

Analysis of the Erosion and Enhancement Paths of Government Credibility at the Grassroots Level in the Big Data Era

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Keywords: Big data era; Grassroots government governance; Government credibility

Abstract: The advent of the big data era has empowered government governance with precision, leveraging the integration of information and its powerful influence to effectively promote technological integration, business convergence, and data sharing. This has injected new momentum into regional social governance, making it more convenient and efficient. However, the erosion of government credibility is also accelerating in the big data era. For grassroots governance, government credibility is a crucial link connecting the government and the public. The changes of the times and the deepening development of big data present new challenges for government credibility. This paper clarifies the concepts of "big data era," "government credibility," and "grassroots governance," summarizes the new characteristics of government governance in the big data era, and examines the enhancement paths in the context of contemporary government credibility erosion. By analyzing the current situation and causes of government credibility loss at the grassroots level, including government self-awareness, public perception, and communication processes, and considering the characteristics of field transformation, inconsistent stakeholder demands, and rapid technological updates in the big data era, the paper proposes strategies and recommendations to enhance government credibility, focusing on the roles of communication entities, media, and processes.

1. Introduction

Contemporary Chinese governance exhibits a central-local credibility asymmetry, manifesting in a hierarchical trust gradient marked by declining public confidence from central to local levels – an underexplored phenomenon with critical implications for regime legitimacy. While 78% of government credibility studies focus on provincial/municipal tiers (CNKI data), grassroots administrations' credibility deficit remains theoretically underdeveloped, particularly its correlation with administrative efficacy deterioration. This research void carries operational significance: discrepancies between public perceptions of central directives versus local implementation generate recursive governance dilemmas – citizen cognitive dissonance regarding central-local functional differentiation amplifies bureaucratic inertia. Unaddressed grassroots credibility entropy threatens

systemic legitimacy through three interconnected mechanisms: 1) Reduced trust capital undermining policy compliance incentives 2) Escalated social conflict resolution costs 3) Emergence of alternative authority structures in civic mediation. The study contends this trust gradient originates from constitutional-performative governance disjunctures (strategic oversight vs. localized service delivery), demanding recalibrated credibility metrics aligned with China's political ontology.

2. The Current Situation and Causes of the Erosion of Grassroots Government Credibility

2.1 Current Situation of Grassroots Government Credibility Erosion

With the advent of the big data era, the information dissemination and interaction model between government and citizens has undergone significant changes. "Internet + Government Services" has become a new service approach, creating e-government platforms that leverage online resources. This has improved government efficiency and provided tangible convenience for the public. However, there is a phenomenon of "decreasing trust" in government credibility, with grassroots governments facing significant challenges. In the big data era, the influence of multiple authoritative centers has weakened government credibility. This paper will delve into and investigate the causes of these issues from these three aspects, as shown in Figure 1.



Figure 1: Mechanism of Grassroots Government Credibility Erosion

2.1.1 Strong Central Government, Weak Local Government: Formation of the "Decreasing Trust" Pattern

China has entered a new era of comprehensive development, steadily advancing to the forefront of the world's major powers, with remarkable achievements in economic, social, political, military, and cultural sectors. The academic community generally agrees that there exists a phenomenon of "decreasing trust" in the credibility of the Chinese government, which is closely related to the administrative level of government. As the government moves down through administrative levels, its social credibility decreases correspondingly, and vice versa, as shown in Table 1. [1]

Table 1: Public Trust Levels in Different Government Administrative Tiers

Level of Trust	Central Government		Provincial and Municipal Governments		District and County Governments		Explanation
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	
Distrust	81	2.42	104	3.11	216	6.46	Distrust=1 Moderate=2 Trust=3
Moderate Trust	482	14.42	732	21.9	1,145	34.26	
Trust	2,779	83.15	2,506	74.99	1,981	59.28	
Total	3342	100	3342	100	3342	100	

The formation of the "decreasing trust" pattern is due, on one hand, to the public's cognitive differences, and on the other hand, to the differing pressures and governance situations faced by the central and local governments, which result in distinct standards for the central and local authorities.

2.1.2 Grassroots Government Credibility in Crisis

Contemporary Chinese grassroots governance confronts a credibility crisis intensified by evolving communication technologies and elevated public expectations that exceed institutional adaptive capacities. This systemic legitimacy erosion manifests through dual operational failures: 1) Persistent governance deficits emerge despite improved administrative ecosystems, with authorities demonstrating insufficient responsiveness to emerging social issues and critical implementation gaps between central directives and localized execution, particularly regarding public opinion integration; 2) Policy processes exhibit democratic-scientific dualism deviations through unilateral decision-making and evidentiary detachment in formulation, contravening requirements for stakeholder consultation and evidence-based design. These institutional shortcomings perpetuate reflexive public distrust and compliance disengagement, constituting a self-reinforcing legitimacy erosion cycle that undermines governance modernization objectives through deteriorating state-society reciprocity.

2.1.3 The Impact of Multiple Authority Centers in the Big Data Era on Government Credibility

Zhou Qingzhi (2020) characterizes local authoritarian governance as a state-engineered social integration mechanism, utilizing institutionalized power penetration to consolidate fragmented societal actors under centralized frameworks. This model inherently produces systemic contradictions—eroded public authority, governance involution, and politicized social conflicts—stemming from fragmented sociopolitical foundations[2]. The big data era intensifies these tensions through epistemological pluralism in governance interpretation: multiple authority nodes exploit algorithmic amplification to construct competing policy narratives, cultivating selective public allegiance to non-state epistemic regimes. Such polycentric discourse ecosystems progressively erode governmental credibility as citizens gravitate toward alternative truth paradigms. Simultaneously, bureaucratic inefficiencies—fueled by fragmented policy mandates and convoluted opinion-channeling systems—generate systemic response lags in addressing societal demands.

2.2 Analysis of the Causes of Grassroots Government Credibility Erosion in the Big Data Era

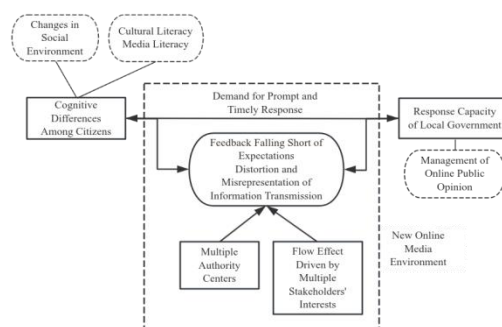


Figure 2: Framework of the Causes of Grassroots Government Credibility Erosion

Current academic discourse recognizes the existence of a "decreasing trust" pattern in government credibility. Combined with the weak governance capacity of grassroots governments,

the distortion of information dissemination, and the impact of the flow effect in the big data era, several key factors contribute to the erosion of grassroots government credibility. This section explores the pathways through which grassroots government credibility erodes in the context of the big data era from these multiple dimensions, as shown in Figure 2.

2.2.1 Public Perception Differences in Central and Local Governance Capacities

Scholarly research identifies multidimensional governmental credibility erosion stemming from state-citizen perceptual asymmetries mediated by cultural-literacy disparities and institutional misalignments. Individually, cognitive fragmentation arises from divergent media literacy capacities within algorithm-driven entertainment platforms (e.g. Douyin, Weibo), where low-integrity information ecosystems constrain rational policy assessment. Systemically, trust dynamics polarize between central-local governance tiers: central authorities retain legitimacy through macro-strategic stewardship, while grassroots agencies suffer trust erosion from micro-level bureaucratic inefficiencies and misconduct. This epistemic divergence intensifies with China's sociogeographic complexity, where regional governance disparities intersect with uneven educational attainment and influencer-mediated public opinion formation. Yue Hongsheng (2022) frames this credibility paradox as both an outcome and catalyst of societal trust—a reciprocal cycle co-evolving institutional integrity and public rationality[3].

2.2.2 Low Policy Efficiency and Inadequate Response to Public Opinion in Grassroots Governments

China's grassroots governance faces dual structural-institutional credibility crises stemming from policy implementation inefficiencies, where universal policy applicability conflicts with chronic administrative inefficacy and opacity, fostering public disengagement through diminished civic understanding. Credibility deterioration is compounded by interdepartmental fragmentation—manifested through bureaucratic self-interest and accountability diffusion across agencies—and systemic agent-principal misalignment via nepotism, corruption, and unmet public obligations, which rupture citizen-state reciprocity. These operational failures, amplified by digital public opinion amplification mechanisms, progressively erode governance legitimacy through trust capital depletion within the nation's multilayered administrative framework.

2.2.3 Distortion and Misrepresentation in the Information Dissemination Chain

Zhou Haimi (2021) theorizes grassroots governance credibility as mediated through mass media's dual output-feedback function, where policy diffusion and public sentiment form cyclical legitimacy-reproduction mechanisms[4]. This system inherently produces epistemic asymmetries: media strategically filters ostensibly neutral government information through value-laden editorial protocols, privileging algorithm-optimized sensationalism over transparent deliberation. Two critical dysfunctions emerge: 1) Grassroots authorities' propagandistic focus on triumphalist narratives and performative formalism, sidelining substantive citizen-centric problem-solving; 2) A self-reinforcing credibility erosion cycle where selective disclosure fuels public conjecture and rumor proliferation. Structural inertia in bureaucratic communication protocols—marked by rigid "officialese" responses—fails to address demands for authentic solution-oriented dialogue. The mediation crisis intensifies through profit-driven media exploitation of regulatory ambiguities, accelerating the decoupling between institutional actions and civic perception through governance content commodification.

2.2.4 The Rapid Development of the "Fourth Estate" and the Flow Effect Driven by Multiple Interests

The mediatized governance paradigm demonstrates dual logics in digital transition: institutional authoritative communication (TV, newspapers) coexists with algorithmic platforms' emergent "fourth estate" reconfiguring state-society dynamics. While governments utilize these platforms for policy dissemination and image curation—purportedly enhancing efficiency through digitized engagement—their operational mechanisms paradoxically generate systemic risks. Platform economies foster informational pathologies via incentive misalignments: influencer ecosystems commodify attention through sensationalist virality, while entrepreneurial actors exploit regulatory gaps to circulate governance disinformation[5]. These conditions produce epistemic asymmetries that disrupt bidirectional flows—top-down policy implementation suffers data pollution distorting administrative rationality, while bottom-up civic cognition becomes warped through algorithmically amplified pseudo-events.

3. Pathways for Enhancing Grassroots Government Credibility

3.1 Theoretical Logic for Enhancing Grassroots Government Credibility

3.1.1 Transformation of the Participation Field

The media field, as a pivotal subsystem within societal organizational matrices, constitutes an objective relational network governed by distinct operational logics, wherein institutions and actors vested in informational exchange compete for symbolic capital and discursive power. Historically dominated by traditional media's unidirectional transmission paradigm—characterized by institutional monopolies over content production and passive audience reception—this field has undergone tectonic shifts with digitalization's ascendancy. The emergence of algorithmic platforms has catalyzed a paradigmatic transition from centralized informational authoritarianism to polycentric informational ecosystems, fundamentally democratizing content generation through mobile-enabled mass participation.

3.1.2 Aligning Various Stakeholder Demands

The data-driven governance ecosystem constitutes a polycentric interaction framework where stakeholders (state, citizens, media) pursue intersecting yet divergent imperatives. State actors necessitate transparent digital interfaces for policy articulation, institutional image curation, and crisis responsiveness. Citizens require participatory governance mechanisms ensuring unobstructed interest articulation and bureaucratic transparency verification[6]. Media intermediaries face dual imperatives: fulfilling civic-state bridging functions through information dissemination while pursuing profit-maximization via algorithmic traffic optimization. This tripartite dynamic demands institutionalized alignment platforms that reconcile competing objectives—preserving governance legitimacy through bidirectional communication channels while maintaining media's information dissemination efficacy amidst algorithmic mediation of public discourse.

3.2 Pathways for Enhancing Grassroots Government Credibility

3.2.1 Government Response to Public Opinion and Governance Capacity

Grassroots governance systems require paradigm adaptation to algorithmic governance realities, necessitating operational protocol reconfiguration for data-driven polycentric discourse ecosystems.

Institutionalization of real-time sentiment monitoring architectures becomes imperative for crisis preemption through rapid source verification and transparent disclosure—critical trust preservation mechanisms. Legitimacy maintenance demands optimized transparency protocols enabling participatory sense-making with networked public, countering disinformation through anticipatory narrative governance[7]. Concurrent modernization mandates multidimensional capacity-building: transitioning from economic prioritization to service-oriented public value creation via digital governance toolkit that reduce information asymmetries and institutionalize satisfaction metrics as legitimacy indicators. The emergent "flow governance" paradigm presents dual imperatives—leveraging algorithmic systems for civic engagement while building resilience against attention economy distortions—where credibility co-evolves through continuous state-society negotiations of performative transparency and dynamic accountability expectations.

3.2.2 Norms for Communication Entities

Constitutional governance of digital public spheres requires multi-stakeholder frameworks balancing free expression with epistemic integrity through cyber-environmental legalization defining rights and obligations for polycentric actors (media, influencers, publics). Implementation necessitates graduated accountability via escalating judicial sanctions for malicious disinformation coupled with algorithmic audits of information flows to counter emotional mobilization, while establishing ethical incentivization through reputation capital systems rewarding constructive discourse[8]. Regulatory efficacy depends on hybrid models integrating state-mandated verification infrastructure with platform self-governance algorithms for real-time misinformation containment. This dual approach—penalizing harmful content while incentivizing civic participation—cultivates self-regulating digital ecosystems where constitutional speech coexists with techno-legal safeguards against attention economy exploitation through optimized engagement cost-benefit calculus.

3.2.3 Public Perception and Literacy

Divergent informational literacy levels critically shape governance perceptions, directly modulating public trust in institutions through social-environmental mediation[9]. Limited civic engagement and superficial comprehension of governance amplify reliance on third-party evaluations, particularly under primary information scarcity.

Digital discourse expansion mandates stringent regulation of online opinion ecosystems to prevent systemic communication crises from unregulated heterogeneous viewpoints[10]. Citizen literacy, as national cultural capital, determines state-citizen relational trajectories through dual cognitive deficits: behavioral deviations from misinformation internalization and participatory inertia compounded by truth-discernment failures. Political literacy mediates governance evaluation rationality, while networked moral entrepreneurs propagate anti-institutional sentiments via emotion-driven, fact-agnostic criticism.

4. Recommendations for Enhancing Grassroots Government Credibility

4.1 Improving Public Perception and Literacy

4.1.1 Correcting Public Perception Bias and Cultivating Reasonable Expectations

Governance credibility emerges through co-constructed state-society interactions, necessitating institutionalized participatory mechanisms to reconcile cognitive asymmetries between administrative systems and citizens. This requires dual-path institutional interventions: enhancing civic political literacy via structured policy engagement and supervisory accountability mechanisms,

while formalizing multi-channel digital interfaces (e-consultations, transparency protocols) to operationalize informational rights alongside administrative rationality[11]. Strategic digital governance integration proves pivotal through cultivating official media ecosystems via cross-sectoral opinion leader collaborations for balanced narrative dissemination, coupled with structured disclosure frameworks that mitigate intergovernmental perception gaps and anchor public expectations in evidentiary governance realities.

4.1.2 Improving Citizens' Internet Literacy

Cyberspace governance efficacy fundamentally depends on citizens' digital literacy as the cognitive foundation for rational political engagement in networked ecosystems[12]. Empirical evidence indicates governmental credibility erosion frequently stems from mass emotional mobilization through amplified opinion cascades rather than institutional shortcomings, necessitating multi-tiered literacy enhancement strategies. These include advanced information discernment training to navigate high-volume digital content while countering misinformation susceptibility, combined with algorithmic governance interventions to temper impulsive communication patterns undermining deliberative democracy. Systematic digital civics education must enhance public capacity for evidence-based governance evaluation, fostering policy-literate participation over emotive reactivity. Concurrent institutional reforms should align governmental transparency protocols with citizen interpretation frameworks to reduce administrative performance perception gaps. Strategic integration of cross-platform monitoring with behavioral nudging architectures could optimize digital discourse equilibrium between free expression and discursive accountability imperatives.

4.2 Enhancing Grassroots Government's Public Opinion Response Capacity and Policy Effectiveness

4.2.1 Improving Grassroots Government's New Media Public Opinion Response Capacity

Grassroots governance systems require adaptive opinion management frameworks integrating real-time monitoring and algorithmic responsiveness to address evolving informational challenges[13]. Institutional reforms must prioritize multi-layered surveillance mechanisms employing continuous digital sentiment analysis for preemptive issue detection and policy refinement. Essential operational upgrades include institutionalized verification pipelines ensuring authenticated data transparency and temporally optimized crisis responses. Modernization necessitates technocratic personnel skilled in media ecology to transform platforms into bidirectional communication channels—harnessing viral dissemination for policy articulation while deploying AI-powered verification systems against misinformation. Credibility maintenance necessitates institutionalizing machine learning-driven citizen feedback integration into decision matrices alongside service optimization through integrated governance interfaces that synchronize digital participation with administrative processes.

4.2.2 Improving Grassroots Policy Effectiveness

Sustainable government-public trust cultivation requires threefold institutional reforms: integrated oversight systems combining internal-external monitoring to operationalize power constraints and demonstrate procedural legitimacy through bureaucratic accountability; legally codified service delivery protocols standardizing eligibility, scope, and quality benchmarks to resolve equity disputes via technocratic optimization; and meritocratic civil service professionalization through competitive recruitment and anti-corruption enforcement aligned with

socialist governance principles. Synergistic implementation of these measures transforms trust-building from reactive repairs to proactive engineering—enhanced monitoring prevents malpractice, service standardization elevates satisfaction, and cadre quality ensures policy fidelity. This structural integration replaces personality-dependent credibility models with institutionalized transparency in decision-making and service metrics, while Party-led disciplinary inspection systems institutionalize dynamic accountability pressures that structurally deter power abuse through constitutional governance alignment.

4.3 Standardizing the Information Dissemination Process

4.3.1 Standardizing Cyberspace

Effective regulation of digital discourse necessitates institutional constraints that standardize communicative conduct while clarifying stakeholder rights and obligations. Legal accountability must be rigorously enforced against rumor propagation destabilizing social order. A multi-tiered accountability architecture should integrate real-time discourse monitoring with punitive measures for malicious actors exploiting regulatory gaps, complemented by enhanced oversight of illicit activities through multi-stakeholder supervisory frameworks. Stringent pre-dissemination vetting protocols for sensitive information must be implemented, mandating cybersecurity personnel oversight to mitigate harmful content circulation through quantitative-qualitative data surveillance. Concurrently, a behavioral incentive system should impose graduated penalties for discursive disorder while rewarding constructive civic engagement, thereby elevating participation costs to deter malicious actors through risk-benefit recalibration of online interactions.

4.3.2 Building a Social Trust Atmosphere

Creating a social trust atmosphere can foster trust between grassroots governments and the public, correct cognitive biases, and enhance the credibility of grassroots governments. The construction of a trust culture requires the active development of the government, the public, and the media. By promoting mutual trust between the government, the public, and the media, a culture of honesty and trustworthiness can be cultivated, enhancing media responsibility and encouraging the public to fulfill their duties. In this overall atmosphere of trust, grassroots government credibility will gradually improve, fostering a unified social value system and contributing to the development of a harmonious and prosperous new society in China.

4.4 Adapting to New Changes of the Times and Promoting Collaborative Governance

4.4.1 Properly Handling the Flow Economy Effect

In the big data era, the flow economy represents a new form of economy driven by attention, which taps into the fundamental needs of users[14]. Behind it is the improvement of information efficiency driven by the iterative development of internet technologies. The flow economy has created new employment opportunities and brought significant benefits to social life and economic development. However, it is undeniable that this enthusiasm has also led to economic anomalies. Under the temptation of profit, legal and moral constraints have started to loosen. It is important to clearly understand the advantages and risks of the flow economy and utilize it wisely.

4.4.2 Promoting Government Collaboration with Multiple Authority Centers

Each field has influential representatives, whether they are admired for their professional

expertise or their strong leadership. These individuals, from scientific fields to entertainment and charity sectors, often have a significant impact, guiding public thoughts and actions. Sometimes, public trust in these figures exceeds trust in the government. During governance, grassroots governments must engage with these figures and seek to cooperate with them. By supporting these authoritative representatives, the government can leverage their influence to enhance its own image. The collaboration between grassroots governments and influential figures can align mutual interests, improving government credibility and integrating social resources, thus easing the governance burden.

5. Conclusions

China's grassroots governance undergoes transformative adaptation amidst national developmental progression and big data proliferation, with governmental credibility constituting the critical nexus in state-society relations. This study systematically investigates accelerating credibility erosion through tripartite analytical dimensions: 1) Diagnostic assessment of current credibility degradation patterns via comprehensive literature review; 2) Causal identification through empirical analysis of operational deficiencies; 3) Strategic formulation of credibility enhancement pathways via multi-stakeholder dynamics examination. Key findings reveal a descending trust gradient in governance legitimacy, wherein grassroots authorities encounter Tacitus Trap reinforcement through proliferation of polycentric authority nodes. The government-media-public interaction matrix demonstrates critical mediation effects, enabling targeted strategy development through tri-dimensional analysis of institutional communication protocols, algorithmic opinion leadership, and civic rationality cultivation. The proposed intervention paradigm integrates technocratic governance modernization with participatory accountability mechanisms to counteract systemic credibility entropy in data-intensive governance ecosystems.

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