

The Evolution of China's Environmental Protection Policies from a Sustainable Development Perspective

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Abstract: This study examines the evolution of China's environmental protection policies from a sustainable development perspective, analyzing their development across five distinct stages from 1972 to the present. Through comprehensive analysis of policy transformation, stakeholder dynamics, and institutional changes, the research reveals the complex interplay between domestic and international factors shaping China's environmental governance. The study identifies key transitions in policy approach: from passive response to active participation, from single pollution control to systematic construction, and from administrative command to multi-stakeholder governance. The research highlights significant challenges in policy implementation, including local-central government tensions, economic-environmental balance conflicts, and public participation limitations. The findings demonstrate that optimizing institutional structures and strengthening social security systems are crucial for enhancing the effectiveness of China's environmental protection efforts.

Keywords: Environmental Protection Policy, Sustainable Development, Policy Evolution, Environmental Governance, Stakeholder Analysis, Chinese Environmental Management, Chinese Government, Social Governance.

1. Introduction

According to the current trend of globalization, environmental protection has risen from a single country to the level of the international community, and the corresponding quality level of environmental protection policies reflects the modernized governance capacity of national governments and their pursuit of sustainable development (Bomberg, 2016).

Looking at the evolution of China's environmental protection policies, we can divide it into five developmental stages: exploration and initial stage (1972-1983), policy establishment stage (1984-1991), policy development and improvement stage (1992-2005), policy transformation and innovation stage (2006-2014), and policy breakthrough and deepening reform stage (2015-present). Throughout this evolution, China's environmental protection policies have demonstrated changes in the government's perception (from passive response to active participation) and governance approaches (from single pollution control to systematic construction).

From the perspective of driving factors, there are both internal and external forces. The internal drivers mainly come from the increasingly prominent environmental issues in China's industrialization and urbanization process and the inherent demand for economic development transformation. It is worth noting that the awakening of citizens' awareness of environmental protection has also had a significant impact on this (Yu & Jin, 2022). External drivers mainly come from international development needs, such as the constraints and influences of international environmental protection treaties, economic development pressure from green trade barriers, and the influence of international consensus on environmental protection. The interaction of these internal and external factors has driven the continuous evolution of China's environmental protection policies.

From the evolution of governance approaches, there has been a clear trend toward diversification. Early governance

methods primarily relied on single administrative means (controlling pollution through administrative orders). Following the economic system's re-establishment and continuous development after the Reform and Opening-up, economic measures began to be applied to environmental governance and became an important governance approach. Correspondingly, with the recent development of network technology, more diverse governance methods such as information disclosure and online public consultation have also been implemented, becoming important choices for government governance.

From the perspective of participating entities in environmental protection, there has been a transformation trend from government-led to multi-stakeholder co-governance. The roles and interactive relationships of different entities including central government, local governments, enterprises, social organizations, the public, experts and scholars, and media institutions in environmental protection governance have undergone profound changes. Particularly, with the strengthening trend of environmental governance socialization, the public and social organizations (NGOs) have been playing increasingly important roles in environmental monitoring, policy advocacy, and advisory contributions.

Looking at the transformation of participatory roles, the Chinese government has shown a shift from passive to active participation. From participating in the 1972 Stockholm Conference on the Human Environment, to responding to the United Nations 2030 Sustainable Development call, and then to actively promoting South-South cooperation on climate change (Milhorance & Soule-Kohndou, 2017), the Chinese government has not only completed the role transformation from passive to active participation but also achieved the transformation from participant to contributor.

This paper, starting from the historical context of environmental protection policy development, systematically reviews the policy background of different stages, deeply analyzes the internal and external influencing factors of

policy evolution, and through stakeholder analysis, explores the role positioning and interactive relationships among various parties in the environmental protection policy development process. Through this multi-dimensional analysis, this paper aims to deepen the understanding of the evolution of China's environmental protection policies and provide reference for future policy optimization and improvement of the environmental governance system.

2. Policy Development Process and Background

2.1. First Stage: Exploration and Initial Stage (1972-1983)

The 1972 Stockholm Conference on the Human Environment was a crucial turning point in initiating China's environmental protection policies (Li, 2021). This conference not only demonstrated global attention to environmental issues but also made the Chinese government aware of the importance of environmental protection during industrialization. Subsequently, at the First National Environmental Protection Conference held in 1973, the environmental protection policy of "overall planning, rational layout, comprehensive utilization, turning harm into benefit, relying on the masses, everyone taking action, protecting the environment, and benefiting the people" was established, marking the Chinese government's systematic consideration of environmental protection issues (Pan & Zhuang, 2018).

This period's environmental protection work faced many challenges. For instance, there were limitations in understanding, with environmental protection being viewed as purely technical work, without sufficient recognition of its socio-economic attributes. In terms of institutional construction, there were also significant deficiencies. Although the "Environmental Protection Law of the People's Republic of China (Trial)" was passed in 1979, no supporting regulations and standard systems were established, resulting in significant limitations in enforcement effectiveness (Khan & Chang, 2018).

2.2. Second Stage: Policy Establishment Stage (1984-1991)

In 1984, environmental protection was established as a basic national policy, marking the beginning of a new stage. This change in policy positioning reflected the government decision-makers' enhanced recognition of environmental issues' severity and demonstrated the Chinese government's initial considerations of sustainable development in the context of Reform and Opening-up (Beyer, 2006).

During this period, environmental legislation made significant progress. The promulgation of specialized laws such as the Water Pollution Prevention Law (1984) and Air Pollution Prevention Law (1987) initially constructed the framework of China's environmental protection legal system. The implementation of the pollutant discharge fee system and the establishment of environmental protection target responsibility system were important innovations in this stage. These not only reflected the government's gradual attention to environmental governance but also marked the first introduction of economic measures into environmental protection policies (Li, 1984; Wu, Shen, Guo & Xing, 2020).

2.3. Third Stage: Policy Development and Improvement Stage (1992-2005)

After the 1992 United Nations Conference on Environment and Development, the concept of sustainable development began to influence China's environmental policies (Yang, 1992). The formulation of "China's Agenda 21" marked the incorporation of environmental protection into the national sustainable development strategic framework. This stage coincided with China's rapid economic growth period, with accelerating industrialization and urbanization processes and increasing environmental pressure, leading policy makers to deeply consider the relationship between development and environment.

The incorporation of environmental protection indicators into national economic and social development plans was an important innovation in this stage. The "Ninth Five-Year Plan" first included major pollutant emission control as a binding indicator, pioneering the integrated planning of environmental protection and social development (Ding, 1998).

2.4. Fourth Stage: Policy Transformation and Innovation Stage (2006-2014)

This stage's environmental policies showed distinct transformation characteristics. First was the change in governance concepts, shifting from end-of-pipe treatment to whole-process control, and from single pollutant treatment to regional and watershed-based comprehensive governance. Second was the innovation in governance measures, beginning to emphasize the use of market mechanisms and economic measures to solve environmental problems (Zheng, 2013).

In 2008, the State Environmental Protection Administration was upgraded to the Ministry of Environmental Protection, becoming a ministry-level unit, marking the elevation of environmental protection units' administrative status (Zhang, Zhou, Yang & Guo, 2009). Market-oriented reforms began to advance during this stage, such as pilot programs for emissions trading, environmental pollution liability insurance, and green credit policies (Xia, 2014).

2.5. Fifth Stage: Policy Breakthrough and Deepening Reform Stage (2015-present)

The implementation of the new Environmental Protection Law in 2015 and the proposal of the United Nations Sustainable Development Goals (SDGs) jointly opened a new stage in China's environmental protection policies. Compared to the past, the new Environmental Protection Law significantly increased violation costs, strengthened environmental protection departments' enforcement authority, and improved the public interest litigation system, earning it the title of "the strictest environmental protection law in history" (Yang & Zhang, 2015).

Under the SDG framework, China's environmental governance has shown new characteristics: first, accelerating energy structure adjustment, with the proposal of "dual carbon" goals promoting renewable energy development; second, strengthening biodiversity protection, with national park system pilot programs advancing; third, increasing marine ecological environment protection efforts (Yu, Sial, Tran, Badulescu, Thu & Sehleanu, 2020).

3. Analysis of Development Process and Causes

The evolution of China's environmental protection policy is a complex systematic project, and its development process and driving factors reflect the development logic of institutional change and the Chinese government's considerations (Nie, Cheng & Liu, 2020).

3.1. Development Logic of Institutional Change

The institutional change of environmental protection policies has shown reform characteristics similar to the economic system of Reform and Opening-up-gradual reform (Walder, 2017). China's early environmental systems mainly relied on borrowing and replicating foreign experiences, such as the environmental impact assessment system clearly referencing the U.S. approach (Aung, Fischer & Luan, 2020). However, this simple replication often ignored the uniqueness of local institutional environments, leading to poor policy implementation effects. With the continuous accumulation of practical experience, China's policy-making in the environmental protection field has gradually completed its localization process. For example, the recent implementation of the River Chief System and Forest Chief System, which are institutions with Chinese social characteristics, reflects policy makers' consideration of China's national conditions.

From a governance perspective, environmental governance has gradually achieved transformation from administrative commands to diverse governance. Early excessive reliance on administrative measures led to insufficient enterprise environmental protection motivation and high governance costs. After market-oriented reforms, economic incentive mechanisms were introduced, such as emissions trading and environmental taxes and fees, but the implementation effects of these policy tools were limited due to imperfect market mechanisms. In recent years, with the continuous development of social governance concepts and the successive introduction of mechanisms such as public participation and information disclosure, environmental governance is showing characteristics of mutual synergy.

Meanwhile, with the continuous improvement of government official evaluation mechanisms and strengthening of law enforcement, especially the implementation of environmental protection inspection systems, the phenomenon of "policies from above, countermeasures from below" commonly used by local governments has been somewhat contained. However, it should be noted that problems such as insufficient grassroots law enforcement capacity, high enforcement costs, and imperfect interest distribution still exist today.

3.2. Chinese Government's Considerations

Party and government interests' considerations are important drivers for China's implementation of environmental protection policies. First is the increasingly serious environmental pollution problem, particularly the occurrence of major environmental pollution incidents and adverse weather events, which have directly become important drivers of changes in China's environmental protection policies. For example, recurring climate issues such as smog and sandstorms, these natural events that concern the public, if not effectively improved or resolved, can easily lead to a civil society situation of "public

grievances."

Second is the enhancement of public environmental awareness promoting government actions. With the continuous popularization of education and rapid development of network technology, the public can easily spread local events or their thoughts through videos, audio, and text on social media platforms via smartphones. Environmental issues, being visible to the naked eye, can not only easily trigger widespread online dissemination but also allow the public to see governance effectiveness. If the government fails to resolve these issues, it can easily lead to public opinion crises.

Finally, there is international community attention and development needs in the globalization era. Environmental protection issues represented by agreements like the Paris Agreement have become international consensus. Correspondingly, these issues and agreements have become symbols measuring national government governance capacity and pursuit of sustainable development. From the perspective of international cooperation and development, innovating environmental protection policies and taking responsibility for environmental protection can not only help the Chinese government participate in the international community system but also create a positive international image for the Chinese government, thereby stabilizing its party and government interests and gaining international society's recognition and support.

Especially with the adoption of the "2030 Agenda for Sustainable Development" (2030 Agenda) by the United Nations in 2015, the promotion of the concept of sustainable development and the implementation of sustainable development actions have not only become a global consensus among government officials (at the political level), but also a collective consensus among many international universities, corporations, experts, scholars, and non-governmental development organizations (at the civil society level). The promotion of the concept of sustainable development and the implementation of sustainable development actions have not only become a global consensus among government officials (at the political level), but also a collective consensus among many international institutions of higher education, enterprises, experts, scholars, and non-government development organizations (at the civil society level). Practicing the concept of sustainable development will not only help Chinese society to go global, but also help Chinese people to form a new social collective consensus (Elder & Olsen, 2019; Sdg, 2019; Shi, Yang & Gao, 2019).

4. Stakeholder Analysis

The formulation and implementation of environmental protection policies involve the interaction and game between multiple subjects, with different stakeholders playing different roles in policy development based on their role positioning and interest demands.

4.1. Central Government

The central government occupies the highest decision-making level in the environmental protection policy system and is the largest beneficiary of environmental protection interests. It is influenced by multiple factors in policy formulation. First is the overall consideration of national development strategy, with the central government needing to balance relationships between economic development, social

stability, and environmental protection. At different development stages, the focus of this balance varies. For example, during the early period of Reform and Opening-up, economic development was the central government's overriding central task, with environmental protection having little manifestation during this period. With the strengthening of economic power, worsening of environmental problems, and international community participation, the policy status of environmental protection has also been elevated.

Although the central government does not participate in actual policy implementation, as the policy maker, it needs to consider the different circumstances of various regions in China. Due to the regional nature and complexity of environmental issues, the central government finds it difficult to fully grasp local actual environmental conditions and policy implementation effectiveness. Even though mechanisms such as the central environmental protection inspection system and environmental monitoring network have been established, the timeliness and accuracy of information acquisition remain important issues and complexities. In addition, the central government needs to respond to international community scrutiny. With the deepening development of global environmental governance, China, as the world's second-largest economy, bears increasing responsibility in international environmental affairs, and this international responsibility consequently influences China's domestic environmental policy orientation.

4.2. Local Governments' Multiple Roles

Local governments play dual roles as policy implementers and major local stakeholders in environmental protection policies. The behavioral logic of local governments is relatively complex, with the primary contradiction being the balance between economic development and environmental protection proportions. Under the current performance evaluation system, although the weight of environmental protection indicators is gradually increasing, GDP growth remains the most important high-proportion consideration. This leads to phenomena such as selective law enforcement and campaign-style enforcement by some local governments in environmental regulation.

Meanwhile, fiscal pressure is also an important factor affecting local governments' implementation of environmental protection policies. Environmental governance requires substantial financial investment, but local fiscal revenue is limited and faces multiple expenditure pressures. This has led to some localities charging enterprises additional fees in the name of environmental protection, while the funds are not actually used for environmental governance. Similarly, there exists a contradiction between the long-term responsibility required for environmental governance and the short-term responsibility of government officials' terms. Should they choose the invisible benefits of environmental protection, or opt for more effective short-term economic and promotion effects? These two options constitute an important "either-or" situation for high-level local government officials.

4.3. Enterprises

Enterprises are direct recipients of environmental protection policies, important producers of pollution sources, and key subjects of pollution control. Enterprise responses to environmental policies are deeply influenced by economic benefits. In early Chinese society, due to environmental violation costs being lower than treatment costs, many

enterprises chose to pay fines rather than conduct pollution treatment. Although enterprises' compliance awareness has increased with strengthening penalties, perfunctory responses still exist. Particularly under unstable economic conditions and government policies, enterprises' choices regarding environmental protection responsibilities and specific behavioral measures are profoundly affected. They must balance their own cost considerations, observe changes in government policies, and simultaneously face scrutiny from civil society.

Meanwhile, differences in enterprise scale also affect the level of investment in environmental governance. Large enterprises usually possess stronger environmental governance capabilities while maintaining their economic interests, and can even use environmental protection as a means to enhance corporate social image, especially concerning Corporate Social Responsibility (CSR). However, for small and medium-sized enterprises (SMEs), due to limitations in funding and technology, particularly the inefficiency of economic benefits, their ability to invest in environmental protection is difficult to strengthen, sometimes resulting in a situation of "willing but unable." Moreover, with increasingly strict environmental inspections, some SMEs face not only the extreme pull between costs and benefits but also the pressure of elimination. Notably, although some enterprises have begun transitioning from passive response to active participation, these are mostly large enterprises with strong economic capabilities. Measures such as environmental technology innovation, clean production transformation, and energy consumption structure adjustment not only reflect enterprises' active exploration of environmental governance but also confirm the higher costs that enterprises need to invest.

4.4. Public (Civil Society)

The public (civil society) is a low-efficiency stakeholder in environmental policies and bears the greatest responsibility for environmental protection policy effectiveness. The awakening of environmental rights consciousness marks an important turning point in civil society. From initial silent acceptance to utilizing petitioning, litigation, and online disclosure methods, citizens are practicing their civic responsibility to protect the environment. This not only reflects the strengthening of public social responsibility awareness but also demonstrates public consciousness of participating in environmental governance and rights protection.

However, the effectiveness of public participation and citizens' personal safety still face numerous challenges. First is the limitation of participation capacity - ordinary citizens often lack professional knowledge and find it difficult to make accurate judgments about complex environmental issues. Second is the imperfection of participation mechanisms - although systems such as environmental assessment public notices and hearings have been established, they often become mere formalities without practical effect. Meanwhile, some local governments, to protect their own interests, implement threatening actions such as detention and "talks" against citizens who criticize or petition, posing significant threats to citizens' personal safety and individual freedom.

4.5. Environmental Protection NGOs

Environmental protection organizations, serving as bridges connecting government, enterprises, and the public, have

experienced a development process from marginalization to gradual attention and back to marginalization. Early environmental organizations mainly engaged in environmental education and publicity work, with limited influence. With the establishment of environmental public interest litigation systems, some professional environmental organizations began to play important roles in environmental rights protection (Zhai & Chang, 2018). However, with the Chinese government's strengthened control over various regulations and widespread monitoring of public opinion, these social organizations not only face survival challenges due to funding shortages but also risk being delisted by the government, especially in the current context of restrictions on foreign funding entry and strengthened network management.

4.6. Experts and Scholars

Experts and scholars generally play think tank and advisory roles in environmental protection policy development. However, due to personnel selection limitations and political benefit choices, experts and scholars' specific identities and actual participation levels are questionable.

The relationships among various stakeholders involve both cooperation and conflict. The relationship between government and enterprises encompasses both regulatory oversight and support, though the supportive relationship is not equal. As for the government-public relationship, while constitutionally the government should be subject to public oversight, in China's actual social system, the government holds absolute power while the public faces restrictions or suppression. This has failed to create a fair and healthy social relationship between government and public. Such inequality may lead to imbalances in interest expression during environmental decision-making processes, as well as imbalances in responsibility allocation and benefit distribution after environmental policies are established.

5. Conclusion

China's environmental protection policies have achieved significant accomplishments while facing numerous challenges and having many problems requiring resolution. Through the above discussion, we find that China's environmental policies cannot be discussed in isolation, as they involve numerous stakeholders, each with their own considerations. Among these stakeholders, there exist relationships of leadership and being led, supervision and being supervised, as well as relationship imbalances. Although China's economy has achieved development over the past few decades, the corresponding social security system is not perfect. For environmental issues concerning Chinese public and international society's common interests, optimizing institutional construction and establishing a sound social security system will bring significant positive impacts to the effectiveness of China's environmental protection.

References

- [1] Aung, T. S., Fischer, T. B., & Shengji, L. (2020). Evaluating environmental impact assessment (EIA) in the countries along the belt and road initiatives: System effectiveness and the compatibility with the Chinese EIA. *Environmental Impact Assessment Review*, 81, 106361.
- [2] Beyer, S. (2006). Environmental law and policy in the People's Republic of China. *Chinese Journal of International Law*, 5(1), 185-211.
- [3] Bomberg, E. (2016). Governance for sustainable development: The United States and the European Union compared. In *Transatlantic Environment and Energy Politics* (pp. 21-40). Routledge.
- [4] Coenen, J., Bager, S., Meyfroidt, P., Newig, J., & Challies, E. (2021). Environmental governance of China's belt and road initiative. *Environmental Policy and Governance*, 31(1), 3-17.
- [5] Ding, Y. (1998). Integration of sustainable development strategy and economic policy: Problems and countermeasures. *Sociological Studies*, 3, 12-18.
- [6] Elder, M., & Olsen, S. H. (2019). The design of environmental priorities in the SDGs. *Global Policy*, 10, 70-82.
- [7] Guo, S. (2019). The institutional logic and continuation of central environmental protection inspection: Based on comparative study of inspection systems. *China Studies of Socialism with Chinese Characteristics*, 1(5), 83-91.
- [8] Khan, M. I., & Chang, Y. C. (2018). Environmental challenges and current practices in China—a thorough analysis. *Sustainability*, 10(7), 2547.
- [9] Li, J. (2021). Historical review of the initiation of environmental protection in New China. *Beijing Party History*, (2), 45-52.
- [10] Li, L. (1984). Several issues concerning pollution discharge fees. *Fujian Tribune (Humanities and Social Sciences Edition)*, 3, 28-35.
- [11] Li, Y., & Feng, H. (2008). Legislative suggestions on improving China's environmental resource protection law [Doctoral dissertation]. Retrieved from Chinese Academic Database.
- [12] Lu, J., & Luo, X. (2002). On the system of China's environmental resource law. *Journal of Fujian Institute of Political Science and Law*, 3, 12-18.
- [13] Milhorance, C., & Soule-Kohndou, F. (2017). South-South cooperation and change in international organizations. *Global Governance*, 23, 461-472.
- [14] Nie, Y., Cheng, D., & Liu, K. (2020). The effectiveness of environmental authoritarianism: Evidence from China's administrative inquiry for environmental protection. *Energy Economics*, 88, 104777.
- [15] Pan, J., & Zhuang, G. (2018). *China's ecological construction and environmental protection (1978-2018)*. Social Sciences Academic Press.
- [16] Sdg, U. (2019). Sustainable development goals. *The Energy Progress Report. Tracking SDG*, 7, 805-814.
- [17] Shi, L., Han, L., Yang, F., & Gao, L. (2019). The evolution of sustainable development theory: Types, goals, and research prospects. *Sustainability*, 11(24), 7158.
- [18] Walder, A. G. (2017). China's transitional economy: Interpreting its significance. In *Chinese Economic History Since 1949* (pp. 120-138). Brill.
- [19] Wei, C., Du, L., & Shen, M. (2010). Can China achieve its energy-saving and emission-reduction targets: Assessment and simulation based on DEA method. *World Economy*, 3(1), 21-36.
- [20] Wu, S., Shen, Y., Guo, L., & Xing, J. (2020). Development process, characteristics and prospects of China's environmental strategy and policy. *Environment and Sustainable Development*, 45(1), 34-36.
- [21] Xia, G. (2014). Establishing a systematic and complete ecological civilization system. *Environment and Sustainable Development*, 39(2), 9-11.

- [22] Yang, C., & Zhang, N. (2015). On the chaos and countermeasures of government environmental accountability in China-Written at the beginning of the implementation of the new Environmental Protection Law. *Journal of Jishou University (Social Sciences Edition)*, 36(4), 1-8.
- [23] Yang, Z. (1992). Comprehensive report on the United Nations Conference on Environment and Development. *Northwest Geology*, 3, 15-22.
- [24] Yu, S., Sial, M. S., Tran, D. K., Badulescu, A., Thu, P. A., & Sehleanu, M. (2020). Adoption and implementation of sustainable development goals (SDGs) in China-Agenda 2030. *Sustainability*, 12(15), 6288.
- [25] Yu, W., & Jin, X. (2022). Does environmental information disclosure promote the awakening of public environmental awareness? Insights from Baidu keyword analysis. *Journal of Cleaner Production*, 375, 134072.
- [26] Zhai, T., & Chang, Y. C. (2018). Standing of environmental public-interest litigants in China: Evolution, obstacles and solutions. *Journal of Environmental Law*, 30(3), 369-397.
- [27] Zhang, H., Zhou, F., Yang, H., & Guo, Q. (2009). Empirical analysis of regulatory performance achieving win-win between environmental protection and economic development. *Economic Research Journal*, 3, 14-26.
- [28] Zheng, J. (2013). Research on China's environmental investment and financing strategies in the post-financial crisis period. *Acta Ecologica Sinica*, 22(5), 905-912.