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Response patterns of grassroots governments under dynamic accountability pressure: environmental governance actions in District J, City S, China

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Abstract. Grassroots governments are the core executive bodies in the grassroots governance system, and their response patterns in the context of dynamic accountability pressure are directly related to the effectiveness of grassroots governance. To explore the practical paths for grassroots governments to improve work efficiency and quality under dynamic accountability pressure, and to facilitate the systematic enhancement of grassroots governance capacity, this study takes the environmental governance actions in District J, City S as a case study. Through in-depth analysis, it refines an explanatory framework of "Dynamic Accountability Scenario—Response Pattern." The research indicates that the uncertainty of the dynamic accountability pressure scenario constitutes an external constraint, while the sense of responsibility of grassroots cadres forms an endogenous driving force. The interaction of these two factors gives rise to diverse forms of response patterns of grassroots governments, presenting heterogeneous behavioral logics. The study argues that the investigation of grassroots governments' response patterns should break through the limitations of traditional single-result-oriented research and shift towards a comprehensive and dialectical dynamic situational analysis.

Keywords: dynamic accountability pressure, grassroots government, response pattern, environmental governance, grassroots governance

1. Introduction

Grassroots governments constitute the core actors in grassroots governance and serve as the critical bridge connecting national governance and social governance. As the foundational project of national governance, the effectiveness of grassroots governance directly affects the progress of modernizing the national governance system and governance capacity. To ensure the implementation efficiency of grassroots governments, China has continued to improve its grassroots supervision system, actively exploring integrity oversight mechanisms featuring whole-process participation, full-process supervision, and full-cycle management, with the aim of activating the "nerve endings" of grassroots supervision. With the deepening of national governance modernization, strengthening official accountability has become an important means of governance. The

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principle that "power entails responsibility, responsibility requires commitment, and dereliction necessitates accountability" has become a fundamental norm for the construction and management of the cadre corps. However, excessive, frequent, and generalized inspections at the grassroots level have also created new governance dilemmas. Within a pressure-driven bureaucratic system, grassroots governments are subject to the mandatory control of higher-level authorities and possess limited bargaining space. Coupled with their constrained capacity to undertake tasks, the reality that "pressures are easily increased but difficult to reduce" has led to a growing burden on grassroots governance.

The 19th National Congress of the Communist Party of China explicitly stated that China's economy has shifted from a stage of high-speed growth to a stage of high-quality development. As an essential pathway to high-quality development, green development serves as a core indicator of sustainable economic and social development. The concept that "lucid waters and lush mountains are invaluable assets" has become the guiding ideology for China's sustainable development, making environmental governance a crucial task that must be addressed in the new era. Consequently, governments at all levels face significant pressure regarding environmental governance. In 2021, the Central Ecological and Environmental Protection Inspection Office issued the Measures for Special Inspections of Ecological and Environmental Protection, further standardizing special inspection work and promoting the thorough implementation of ecological and environmental protection responsibilities at all levels. Provinces and cities promptly responded by introducing supporting normative documents that specify the implementation details and accountability standards for environmental inspections. Ultimately, the national environmental governance strategy must be implemented through grassroots governments, whose performance directly affects the overall quality of environmental governance across the country. As corresponding governance responsibilities are fully assigned to grassroots governments, they have come to bear unprecedented pressure in the field of environmental governance.

As an economically developed city in eastern China, City S plays a leading role in regional economic development, with its municipal district, District J, serving as a key driver of growth. In recent years, although City S has achieved remarkable economic growth, shortcomings in environmental governance remain prominent. Problems such as air pollution, water pollution, and soil pollution continue to affect urban appearance and residents' well-being. In response, City S has continuously strengthened its environmental governance efforts by issuing a series of policy documents and local regulations that clarify the governance responsibilities of grassroots governments and establish strict accountability measures. Among these, District J was once a severely affected area for environmental issues. Over the past decade, several towns within the district became synonymous with poor environmental conditions. To thoroughly implement the central government's guiding ideology on ecological protection, District J launched a nine-year environmental comprehensive improvement campaign from 2015 to 2023, investing a total of 36 billion yuan across three phases (each lasting three years). The campaign concluded successfully in December 2023, by which time all 810 improvement projects across ten key areas had been completed. During the third phase of improvement from 2021 to 2023, the 20th National Congress of the Communist Party of China once again emphasized the thorough implementation of the green development concept, and City S continued to transmit governance pressure to the grassroots level. Against this background, District J found itself in an increasingly intensified dynamic accountability pressure scenario. It promoted environmental governance with unprecedented intensity, actively transformed external pressure into internal motivation, and continuously innovated its governance methods. These efforts ultimately yielded significant improvement outcomes. Based on this context, this paper takes the third round of comprehensive environmental improvement in District J as a case study. It focuses on exploring how grassroots governments can achieve environmental improvement goals with

high quality and high efficiency under dynamic accountability pressure, thereby addressing the core issue of enhancing governance effectiveness.

2. Literature review

2.1. Overview of domestic studies

Under the leadership of the Central Government, the pressure-based system [1] stands out as a salient feature of China's administrative framework. In the practice of government governance, the cascading issuance of assessment targets, coupled with intensified incentives and pressures imposed on lower-level government officials, serves as the primary guarantee for policy implementation [2]. The "pressure-based system" aptly summarizes the organizational forms and fundamental interrelations between administrative entities within China's institutional structure, and also constitutes a critical structural context for grassroots governance [3]. Pressure transmission dictates the intensity of pressure exerted by leaders' attention, the extent of data falsification in quantitative target fulfillment, the perceived level of inter-governmental competition, and the stringency of inspections and supervision [4]. This mechanism consequently leads to constant fluctuations in the implementation of one and the same policy [5]. In this process, pressure exists as both a "catalyst" and an "inhibitor". The "catalytic-inhibitory effect" of the pressure-based system exerts its influence gradually and transforms into each other, shaping the implementation strategies adopted by grassroots governments in different policy scenarios. These strategies include duty-performing response, perfunctory response, passive response, and governance-oriented response [6]. Top-down pressure transmission may become a constraint that tightens policy implementation, exerting a negative impact on the effectiveness of grassroots governance. Although some studies have identified various negative effects of the pressure-based system on grassroots governments, its adaptability to China's governance context remains undeniable [7].

Grassroots governments are the cornerstone of national governance and stand at the terminal of the pressure-based system. The relationship between powers and responsibilities constitutes the foundation for the operation of hierarchical organizations [8]. At present, China takes accountability power as the dominant power, and integrates performance assessment, commitments to the people, and accountability for public support, thus establishing a responsibility system centered on the study of accountability. However, a certain degree of ambiguity still exists in the governance model [9]. Although this governance model ensures greater flexibility in the governance field, it is highly prone to the imbalance between powers and responsibilities in practice. Such imbalance is an institutional product of the pressure-based system, which is specifically manifested in the power-responsibility allocation characterized by the generalization of governance affairs, the upward shift of governance power, and the downward shift of governance responsibilities. The mismatch between powers and responsibilities is a prevailing reality of governance in China [10]. This reality has led some grassroots cadres to resort to passive accountability-avoidance behaviors to cope with inspection pressures from higher authorities, resulting in the formation of an "inspection paradox" [11].

Accountability encompasses an interactive process of communication, explanation, and inquiry between the accountability subject and the accountability object. If it is examined from a static scenario, it may evolve into a one-way punitive outcome, thus forming the accountability object's motivation for accountability avoidance [12]. Dynamic accountability pressure refers to the dynamic changes in the top-down hierarchical accountability pressure. The scenario of dynamic accountability pressure consists of three elements: operational autonomy, task pressure, and accountability risk constraints. In a dynamic context, the accountability pressure borne by grassroots cadres continues to change with the fluctuations in operational autonomy and task pressure as well as the escalation of accountability measures, ultimately influencing their

behavioral choices. Such a behavioral pattern can be termed "acting in response to the situation", which refers to the process of selecting and continuously adjusting action strategies to ultimately accomplish tasks. This is done on the basis of analyzing and judging the ever-growing internal and external pressures and the prevailing situation during task advancement, so as to fulfill the task objectives set by the hierarchical system [13].

Accountability pressure can rapidly coordinate multiple departments to form commitments and consensus on goals, thereby positively moderating the negative impact of collaborative inertia on local government responses [14]. However, in practice, the negative incentive mechanism under the accountability-led governance model suffers from the problem of generalized implementation. The generalization of accountability and the absence of error tolerance and correction mechanisms have imposed heavy mental burdens on township-level cadres [15]. Grassroots cadres are shaped by the interdependent and mutually constitutive nature of institutions, interpersonal relationships, psychological factors, and behavioral choices. The interaction of multiple field factors, the inter-embedding of different administrative fields, and the overlapping of role identities exert a subtle influence on the behaviors and choices of grassroots cadres engaged in policy implementation. Constructing an operational model of inter-embedding collaboration between vertical functional departments and horizontal territorial governments can resolve the vertical-horizontal conflicts to a certain extent. By rationalizing the relationships between functional departments and grassroots governments, between peer-level territorial authorities, and between peer-level functional departments [16], this model can further strengthen the governance capacity building of grassroots political power. In the context of increasingly intensifying accountability pressure, some grassroots governments resort to passive accountability-avoidance measures, with the misalignment of power-responsibility relations between vertical functional departments and horizontal territorial governments being the primary cause. The key to addressing such misalignment lies in balancing the authority of higher-level governments with the autonomy of grassroots governments—this approach both leverages the flexibility of grassroots entities and promotes policy uniformity [17]. Improving incentive mechanisms and rationally allocating residual control rights and residual claim rights among information decision-making power, target-setting power, inspection and acceptance power, and incentive distribution power will help overcome the "accountability paradox" in the process of reducing grassroots burdens [18].

2.2. Overview of foreign studies

Accountability systems are a common feature of governance in many countries, and research on relevant systems of other nations can provide references for China. Shepherd argues that accountability systems are prominently characterized by performance management, which requires review and explicitly focuses on learning rather than control [19]. Muhtar and Sutaryo conducted a comprehensive review of all government oversight mechanisms—ranging from external government auditors to the Supreme Audit Board, and from legislative bodies to legislative committees and direct public oversight. Their study concluded that external audits exert a positive impact on the performance accountability of local governments, while legislative oversight has a negative impact on performance accountability [20]. A major review of the fundamental principles of the performance management system is required to better understand its intended purposes and how these intentions are realized, as well as to foster collaboration and cohesion both within and across functions.

Performance accountability approaches include external auditing, public oversight, and legislative oversight [14]. Kessy argues that effective control over citizens and leaders requires the establishment of sound demand-side and supply-side accountability mechanisms [21]. Van der Tier et al. emphasize the significance of interaction for social workers' participation in government-related accountability. They also

unpack the accountability practices of social workers, exploring how such practices are mediated by organizational mechanisms and shaped by macro-policy characteristics [22]. The humanistic dimension of accountability implemented through face-to-face interaction is, in many cases, associated with hierarchical factors (i.e., the relationship between superiors and subordinates). Studies by Roberts, Yates, and other scholars have shown that accountability is not only dynamic, but also a process involving multiple accountability channels. Johnstone et al. argue that within organizations, it is necessary to establish an accountability system for sustainable development, which can be achieved through more personalized and socialized forms of accountability. Public sector employees should be encouraged to participate in the socialization of sustainable behaviors; in turn, responsible or sustainability-conscious employees will also provide motivation for action [23].

The aforementioned studies still fail to analyze the response patterns of grassroots governments in the context of dynamic accountability pressure from a comprehensive and dynamic perspective. Based on this, this paper takes the environmental governance initiatives in District J as the research object, conducts an in-depth analysis of the dynamics and comprehensiveness of grassroots governments' response patterns under dynamic accountability pressure, as well as how grassroots cadres exert their subjective initiative to adapt to such accountability pressure scenarios, aiming to provide theoretical support for improving the accountability system and enhancing grassroots governments' social governance capacity.

3. Dynamic accountability pressure scenarios: current situation of environmental governance in District J

3.1. Interpretation of dynamic accountability pressure scenarios

A scenario constitutes the environmental conditions for actors to implement behavioral strategies, while behavioral strategies are actors' adaptive behavioral responses to the scenario. Scenarios can exert an impact on multiple dimensions of individuals, such as emotions, cognition, social behaviors, and cultural behaviors. Behavioral public administration focuses on the cognitive and behavioral characteristics of individuals in the public management process, as well as their influencing factors and mechanisms. Studies in this field have found that public sectors can effectively guide individual cognition and behaviors through management tools such as scenario frameworks [24], so as to align them with the government's policy orientation.

The dynamic accountability pressure in this study encompasses the dynamic changes of bureaucratic accountability pressure and social public accountability pressure under a pressure-based system. Based on this, the scenario of dynamic accountability pressure is composed of three core elements: task accountability pressure, mass supervision pressure, and behavioral autonomy (see Figure 1). The specific connotation of each element is as follows: Task accountability pressure refers to the pressure exerted on members in organizational management due to their responsibility for specific tasks and the demand for expected task outcomes. Mass supervision pressure refers to the force through which the public supervises the behaviors of power holders such as governments and enterprises via multiple channels to safeguard social equity and justice and promote social progress. Behavioral autonomy refers to an individual's ability to make independent decisions and implement them based on their own will, goals, and motivations during the course of action.

Grassroots governments are at the terminal of the pressure-based system. In the process of comprehensive environmental improvement, the behavioral decisions of grassroots cadres are deeply influenced by the interplay of the above three core elements, which makes the accountability pressure scenario present a dynamic evolutionary process of low pressure, medium pressure and high pressure. Essentially, the

transformation of grassroots governments' response modes in task execution is a process of their adaptation to this dynamic accountability pressure scenario (see Figure 1).

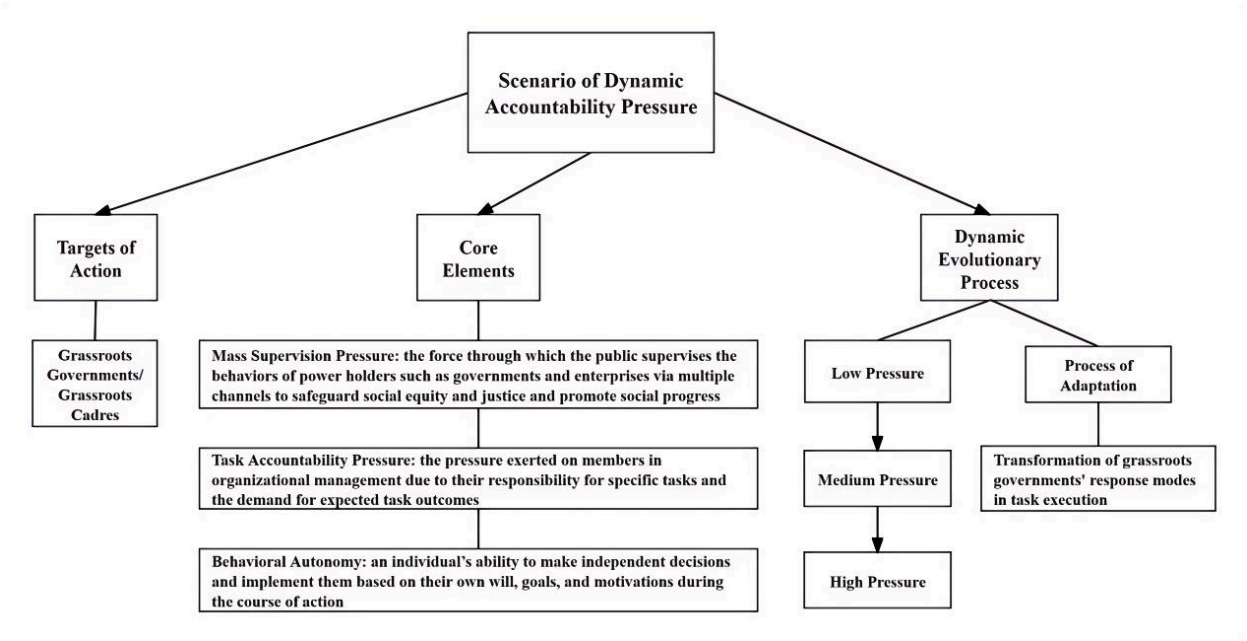


Figure 1. Components of the dynamic accountability pressure scenario

3.2. Characteristics of environmental governance in District J

District J is affiliated to City S, a developed city in eastern China. As a leading city in China's economic development, the environmental condition of City S exerts a crucial impact on its urban image building. Located in the southwestern suburban area of City S, District J covers a total area of 613 square kilometers and administers 1 sub-district, 1 industrial park and 9 towns. By the end of 2022, the permanent resident population of the whole district had reached 823,700. Historically, District J has gradually formed key industrial clusters including major equipment, new materials, biomedicine, food processing, automobiles and key parts, fine chemicals, electronic information, green creative printing and new energy. However, the lack of systematicness in industrial development planning has significantly increased the pressure of regional environmental governance.

In terms of environmental problems, District J is mainly confronted with three major pollution challenges, namely waste gas pollution, water pollution and soil pollution. In the past, factories and small workshops located along the rivers, together with domestic sewage, were directly discharged into the rivers, which resulted in black and odorous river water and sewage overflow. Meanwhile, the district was also plagued by multiple governance dilemmas, such as the lagging ecological construction around factories, the illegal construction of buildings, the insufficient improvement of the agricultural and rural environment, the unbalanced industrial structure and the inadequate supporting of environmental infrastructure. At present, China's economy has shifted from a stage of high-speed growth to a stage of high-quality development, which clearly requires that high-level protection of the ecological environment should boost the high-quality economic and social development. Against this background, it has become extremely urgent for the government of District J to promote the comprehensive improvement of the environment.

3.2.1. Environmental governance actions under the scenario of dynamic accountability pressure

The comprehensive environmental improvement campaign in District J was advanced amid a dynamically evolving accountability pressure scenario. The third round of this campaign was closely aligned with the Three-Year Action Plan for Ecological Environmental Protection and Construction of City S. To ensure that all districts fully implement the tasks related to ecological environmental protection and construction, City S launched the first round of the "look-back" inspection on ecological and environmental supervision in 2022, and established a biweekly scheduling mechanism. In 2023, City S initiated the second round of such "look-back" inspections. Meanwhile, City S conducted an annual assessment of the improvement effectiveness of each district through the summary report on environmental governance work.

Specifically, in the early stage of the Three-Year Action Plan for Ecological Environmental Protection and Construction, the work focus was on publicity and mobilization, and District J was in a scenario of low accountability pressure. Entering the mid-term stage of the plan — the phase of intensive environmental improvement and tackling key problems, which was also a critical period for environmental remediation— City S strengthened the follow-up supervision over the progress of each district's actions, leading to a marked escalation of accountability pressure on District J. In the final assessment stage, City S carried out acceptance checks on the three-year environmental governance outcomes of all districts, evaluated the achievement of targets simultaneously, and implemented corresponding rewards and penalties. During this stage, District J was confronted with an extremely high level of accountability pressure.

3.2.2. A flexible and efficient environmental governance model

By the end of 2023, the third round of comprehensive environmental improvement in District J was successfully concluded with remarkable results. Looking back on the entire governance process, a flexible and efficient governance model was the core reason for achieving such outcomes. After City S issued the Three-Year Action Plan for Ecological Environmental Protection and Construction, District J first accurately aligned itself with the superior-level guiding ideology, basic principles and main objectives, and then formulated specific work implementation rules tailored to its actual conditions by means of field visits and surveys, as well as soliciting opinions from experts.

In the stage of fully advancing task implementation, District J continuously explored and innovated governance approaches. On the one hand, it took the initiative to invite superior authorities to conduct environmental inspections, forcing governance enhancement through inspections; it fully activated the power of public supervision and extensively solicited public suggestions and advice; it abandoned the "go-it-alone" governance mindset and actively carried out collaborative governance with other regions. On the other hand, throughout the entire governance process, it focused on strengthening communication and coordination with multiple stakeholders, which effectively improved the efficiency and quality of solving various environmental problems.

3.3. The process of environmental governance in District J

3.3.1. Publicity and mobilization stage

In May 2021, City S issued the Three-Year Action Plan for Ecological Environmental Protection and Construction of City S (2021–2023), explicitly requiring all districts to solidly carry out publicity and mobilization work, continuously coordinate and strengthen ecological protection, and further advance the tough battle against pollution. In the same period, City S promulgated the Provisions on the Rules for Ecological and Environmental Supervision of City S, which took the results of ecological and environmental assessment and supervision as the core basis for the comprehensive assessment, evaluation, rewards, punishments, appointment and removal of leading groups and leading cadres.Notably, 2021 was also the year

when District J launched the third round of comprehensive environmental improvement. Based on the municipal-level requirements and its own actual conditions, the district formulated a precise regional-specific action plan. In this process, cadres went deep into the grassroots to conduct visits and investigations, and extensively solicited the public's opinions and suggestions on environmental improvement. Meanwhile, expert teams were engaged to carry out special investigations on environmental issues. A detailed implementation plan was formulated based on the investigation results and public demands, and then issued to all relevant departments. To coordinate and promote the implementation of tasks, District J set up a regional leading group for comprehensive ecological and environmental governance, decomposed the improvement tasks in detail to all towns (townships) and sub-districts, and established a work promotion system with clear powers and responsibilities (see Figure 2).

3.3.2. Intensive rectification stage

In October 2021, the Third Environmental Protection Supervision Group of City S carried out the "look-back" inspection on ecological and environmental protection in District J. Through comprehensive inspection, targeted guidance and strict supervision, it conducted a full-scale review of District J's ecological and environmental protection work, put forward targeted feedback opinions, and clearly pointed out problems such as incomplete approval procedures for some irregular projects and lack of pollution control facilities, requiring District J to carry out comprehensive inspections and transfer illegal clues to relevant functional departments in a timely manner. In response to this, District J quickly formulated the List of Rectification Measures for Specific Problems in Implementing the Feedback Opinions of the "Look-back" Inspection on Ecological and Environmental Protection of City S, accurately assigning rectification tasks to specific leading and responsible units, clarifying rectification goals and specifying rectification time limits. In addition, to expand the channels for identifying problems, District J formulated the regional Measures for Ecological and Environmental Protection Supervision simultaneously; to consolidate the responsibilities of cadres and stimulate work motivation, it further improved the detailed rules for performance evaluation indicators and the incentive mechanism, providing institutional guarantee for the intensive rectification work (see Figure 2).

3.3.3. Task tackling stage

In 2022, the third round of environmental improvement in District J entered the task tackling stage. On the basis of continuously promoting the rectification of problems identified in the ecological and environmental supervision of the previous year, the district further raised the improvement targets and intensified the improvement efforts. During this period, the Party Central Committee carried out ecological and environmental supervision in City S, pointing out that there were still many prominent problems in the field of ecological environment in City S, which forced City S to strengthen the inspection and supervision of all districts. Meanwhile, the general public fed back environmental problems to the government and put forward improvement suggestions through various channels, forming a joint force for governance. To ensure the successful achievement of the tackling targets, District J further advanced the "Five-step Environmental Protection Work Method" and consolidated the high-standard, cross-regional and multi-field coordination framework of the "Dual-director System" of the Ecological and Environmental Protection Work Committee. It strictly fulfilled the law enforcement responsibilities in accordance with the Catalogue List of Comprehensive Administrative Law Enforcement Items for Ecological and Environmental Protection of City S, further improved the "random selection of inspectors and inspection objects, and public disclosure of inspection results" supervision mechanism, and established a positive list system for law enforcement. In addition, District J strengthened cross-regional collaborative governance and clarified the division of responsibilities between different regions and between different departments and local authorities. It extensively popularized ecological and environmental protection knowledge through various online platforms, actively guided various

mass organizations and social groups to participate in environmental governance, and pooled the forces of multi-stakeholder co-governance (see Figure 2).

3.3.4. Comprehensive rectification stage

2023 marked the final year of the Three-Year Action Plan for Ecological Environmental Protection and Construction of City S, as well as the concluding phase of the third round of comprehensive environmental improvement in District J. The Ecological and Environmental Supervision Group of City S continued to intensify routine inspections on all districts, and imposed serious accountability on cadres who had committed dereliction of duty in environmental improvement work, transmitting pressure layer by layer. District J focused on four key areas—"upholding bottom lines, addressing weaknesses, creating highlights, and promoting development"—to advance pollution control work. It systematically summarized the improvement results of the previous year, fully promoted the rectification of problematic outfalls identified in 2022, carried out pollution source tracing work in 2023, and completed quality control-related tasks by the end of the year. Specifically, District J made efforts in three aspects. First, it consolidated work responsibilities, optimized work procedures, formulated monthly project advancement plans, and further refined the division of tasks to ensure the orderly progress of all work. Second, it strictly controlled the acceptance inspection process, adhered to the principle of using high standards to drive high-quality outcomes, strictly followed the requirements for project review and inspection as well as acceptance criteria, and conducted a comprehensive verification of project completion. Third, it strengthened re-inspections and reviews, focused on prominent environmental problems, took the initiative to invite relevant municipal leaders to conduct inspection and guidance, and timely reported the improvement results and existing problems to municipal-level departments. Meanwhile, it publicized the improvement results to the general public through official websites, news media, WeChat official accounts and other platforms, extensively solicited public opinions and suggestions, and accepted social supervision (see Figure 2).

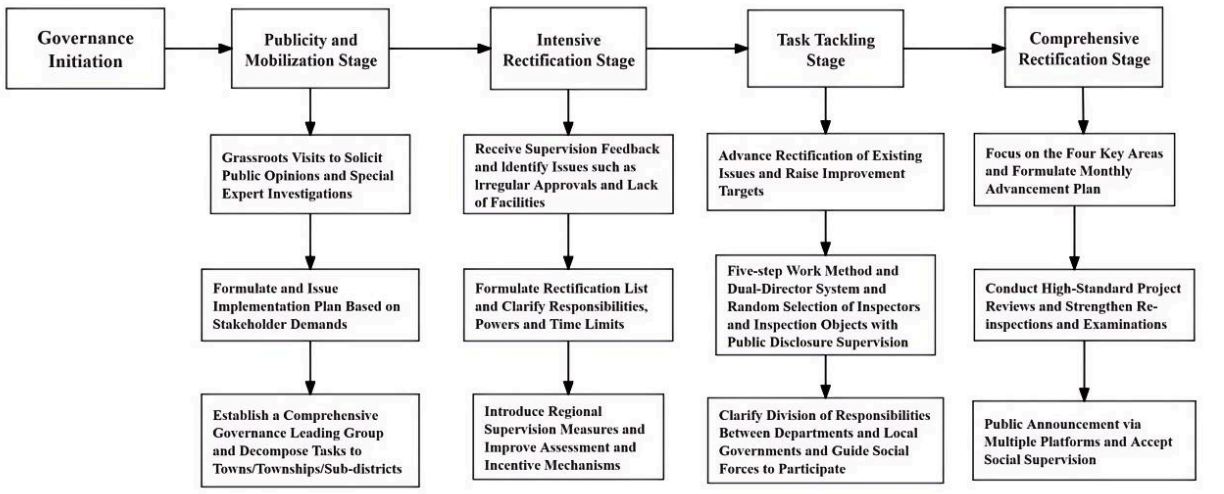


Figure 2. The process of environmental governance in District J

4. Under the pressure of dynamic accountability: the response mode of the J District government

4.1. Research methods and processes

This paper adopts a case study as the primary research method to conduct a comprehensive and dynamic analysis of the response mode of the J District government under accountability pressure. First of all, based on existing domestic and foreign literature, this study sorts out and analyzes relevant theoretical achievements, and constructs a theoretical framework [25] of dynamic accountability scenarios as well as a framework of accountability pressure response modes for grassroots governments. This approach serves to more clearly define the positioning of grassroots governments' responses to accountability pressure, thereby providing solid theoretical support for exploring the response modes of grassroots governments in the context of dynamic accountability pressure. Then, through visits to government departments of District J, semi-structured interviews were conducted with grassroots cadres. A total of 16 grassroots cadres were interviewed, with each interview lasting 20 to 30 minutes [26], thus obtaining sufficient first-hand data. Meanwhile, secondary data were collected as supplements from information released on official government websites and news media, so as to make the data collection more comprehensive. After collecting adequate information, based on relevant theories and models—such as the analysis framework of grassroots governments' "responding to the situation" and the explanatory framework of "dynamic accountability scenario-responsibility cognition-strategy selection"—corresponding viewpoints were formed through interpretation combined with relevant research [27]. Finally, on the basis of systematic research and demonstration, conclusions were drawn, and corresponding policy recommendations were put forward for the improvement of the accountability system and the response mode of grassroots governments.

4.2. Government response scenarios under dynamic accountability pressure

4.2.1. Task pressure and public expectations: responsibility cognition in a low-pressure scenario

During the publicity and mobilization stage, the cadres of District J were under relatively low accountability pressure. District J conducted a comprehensive assessment of task pressure based on the task requirements and assessment indicators issued by higher authorities, while also evaluating its own actual conditions. In the third round of comprehensive environmental improvement, District J adhered to the principle of "perceptible, assessable and measurable". In the process of environmental governance, the government of District J observed public conditions and solicited public opinions. Social surveys were conducted before formulating plans, during the implementation process and in the evaluation phase to listen to public opinions, thus continuously adjusting and improving the content and methods of environmental governance work. The effectiveness of environmental governance in District J is reflected in the improvement of environmental quality, while the environmental governance work itself is embodied in various indicator data. Based on social surveys, District J invited experts to conduct evaluations, combined with actual local conditions, and formulated phased quantitative indicators in accordance with the requirements of the state and City S. Guided by results, it focused on improving the four key indicators of air, water, soil and ecological space to ensure that the environmental improvement work achieved tangible results. Meanwhile, District J adhered to the principle of assessable responsibility, fully implemented the responsibilities of cadres, and gave full play to the roles of cadres at the district, town and village levels.

"Higher-level authorities issued the three-year environmental improvement plan to all districts and put forward the goals to be achieved. However, since the plan was a three-year one and there were no clear

provisions on short-term assessment requirements, there was no significant pressure in the initial stage. In China, the usual practice is to first conduct social surveys and visits to the public to formulate the implementation plan for the district." (Interviews A1、A7)

4.2.2. Self-motivation and regional cooperation: task execution in a medium-high pressure scenario

During the intensive rectification stage and the task tackling stage, City S carried out ecological and environmental protection supervision actions on District J on multiple occasions, and the pressure faced by the cadres of District J gradually intensified. Adhering to the environmental governance requirements of "perceptible, assessable and measurable", District J focused on the improvement of environmental indicators such as the 8th Three-Year Action Plan of City S, so as to achieve comprehensive and multi-level improvement of environmental governance in District J. District J proposed that by 2023, the proportion of key river sections with water quality better than or equal to Grade III would meet the requirements set by the municipal government. The annual average concentration of PM2.5 would be stably controlled below 35 micrograms per cubic meter, and the excellent and good rate of ambient air quality (AQI) would be stably maintained at around 85%. The excellent water quality rate of coastal waters, as well as the quality of soil and groundwater environment, would remain stable; the safe utilization rate of contaminated cultivated land would reach over 95%, and the safe utilization rate of contaminated plots would reach 100%. These targets were higher than the municipal-level ones. The government of District J not only strived to meet the municipal requirements, but also formulated higher goals based on local actual conditions, imposing additional pressure on itself. It took such pressure as motivation and transformed the common goals of the whole district into the driving force of the government [28].

"The targets set by higher-level authorities are the baseline. We pursue better effects of environmental governance, so the targets formulated for our district are higher than those required by higher authorities. Pressure breeds motivation, and we stimulate our fighting spirit through self-motivation." (Interviews A2、A11、A13)

During the intensive rectification stage and the task tackling stage, which were also the critical periods of the Three-Year Plan for Ecological and Environmental Protection of City S, City S issued detailed implementation rules and strictly enforced the assessment system. Given the arduous nature of the tasks, certain regions and projects faced considerable pressure when attempting to complete their respective work independently. Consequently, District J strengthened collaborative governance with other regions. For instance, it jointly formulated a coordinated governance plan for the national-controlled surface water sections in the border areas with the governments of neighboring jurisdictions, shared river management work, and carried out joint law enforcement operations. In the course of task execution, District J adhered to the principle of integrated and coordinated linkage, forming a synergy with other regions; it abandoned the concept of working in isolation and shifted towards collaborative governance. The clear division of tasks, coupled with mutual coordination and integration, can improve the governance efficiency of grassroots governments.

"Environmental issues involving interregional junctions can often not be resolved by a single party, which necessitates collaborative governance and mutual cooperation. As an old saying goes, Unity is strength. Only when all parties—both superior and subordinate, as well as neighboring regions—work in harmony can we truly promote the progress of the whole society." (Interviews A3、A9、A16)

4.2.3. Performance evaluation and multi-directional interaction: task assessment in a high-pressure scenario

During the comprehensive rectification stage, the three-year comprehensive environmental improvement drive entered the final phase. To verify the achievement of task objectives, City S carried out multiple rounds of supervision, placing the government of District J in a scenario of high-pressure accountability. To identify

specific problems arising during the comprehensive environmental improvement process, District J, on the basis of continuing to deepen the resolution of problems identified in the earlier stages, conducted performance evaluations to assess the completion of tasks and pinpoint shortcomings. This approach enabled more targeted and comprehensive resolution of problems in environmental improvement, ensuring that tasks were completed with high efficiency and quality.

"Performance evaluation is the most direct method to verify the completion of tasks. As comprehensive environmental improvement entered the full acceptance phase, we focused more on identifying problems from the assessment results, never overlooking any existing or potential issues, and striving for the best possible outcomes." (Interviews A4、A6、A14)

Under the scenario of high-pressure accountability, District J took the initiative to invite higher-level authorities to conduct supervision on multiple occasions, reported the achievements of comprehensive environmental improvement to them, and received relevant guidance. Meanwhile, since environmental governance is closely related to the sense of well-being of the whole society, District J strictly implemented the government affairs openness system, disclosed to the public the policies and measures for environmental improvement, the results of the improvement, and the outcomes of penalties. It also established channels for public feedback to listen to public opinions and suggestions. District J attached great importance to multi-directional interaction in the process of environmental governance, which not only helped identify and resolve problems, but also enhanced public trust in the grassroots government and strengthened the credibility of the grassroots government.

"Serving the people is our goal, and everything we do is aimed at enhancing people's sense of happiness. Therefore, we must always keep the public informed of our work outcomes, earnestly listen to their opinions and suggestions, and truly ensure that power is exercised in the interests of the people." (Interviews A5、A8)

4.3. Theoretical construction of government response mode under dynamic accountability pressure

Based on the analysis of the task execution response mode of officials in District J during environmental governance, this paper refines the response mode of grassroots governments in the context of dynamic accountability pressure into an explanatory framework of "Dynamic Accountability Scenario—Response Mode" (see Figure 3). In this framework, the accountability pressure scenario is composed of two core elements: external pressure and internal motivation. Among them, external pressure originates from task accountability pressure and public supervision pressure; internal motivation is mainly reflected in the operational autonomy of grassroots governments.

First, task accountability pressure, public supervision pressure, and operational autonomy jointly shape the dynamic accountability pressure scenario for grassroots governments in environmental governance. There are significant differences in the task accountability pressure, public supervision pressure, and operational autonomy faced by grassroots cadres between the routine task scenario and the dynamic task scenario. In a low-pressure accountability scenario, grassroots governments have a relatively large space for operational autonomy, and internal motivation plays a more prominent role in driving task progress. In a medium-high pressure accountability scenario, accountability pressure exerts a more obvious driving effect on grassroots cadres. However, to achieve high-efficiency governance, it is still necessary to fully stimulate the internal motivation of grassroots cadres. The dynamic accountability pressure scenario inherently requires grassroots cadres to flexibly adjust their response modes based on the intensity of accountability pressure and their own operational autonomy. Nevertheless, in practice, most grassroots cadres are accustomed to adopting a single fixed mode to address various problems. They lack the ability of flexible adaptation, find it difficult to

optimize strategy selection according to changes in the task environment, and may consequently respond passively. Therefore, grassroots cadres need to establish a dynamic perspective, accurately judge the scenarios they are in, and flexibly adjust their response modes.

The operation of local governments is always accompanied by various pressure constraints. The "pressure" here specifically manifests as the subjective perception of "having to implement and execute" formed by subordinate executors after higher-level governments issue various instructions. Among the external mechanisms affecting the policy implementation of grassroots governments, the accountability mechanism oriented towards "punishment" and the reward, commendation, and personnel promotion mechanisms oriented towards "incentive" are particularly crucial. Among them, the accountability mechanism constitutes external restrictive pressure, while the reward and promotion mechanisms generate internal driving motivation, and both act synergistically on grassroots cadres' choice of policy implementation strategies. It should be noted that the intensity of accountability needs to be controlled within a reasonable range; if it exceeds the threshold, it may trigger passivity and slackness of grassroots governments. In contrast, the intensity of incentives is positively correlated with the internal motivation of grassroots cadres—the stronger the incentives, the more significant the stimulating effect on grassroots cadres. From the perspective of District J's practice, the accountability pressure faced by its officials presents a progressive characteristic from low pressure to medium pressure and then to high pressure, and they have always maintained a high level of operational autonomy. This has also enabled them to adopt a positive response mode throughout the entire process of the third round of comprehensive environmental improvement.

Third, the dynamic accountability pressure scenario shapes a complex governance context for grassroots governments' comprehensive environmental improvement. In the context of comprehensive environmental improvement, the complex interactive relationship between dynamic accountability pressure and grassroots governments provides more exploration space for the optimization of grassroots governments' response modes. The full cycle of a governance initiative can be divided into three phases: responsibility cognition, task execution, and task evaluation. There are differences in the intensity of accountability pressure and governance priorities across each phase: In the responsibility cognition phase, accountability pressure is relatively weak, and the core task of grassroots governments at this stage is to accurately assess task pressure, extensively solicit public opinions and suggestions, and then formulate scientific and reasonable task implementation plans; when entering the task execution phase, accountability pressure increases significantly. Grassroots governments need to give full play to the regulatory role of incentive mechanisms to alleviate the negative psychology that may be triggered by accountability pressure. At the same time, they should establish and improve an inter-regional collaborative governance mechanism, abandon the isolated policy implementation model, and form a governance synergy; in the task evaluation phase, accountability pressure reaches its peak, and this phase focuses on result acceptance and the precise resolution of remaining issues. Grassroots governments need to give full play to the guiding role of performance evaluation, target and solve existing problems in light of actual conditions, while strengthening vertical hierarchical communication, horizontal departmental linkage, and interaction with the public. They should examine work effectiveness from multiple dimensions and levels to achieve a comprehensive and systematic governance closed loop.

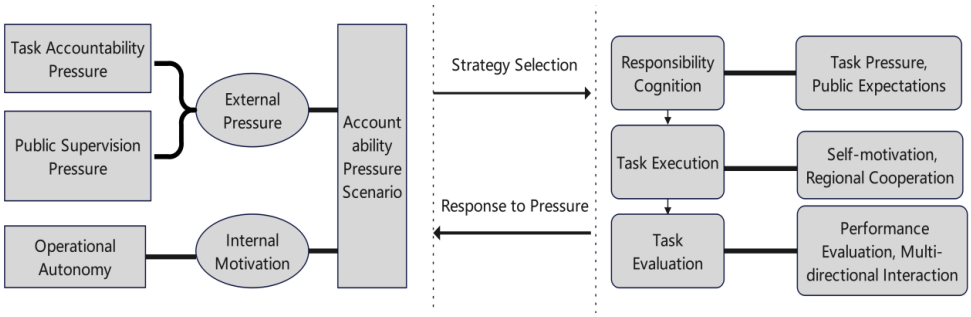


Figure 3. Explanatory framework of "dynamic accountability scenario—response mode"

5. Policy recommendations

China emphasizes that power must be exercised in the open and that power should be locked up in the cage of institutions. The establishment of the accountability system has effectively constrained public power and improved the efficiency of government governance. However, continuously increasing accountability pressure can also have negative effects. As the cornerstone of national governance, grassroots governments generally face the dilemma of scarce resources and heavy responsibilities. To avoid damage to their own interests, some grassroots governments may adopt blame-avoidance strategies. Based on the previous analysis of grassroots governments' response modes under dynamic accountability pressure, this paper puts forward the following recommendations to improve the governance efficiency of grassroots governments in accountability pressure scenarios:

Firstly, enhance the scientificity of the accountability system. At present, China's accountability mechanism still has certain imperfections and inadequacies. The prominent problems include imposing increasing pressure level by level and ignoring local realities. Insufficient investigations and research based on local conditions have led to a widespread imbalance between powers and responsibilities among grassroots governments. If grassroots cadres are under enormous accountability pressure while lacking the necessary conditions to accomplish tasks, they will be highly inclined to adopt blame-avoidance strategies, which runs counter to the original intention of the accountability system.Therefore, inspection and supervision departments at all levels must conduct solid field investigations and research. When carrying out accountability, they should fully take into account the task performance of subordinate governments, their resource endowments, as well as controllable and uncontrollable factors, so as to effectively ensure the scientificity of the accountability system. The core purpose of accountability is not punishment, but to arouse the sense of responsibility and stimulate the spirit of dedication. This requires incorporating the content, targets, matters, subjects, procedures, and methods of accountability into an institutionalized and procedural track, and improving the complete chain of responsibility decomposition, inspection and supervision, and retroactive accountability.

Secondly, improve the incentive mechanism. Internal motivation is a key factor influencing cadres' behavioral choices. An effective positive incentive mechanism can fully stimulate cadres' internal motivation and mobilize their enthusiasm, initiative, and creativity in work. First, clarify responsibility boundaries and implement goal-oriented incentives. Based on the task objective system, formulate differentiated reward and punishment measures, and accurately implement positive and negative incentives in conjunction with assessment results. Second, build a virtuous cycle and carry out distribution-oriented incentives. Comprehensively adopt diversified incentive methods such as ideological and political guidance, spiritual commendation, and material rewards to correctly guide cadres to improve their comprehensive capabilities and overall quality. Third, set up advanced models and strengthen role-model incentives. By publicizing typical

figures and their advanced deeds, promote their professional dedication and fine work styles, give full play to the exemplary and leading role of role models, stimulate cadres' sense of enterprise and honor, create a strong atmosphere for pursuing careers and making achievements, and guide all cadres to engage in their work with a high-spirited attitude. Fourth, make good use of negative examples and implement disciplinary incentives. Impose penalties on cadres who are passive and inactive in work, exert a warning and deterrent effect, and spur cadres to perform their duties actively and promote the implementation of work through appropriate pressure.

Thirdly, establish and improve interaction channels between government vertical and horizontal departments as well as among regions. China has been continuously advancing the shift of social governance and service focus to the grassroots level. However, the current poor coordination and linkage between government vertical and horizontal departments and among regions remain a prominent shortcoming in grassroots governance. To this end, efforts need to be made to establish and improve interaction channels: First and foremost, focus on the equality of powers and responsibilities, and clarify the functions and powers of all grassroots levels. Clarify the division of powers and responsibilities among departments at all levels, and on the basis of giving play to their function of transmitting information between higher and lower levels, urge departments to strengthen their coordination and linkage role; establish an access mechanism for tasks assigned by higher-level authorities to lower-level ones, define the scope of responsibilities that cannot be shifted to the grassroots, and endow grassroots governments with corresponding powers to solve the problem of imbalance between powers and responsibilities and put an end to the phenomena of "inferior implementation" and "hollow implementation". Next, promote the inclination of law enforcement resources and forces to the grassroots, adhere to the streamlining of administration and delegation of powers, and ensure that the grassroots can give full play to their independent creativity within a reasonable scope. Subsequently, improve information sharing channels to realize vertical, horizontal and inter-regional collaborative connection. Promote the refinement of grid governance, build an "Internet Plus" government service model, and improve the grid "1+1+N" work linkage mechanism; establish a coordinated mechanism for cross-departmental and cross-regional joint law enforcement to improve the efficiency of collaborative governance.

Fourth, strengthen ideological education of grassroots cadres and enhance their work capacity and sense of responsibility. Faced with accountability pressure, some grassroots cadres resort to blame-avoidance strategies to evade punishment, and this problem urgently needs to be resolved by strengthening ideological education [29]. We can carry out thematic ideological education and work capacity training programs for grassroots cadres, adopt a two-pronged approach to enhance their governance capabilities and sense of responsibility, drive them to shift from "passive response" to "proactive engagement" in work, encourage them to dare to take responsibility, courageously face difficulties, and actively innovate social governance methods and approaches.

6. Conclusion

Improving the efficiency of grassroots governance is a top priority for advancing the modernization of China's governance system and governance capacity. As the core subject of grassroots governance, the governance behaviors and efficiency of grassroots governments are directly related to the implementation of national governance goals. The accountability scenario is an important feature of grassroots governance in China. If we only analyze the response modes of grassroots governments from the perspective of static accountability scenarios, it will be difficult to accurately explore the effective paths for grassroots governments to adapt to China's accountability scenarios. Based on a study of the comprehensive environmental improvement initiative

in District J, this paper extracts the explanatory framework of "Dynamic Accountability Scenario—Response Mode", aiming to analyze the behavioral modes of grassroots governments adapting to pressure scenarios from a dynamic perspective. In fact, understanding the response modes of grassroots governments in the context of dynamic accountability pressure is the key to improving the efficiency of grassroots governance.

Task accountability pressure, public supervision pressure, and operational autonomy jointly shape the dynamic accountability pressure scenario. The degree of compatibility between this scenario and the response modes of grassroots governments directly affects the outcomes of grassroots governance. If grassroots governments fail to flexibly adapt to dynamic accountability scenarios, they may not only be unable to achieve task objectives, but also face the risk of accountability and punishment [30]. Against this backdrop, some grassroots cadres will resort to passive blame-avoidance behaviors to evade accountability and safeguard their own interests—that is, grassroots government staff seek ways to avoid accountability through various means. Such behaviors will severely dampen their work enthusiasm, initiative, and creativity, ultimately leading to a decline in governance efficiency. The case study of environmental governance in District J shows that although grassroots governments passively bear the dual pressures of task accountability and public supervision, they can transform pressure into motivation by stimulating internal drive. This not only enables them to accomplish tasks efficiently, but also allows them to exert reverse pressure, forcing higher-level governments to innovate social governance models.

It is worth noting that grassroots governments are at the bottom of China's administrative power hierarchy. The accountability pressure transmitted layer by layer from the central to local governments often exceeds their actual bearing capacity. Coupled with the general lack of necessary resources required to accomplish tasks at the grassroots level, this further exacerbates the difficulty of task fulfillment and significantly increases the likelihood of them adopting passive responses. The failure of higher-level governments to accurately grasp the proper degree of accountability pressure constitutes one of the important causes of this problem. Therefore, it is imperative for China to adjust the supervision mechanism at the macro level in a timely manner and establish an appropriate accountability pressure threshold—one that not only effectively urges grassroots governments to accomplish tasks efficiently, but also avoids subjecting grassroots cadres to excessive stress due to overwhelming pressure, which would otherwise dampen their work enthusiasm. Meanwhile, grassroots governments should take the initiative to learn from advanced models, enhance their pressure resilience and governance capabilities; more importantly, they should dare to feed back the true situation of governance to higher-level authorities, and promote differentiated adjustments under special scenarios. Higher and lower-level governments need to further strengthen their connections, enhance two-way interaction, ensure that strategic arrangements are accurately aligned with grassroots realities, and ultimately promote the overall improvement of the modernization level of China's governance system and governance capacity.

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Conflicts of interest

The authors declare no conflict of interest.

References

[1] Rong, B. J., Cui, Z. Y., & Wang, S. Z. (1998). *Transformation from a pressure-based system to a democratic cooperative system: Political system reform at county and township levels.* Central Compilation & Translation Press.

[2] Zhou, L. A. (2008). *Local governments in transition: Official incentives and governance.* Truth & Wisdom Press.

[3] Zhang, P., & Cui, Z. A. (2024). Deconstructing the policy implementation logic of urban communities in the field of grassroots governance. *Study and Practice*, (1), 42–51.

[4] Wang, Q., & Yan, Z. P. (2023). Pressure transmission: A study on the mechanism of effective implementation of local government institutional reform. *Administrative Tribune, 30*(4), 60–69.

[5] Huang, D. Y. (2020). Pressure transmission and fluctuations in policy implementation: A case study of the implementation of Industry X policy in Province A. *CASS Journal of Political Science*, (6), 104–116, 128.

[6] Li, Y. X., Ma, R., & Mao, S. L. (2024). Pressure-based system and fluctuations in grassroots policy implementation: A diachronic observation of the toilet revolution in Town D, Province J. *Issues in Agricultural Economy*, (11), 77–89.

[7] Wang, C. W., & Ma, L. (2020). How performance gaps drive government performance improvement under a pressure-based system: An empirical study of the "immediate response to complaints" initiative in Beijing. *Public Administration Review of China, 2*(4), 82–109.

[8] Yu, J. J., & Chen, B. F. (2021). Institutional causes and organizational adjustments of power-responsibility imbalance at the grassroots level. *Truth Seeking*, (4), 28–41, 110.

[9] He, Y. L., & Xiao, Y. (2021). Accountability-led governance: Fulfillment of ambiguous tasks and new connotations of central-local government relations. *CASS Journal of Political Science*, (3), 114–126, 163–164.

[10] He, X. F. (2015). The problem of hierarchical asymmetry among powers, responsibilities and interests in the administrative system. *Journal of Yunnan Administration College*, (4), 4–7.

[11] Tian, X. H. (2023). The inspection paradox: Grassroots accountability-avoidance behaviors in the process of inspection going to the grassroots. *Seeker*, (5), 159–166.

[12] Tu, W. Y., & Gong, T. (2022). Can control-based accountability effectively curb accountability avoidance behaviors? An analysis based on the internal logic of official behaviors and institutional norms. *Administrative Tribune, 29*(5), 52–60.

[13] Wang, F. S. (2022). "Acting in response to the situation": How do grassroots governments accomplish tasks under the context of increasing pressure? A case study of COVID-19 vaccination promotion in Town A, City X. *Journal of Public Management, 19*(4), 28–41, 167.

[14] Yang, L. W. (2022). Collaborative inertia, accountability pressure and local government response: A mixed-methods study based on the online political consultation platform of City A. *E-Government*, (12), 23–34.

[15] Chen, Z. P., Dong, D. Y., & Lei, X. K. (2023). Easy to increase pressure but hard to reduce it: Multiple institutional logics of burden formation in township governments. *Journal of Northwest A&F University (Social Science Edition), 23*(4), 65–77.

[16] Zhou, Z. C., & Huang, H. K. (2022). The relationship between vertical and horizontal authorities from cooperative co-governance to collaborative embeddedness: The generation and resolution of grassroots government burdens. *Public Administration and Policy Review, 11*(1), 20–33.

[17] Liu, R. (2021). The generative logic of township formalism in the context of governance dilemmas. *Journal of Northwest Normal University (Social Sciences Edition), 58*(2), 26–35.

[18] Liu, B., & Xu, Y. Z. (2021). Imbalance of power and responsibility and residual power allocation: The "accountability paradox" in the process of reducing burdens at the grassroots level. *Truth Seeking*, (3), 19–35, 109–110.

[19] Shepherd, R. P. (2022). Internal governmental performance and accountability in Canada: Insights and lessons for post-pandemic improvement. *Canadian Public Administration, 65*, 516–537.

[20] Muhtar, A. T., & Sutaryo. (2021). Performance accountability in Indonesian local governments: Does monitoring really work? *International Journal of Business and Society, 22*(3), 1673–1692.

[21] Kessy, A. T. (2020). The demand and supply sides of accountability in local government authorities in Tanzania. *Public Integrity, 22*(6), 1–22.

[22] Van der Tier, M., Hermans, K., & Potting, M. (2021). Linking macro-level mechanisms to street-level accountability practice: A cross-national case study of street-level accountability of social workers in government funded homeless shelters. *Social Policy & Administration, 55*, 191–205.

[23] Johnstone, L., Yates, D., & Nylander, S. (2023). Taking shape within the structural and the personal: Sustainability accountability within a Swedish public sector organization. *Sustainability Accounting, Management and Policy Journal, 14*(7), 287–312.

[24] Zhang, S. W., & Li, S. (2018). Behavioral public management: Content, methods, and trends. *Public Policy Review, 11*(1), 7–36.

[25] Hou, Z. Y., & Zhang, X. (2021). "China" as a method: Constructing public management case studies in the Chinese context. *Journal of Public Management, 18*(4), 126–136.

[26] Chou, L. P. (2015). *Social research methods*. Chongqing University Press.

[27] Feng, X. T. (2018). *Social research methods*. China Renmin University Press.

[28] Battaglio, R. P., Bellé, N., & Cantarelli, P. (2022). Self-determination theory goes public: Experimental evidence on the causal relationship between psychological needs and job satisfaction. *Public Management Review, 24*(9), 1411–1428.

[29] Hu, C. Y., & Zhou, F. J. (2023). Avoidance strategy choices of grassroots cadres under dynamic accountability pressure: An investigation based on the "100-day breakthrough campaign" in Town S. *Journal of Public Management, 20*(4), 147–155, 175.

[30] Chen, S. F. (2023). Influencing factors and adaptive paths of local government livelihood policy implementation deviation. *Jiangsu Social Sciences*, (5), 144–152.