights, and management rights in national parks to exercise unified control over territorial space use and resolve fragmented management problems? How to establish an effective exit mechanism to avoid sharp contradictions caused by the withdrawal of mining rights and small hydropower projects? How to establish an effective co-construction, co-governance, and benefit-sharing mechanism to ensure the full participation and basic rights of local governments, communities, the public, social organizations, and enterprises, avoiding various contradictions and estrangements caused by "circle-drawing protection"? Deepening reform to improve the national park governance system is a necessary measure to address these governance challenges and ensure the steady progress of China's world-class national park system construction.

2. Main Challenges and Problems in China's National Park Governance

Since the Third Plenary Session of the 18th CPC Central Committee proposed establishing a national park system, China has made important progress in spatial layout planning, natural resource management, and ecological conservation and restoration [14], making it one of the most rapidly progressing and effective comprehensive reform items in the ecological civilization institutional reform [15]. However, national parks are complex public affairs and also new undertakings in China, making construction difficult with many challenges. Through years of investigation into national parks, pilot areas, and candidate areas, the research group found that China's national park governance still faces many challenges and problems.

2.1 Main Challenges

(1) Large and widely distributed populations make it difficult to balance conservation and development. National parks and their surrounding

areas often contain large numbers of communities and indigenous residents [16]. According to the WorldPop dataset (2020, 1 km resolution population distribution data), the first batch of national parks and their surrounding 5 km, 10 km, and 20 km buffer zones contain approximately 636,600, 790,500, 2,067,000, and 4,531,700 people respectively (Table 2). Based on this projection, the 49 national parks and their surrounding areas will involve tens of millions of rural populations in the future. National parks implement strict ecological protection, which inevitably affects the traditional livelihoods of the large rural populations inside and outside the parks. However, green emerging industries develop slowly in the initial stage of national park creation due to lack of facilities, institutions, and talent, making it difficult to support the improvement of rural residents' livelihoods in the short term. This means that China' s national park system construction will be accompanied long-term by the challenge of balancing ecological conservation and rural community development.

(2) Numerous subjects and stakeholders make coordination difficult.

National park construction and management involve not only the National Forestry and Grassland Administration but also many other subjects and stakeholders, including central and local government administrative departments such as central and local governments, the National Forestry and Grassland Administration, Ministry of Natural Resources, Ministry of Ecology and Environment, Ministry of Water Resources, Ministry of Agriculture and Rural Affairs, the Central Institutional Organization Commission Office (referred to as “Central Bianban”), and Ministry of Finance, as well as numerous stakeholders such as research institutions, enterprises, the public, communities, and non-profit organizations. The integration of various protected areas to establish national parks also involves the integration of numerous institutions and personnel arrangements. Both at the national level and at the level of individual national parks, coordination is difficult.

(3) Complex land tenure makes unified natural resource asset management difficult.

According to the national collective asset verification results, by 2019, China' s collective rural land area was 6.55 billion mu (approximately 43.67 million km²), accounting for about 45.5% of the total land area. This land ownership structure inevitably means that China' s national park system will include large areas of collective land. At the same time, much state-owned land is used by village collectives or individuals without legal contract procedures; land contract right transfers are often conducted through verbal agreements without formal contracts, and even cases where the same piece of land is transferred multiple times or simultaneously to multiple parties [17]. The combination of state-owned and collective land with different forms and terms of land contract systems and land transfers creates land tenure complexity in China' s national parks and candidate areas that is rare in the world, increasing the difficulty of unified natural resource asset management in national parks.

(4) Long history of development and utilization makes historical legacy issues difficult to resolve.

China has a long history, and even

remote areas show traces of long-term human activity. After large-scale industrialization, urbanization, and agricultural and rural modernization, high-quality wilderness areas with minimal human disturbance have become very scarce [18]. National parks and candidate areas often contain certain numbers of mining rights and small hydropower projects. These mining rights and small hydropower projects are pillars of local economic development and guarantees of energy security, and most were legally established. Against the backdrop that the national level has not yet formulated an exit compensation system clarifying compensation subjects, standards, and procedures, local governments often directly shut down or restrict their use, inevitably triggering various contradictions.

2.2 Main Problems

(1) Industry management departments face coordination difficulties in managing public affairs. In addition to being directly managed by the National Forestry and Grassland Administration, national park construction and management involve many other subjects and stakeholders. Without authorization for macro-coordination management, the National Forestry and Grassland Administration faces great difficulties in coordinating various departments and stakeholders to jointly promote national park construction and management. This is mainly reflected in: Without an effective coordination mechanism, the spatial layout of national parks is inevitably constrained by departmental and local interests, making it difficult to include some areas with important conservation value in the spatial layout scheme; it is difficult to coordinate various departments and stakeholders to reach consensus on relevant legislative provisions of the *National Park Law*, resulting in slow legislative progress [19]; it is difficult to coordinate and promote central and local Bianban to efficiently issue national park management institution establishment plans, resulting in management institutions for 4 of the first batch of national parks still not being formally established and their three-fixation schemes not being formally issued; and difficulties in coordinating solutions to specific management issues such as industrial and mining enterprise withdrawal and “one park, multiple systems” in trans-provincial national parks [20].

(2) The national park management system has not been fully streamlined, and problems of unclear responsibility boundaries between central and local governments and among departments still exist. This is mainly reflected in: First, unclear responsibility boundaries between central and local governments. All three management models—direct central management, joint central and provincial government management, and central government entrusting provincial governments with proxy management—face problems of unclear division of responsibilities and expenditure obligations between central and local governments [21], such as the lack of clear definition of central and local responsibilities and expenditure obligations regarding mining rights and small hydropower project withdrawals. Second, unclear responsibility bound-

aries among departments. For example, responsibilities and expenditure obligations between the Ministry of Natural Resources and national park management institutions regarding natural resource survey and monitoring, ownership registration, property rights management, spatial planning, and territorial use control are unclear, creating difficulties in management practice [6]. Third, unclear responsibilities between national park management institutions and local governments. The problem of both national park management institutions and local governments or local forestry and grassland bureaus simultaneously holding natural resource management authority within park boundaries still exists, with multiple management and unclear responsibilities.

(3) Insufficient multi-party participation in national park system construction and management. The *General Plan for Establishing a National Park System* (hereinafter referred to as the *General Plan*) proposes that national park construction should adhere to the principle of “state-led, joint participation.” In national park construction and management practice, the principle of “state-led” has been fully implemented, but “joint participation” mostly remains at the conceptual level and pilot exploration stage, lacking specific institutional arrangements. This creates a constraint of insufficient substantive participation by multiple subjects such as communities, the public, non-profit organizations, and enterprises in China’s national park system construction. National park creation, planning, and management still face a tendency toward “circle-drawing protection” that ignores the close connections between national parks and local governments, surrounding communities, and the public, easily causing contradictions between conservation and development and creating doubts among some local governments about creating national parks, increasing the difficulty of national park system construction.

(4) Absence of laws and regulations, with systemic problems in departmental legislation. The *National Park Law* has not yet been promulgated. The current main legal basis for national park management is the *Interim Measures for National Park Management*. As a departmental regulation, the *Interim Measures for National Park Management* has low legal status and is difficult to coordinate multi-departmental interests or provide legal guarantees for national parks as comprehensive public affairs. National park legislation driven by industry departments may have a tendency toward departmental legislation that is inconsistent with the concepts of national representativeness and public welfare of national parks.

(5) A diversified funding guarantee mechanism has not yet been established. Most countries that have established national park systems have created diversified funding mechanisms primarily based on fiscal investment or market investment to support national park construction [22,23]. The *General Plan* also points out the need to establish a diversified funding guarantee mechanism primarily based on fiscal investment. However, on the one hand, China’s national park construction still lacks special fiscal funds for national park construction, and central government expenditure does not match its responsibility

for protecting public welfare resources [21]; on the other hand, public welfare investment and social capital investment mechanisms are not sound, with investment still very limited and not yet forming an effective supplement to the large amount of funds needed for national park system construction.

(6) Lack of systematic community participation and benefit-sharing mechanisms. The research group conducted a social survey on community participation in national park construction and governance in a certain national park, collecting 418 questionnaires from 33 administrative villages in 13 townships. Regarding the survey on the relationship between respondents' household addresses and national park space, up to 50.2% of respondents answered "unclear," reflecting insufficient community participation in the national park's construction and management and the current lack of community participation mechanisms. At the same time, community benefit-sharing mechanisms for national park nature education, ecological experience, and concession projects are not sound, with communities benefiting little from related projects. Strict ecological protection measures in national parks restrict communities' traditional livelihoods, while the development of emerging industries has not effectively improved community livelihoods, easily causing contradictions between national parks and communities.

3. Basic Principles and Overall Thinking on Improving China's National Park Governance System

3.1 Basic Principles

(1) Uphold state leadership. National parks represent national image and concern the well-being of all people, making them matters of national importance. Their funding, planning, and natural resource asset management must adhere to the basic principle of state leadership. Natural resource assets within national parks belong to the state and should ultimately be owned and managed by the central government, which should also bear corresponding expenditure responsibilities. The spatial layout and adjustment optimization of national parks need to adhere to scientific principles and a "top-down" approach, incorporating the most important natural ecosystems, most unique natural landscapes, most essential natural heritage, and most concentrated biodiversity into the national park system, avoiding interference in spatial layout by local governments and relevant departments based on local and departmental interests.

(2) Uphold co-construction, co-governance, and benefit-sharing. Co-construction, co-governance, and benefit-sharing complement state leadership and represent the proper meaning of national parks' public welfare for all. Multi-governance through government, market, and social mechanisms is an ideal form of effective state governance [24]. Particularly for national parks with multiple functions and numerous subjects and stakeholders, effective governance requires establishing, in line with open and inclusive principles, an institutional system that widely absorbs non-state subjects such as social organizations, enterprises,

and communities to participate in national park construction and governance, mobilizing the enthusiasm of different subjects to participate in national park governance.

(3) Uphold a people-centered approach. A people-centered approach is the core value pursuit of China's national governance system and should also be a basic principle followed by the national park governance system. National park governance system construction needs to adhere to improving people's well-being as the starting point and ultimate goal. In addition to providing high-quality ecological products and services for the whole society, national parks also need to provide more and better opportunities for the public to get close to nature, understand nature, and enjoy nature. In promoting the construction of the world's largest national park system, it is necessary to avoid turning national parks into closed "islands" isolated from the people. From a governance perspective, a people-centered approach requires highlighting the participation of the public and communities in all fields and aspects of national park governance and safeguarding their basic rights and interests.

(4) Uphold the core position of institutions in the governance system. Small wisdom manages affairs, great wisdom manages institutions. Institutions are the guarantee to ensure that various governance subjects in national parks perform their respective duties, fulfill their responsibilities, and coordinate governance, and it is necessary to uphold their core position in the national park governance system. The key to improving China's national park governance system lies in building a systematic, complete, scientifically standardized, and effectively operating national park institutional system, and transforming institutional advantages into national park governance effectiveness.

3.2 Overall Thinking

(1) Give full play to the significant advantages of "Chinese governance" and promote national park governance system reform under the overall framework of modernizing China's national governance system and governance capabilities. Since the founding of the People's Republic of China, China has experienced extraordinary economic growth and transformation, and has also achieved remarkable accomplishments in social security, targeted poverty alleviation, and ecological civilization construction, all of which fully demonstrate the significant advantages of "Chinese governance." National park construction needs to give full play to the significant advantages of "Chinese governance" in adhering to national coordination, long-term planning, concentrating resources to accomplish major tasks, and being people-centered. China's national park governance system needs to be steadily promoted under the overall deployment of China's national governance system and governance capabilities modernization, and the institutional system supporting national park governance needs to match and coordinate with China's socialist economic and social systems.

(2) Fully learn from international advanced governance experience to achieve co-construction, co-governance, and benefit-sharing. Global national park construction has a history of more than 150 years and has accumulated much valuable governance experience. For example, the public participation system and volunteer system of U.S. national parks, the multi-governance of French national parks, and the community co-management of Australian national parks have reference significance. At the same time, global protected areas have accumulated advanced experience in public welfare governance, community governance, and collaborative governance [25]. The construction of China's national park governance system needs to fully learn from these advanced experiences and strive to make China's national parks a model for later-developing national parks worldwide.

4. Theoretical Framework for Improving China's National Park Governance System and Recommendations for Deepening Governance System Reform

4.1 Theoretical Framework for China's National Park Governance System

In response to the challenges and problems facing national park governance, and under the overall framework of modernizing China's national governance system and governance capabilities, the advantages of "Chinese governance" in overall coordination and "concentrating resources to accomplish major tasks" should be leveraged. Drawing on international experience in regional and watershed public affairs and national park governance, a "four-in-one" Chinese national park governance system should be established, comprising a coordinated decision-making mechanism, a management and execution mechanism, a scientific decision-making and consultation mechanism, and a social participation mechanism. This governance system incorporates all subjects and stakeholders involved in national park construction (Figure 1 [Figure 1: see original paper]), reflecting the basic principle proposed in the *General Plan* of "establishing and improving a long-term mechanism for government, enterprise, social organizations, and the public to jointly participate in national park protection and management, and exploring new models for social forces to participate in natural resource management and ecological protection." It is expected to solve various problems and challenges faced by single government governance, reduce governance costs, and improve governance effectiveness.

4.2 Recommendations for Deepening National Park Governance System Reform

(1) Establish a coordinated decision-making mechanism to solve the coordination challenges in national park construction. At the national level, establish a national park construction coordination and leadership group led by the State Council, composed of the National Forestry and Grassland Ad-

ministration, Ministry of Natural Resources, Ministry of Ecology and Environment, Ministry of Water Resources, Ministry of Agriculture and Rural Affairs, Central Bianban, Ministry of Finance, local governments, industry associations, and non-profit organizations. This leadership group will play a coordinating role in national park legislation, institutional establishment, division of responsibilities and financial powers, spatial layout, funding mechanisms, and cross-departmental and cross-regional coordination, to solve the current coordination challenges in national park construction. At the level of individual national parks, establish a national park management committee system composed of the national park, local governments, and community representatives to promote stakeholder participation in major decision-making matters in national park construction and management.

(2) Deepen management system reform and establish a government governance system for national parks with clearly defined responsibilities and administration according to law. Optimize the division of central and local responsibilities and financial powers. In the near term, it is necessary to clarify central and local responsibilities under the three different management models of direct central management, joint central and provincial government management, and central government entrusting provincial governments with proxy management, and establish a fiscal system that matches responsibilities. In the long run, the ownership of natural resource assets owned by the whole people within national parks should ultimately be exercised directly by the central government, and a central funding guarantee system for national parks should be established with matching financial resources. Clarify responsibility boundaries among departments, particularly between national park management institutions and the Ministry of Natural Resources regarding natural resource ownership registration, territorial spatial planning, and use control within parks. Develop power lists and responsibility lists for national park management institutions and local governments within national parks to clarify park-locality responsibility boundaries. Study the necessity and feasibility of establishing a substantive National Park Administration in the new round of institutional reform to strengthen central responsibilities and government governance capabilities for national parks.

(3) Improve the institutional system for multi-party participation throughout the entire process to promote co-construction, co-governance, and benefit-sharing. Research institutions, non-profit organizations, enterprises, communities, and the public are important stakeholders in national park construction and can play their respective advantages and unique roles. Promoting their participation throughout the entire process is of great significance for improving national park governance effectiveness. In response to the current problem of insufficient multi-party participation in China's national park governance, the institutional system for multi-party participation throughout the entire process from legislation, institutional construction, standard formulation, and spatial layout to the creation, planning, operation management, ecological restoration, and evaluation of individual

national parks should be further improved, and the principles and requirements for stakeholder participation in national park construction should be solidified in the *National Park Law*. Currently, China has entered a stage of promoting the creation of a new batch of national parks, and it is necessary to attach great importance to multi-party participation in the national park creation and master planning processes, particularly in national park boundary delineation and functional zoning, where effective participation mechanisms need to be established to safeguard the basic rights and interests of local governments and communities. National park master planning needs to balance multiple functions and diversified objectives of national park construction, and widely absorb experts from ecology, forestry, geography, management, economics, sociology, education, and other fields to ensure the professionalism and scientific nature of planning.

(4) Improve scientific decision-making and consultation mechanisms to promote scientific, democratic, and lawful decision-making. At the national and park levels, establish comprehensive expert committees composed of scientists, experts from social organizations, and industry representatives to play the group decision-making consultation function for interdisciplinary and multi-stakeholder comprehensive affairs. Based on the potential ecological environment, social impact, and complexity of decision-making matters, develop a list of decision-making matters for expert committee participation. If there is high potential ecological environment impact or social impact, participation of expert committees must be clarified through legal procedures. For matters with high potential social impact or difficult decision-making, multi-party consultation mechanisms involving major stakeholders must also be initiated.

(5) Expand the spatial scope and responsibilities of national park governance to establish harmonious and mutually beneficial park-locality relationships. Surrounding local governments and communities are a community of shared destiny with national parks, and their development quality directly affects national park governance effectiveness. It is recommended that the National Development and Reform Commission take the lead in establishing a batch of green development demonstration zones around national parks, supported by matching land, fiscal, taxation, and financial policies. The construction of demonstration zones can fully utilize the brand value and ecological environment advantages of national parks to create green industry belts and clusters for tourism, health and wellness, research and study, R&D, exhibitions, cultural creativity, green agriculture and animal husbandry, and outdoor equipment manufacturing around national parks, allowing national parks to protect the most precious natural assets while benefiting local sustainable economic development. At the same time, optimize the functional allocation of national park management institutions by setting up specialized community development coordination departments in the “three-fixation” schemes of national park management institutions, adding functions for coordinating community governance within parks and green development around parks, to establish harmonious and mutually beneficial park-locality relationships.

References

1. Huang B R, Wang Y, Su L Y, et al. Pilot programs for national park system in China: Progress, problems and recommendations. *Bulletin of Chinese Academy of Sciences*, 2018, 33(1): 76-85. (in Chinese)
2. Zang Z H, Zhang D, Wang N, et al. Experiences, achievement, problems and recommendations of the first batch of China' s national park system pilots. *Acta Ecologica Sinica*, 2020, 40(24): 8839-8850. (in Chinese)
3. Qin T B. Several dimensions on national parks legislation in China. *Environmental Protection*, 2018, 46(1): 41-44. (in Chinese)
4. Wang L, Zhuo J, Su Y. Research on difficulties in the construction of China' s National Park management units. *Environmental Protection*, 2016, 44(23): 40-44. (in Chinese)
5. Zhang H X, Zhong L S. Institutional logic and model selection in the construction of national parks administration. *Resources Science*, 2017, 39(1): 11-19. (in Chinese)
6. Deng Y, Wang N, Su Y. Division of financial power and expenditure responsibility in national parks: History, current situation and problems. *Environmental Protection*, 2021, 49(12): 43-47. (in Chinese)
7. Li J S, Zhu Y P. Discussion on national park funds safeguard mechanism. *Environmental Protection*, 2015, 43(14): 38-40. (in Chinese)
8. Chen Y R, Liu Y, Zhang D, et al. The exploration and practice of national park concession management on value realization path of ecological products. *Environmental Protection*, 2019, 47(21): 57-60. (in Chinese)
9. Yang R. National park governance system of China: Principles, vision and approaches. *Biodiversity Science*, 2021, 29(3): 269-271. (in Chinese)
10. Chen X T, Jin Y T, Su Y. The initiative and experiences of the national park management system reform in France and its enlightenment to China. *Environmental Protection*, 2017, 45(19): 56-63. (in Chinese)
11. López-Rodríguez M D, Ruiz-Mallén I, Oteros-Rozas E, et al. Delineating participation in conservation governance: Insights from the Sierra de Guadarrama National Park (Spain). *Environmental Science & Policy*, 2020, 114: 283-293.
12. Czajkowski M, Ahtiainen H, Artell J, et al. Discourses on public participation in protected areas governance: Application of Q methodology in Poland. *Ecological Economics*, 2018, 145: 401-409.
13. Huber J M, Newig J, Loos J. Participation in protected area governance: A systematic case survey of the evidence on ecological and social outcomes. *Journal of Environmental Management*, 2023, 336: 117593.
14. Ouyang Z Y, Tang X P, Du A, et al. Building China' s national park systems scientifically: Challenges and opportunities. *National Park*, 2023, 1(2): 67-74. (in Chinese)
15. Wang Y, Huang B R. Institutional reform for building China' s national park system: Review and prospects. *Biodiversity Science*, 2019, 27(2): 117-122. (in Chinese)
16. Huang B R, Ma Y H, Huang K, et al. Strategic approach on promoting

- reform of China' s natural protected areas system with National Parks as backbone. *Bulletin of Chinese Academy of Sciences*, 2018, 33(12): 1342-1351. (in Chinese)
17. Huang B R, Zhang C L, Deng R. The systemic solution to historical problems in China' s natural protected areas. *Biodiversity Science*, 2020, 28(10): 1255-1265. (in Chinese)
 18. Cao Y, Long Y, Yang R. Research on the Identification and Spatial Distribution of Wilderness Areas at the National Scale in China' s mainland. *Chinese Landscape Architecture*, 2017, 33(6): 26-33. (in Chinese)
 19. Li C L, Cong L. Research on the legislative dilemma and restrictive factors of National Park Law in China based on Delphi method. *Chinese Landscape Architecture*, 2021, 37(6): 104-108. (in Chinese)
 20. Ouyang Z Y, Xu W H, Zang Z H. Suggestions on improving the management system of National Parks. *Biodiversity Science*, 2021, 29(3): 272-274. (in Chinese)
 21. Wang Q W, Jia W G. Comparative analysis of three National Park management modes. *China Forestry Economics*, 2021, (3): 87-90. (in Chinese)
 22. Zhang L M. An introduction of funding system in National Parks of the USA—Taking the FY2019 budget justification for an example. *Forestry Economics*, 2018, 40(7): 71-75. (in Chinese)
 23. Huang F J, Yu J A, Ma X J. The funding guarantee mechanism of National Parks in South Africa and its enlightenment. *Chinese Landscape Architecture*, 2022, 38(6): 81-85. (in Chinese)
 24. Yan J R. The logic of change and Chinese experience in modernizing the national governance system. *Governance*, 2019, (3): 3-8. (in Chinese)
 25. IUCN. Governance of Protected Areas: From understanding to action. (2013-09-11) [2023-05-08]. <https://portals.iucn.org/library/sites/library/files/documents/PAG-020.pdf>.

Author Biography: HUANG Baorong is Professor and Academic Director of the Institute of Sustainable Development Strategy, Institutes of Science and Development, Chinese Academy of Sciences. His research interests focus on governance systems of national parks and protected areas, and strategies and policies for ecological conservation. E-mail: huangbaorong@casisd.cn

Responsible Editor: Yue Lingsheng

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

Source: ChinaXiv –Machine translation. Verify with original.