

SCALING INCLUSION, MANAGING RISK: GOVERNANCE TRADE-OFFS IN GREEN PUBLIC PROCUREMENT FOR INDONESIA'S NATIONAL SCHOOL FEEDING PROGRAM

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Abstract

National school feeding programs are increasingly positioned as instruments of inclusive green economic transformation. In Indonesia, the *Makan Bergizi Gratis* (MBG) program integrates nutritional provision, local supplier inclusion, and sustainability-oriented procurement within a single national platform. Prevailing policy narratives assume that expanding inclusive green procurement strengthens food security and local economic development in mutually reinforcing ways. This article challenges that linear assumption by conceptualizing MBG as a structurally tensioned governance system. Drawing on institutional complexity, paradox theory, and collaborative governance literature, the study develops a configurational governance framework that examines the interaction among inclusion intensity, control mechanisms, operational scale, and institutional capacity. The analysis argues that inclusion generates heterogeneity, which increases monitoring demands; intensified control, in turn, may constrain participation. Moreover, scaling transforms risk from localized operational exposure into systemic vulnerability, producing non-linear stability effects. Rather than proposing harmonization, the article identifies threshold dynamics and boundary conditions under which inclusive green procurement enhances food system stability—or amplifies fragility. Food security, particularly its stability dimension, is reframed as a derivative of governance alignment rather than aggregate provision. By repositioning procurement as a strategic arena of paradox, the study contributes to food security scholarship, inclusive green economy discourse, and public management theory. The findings suggest that resilience in national feeding systems depends less on normative inclusion ambitions and more on adaptive calibration under persistent structural tension.

Keywords: Inclusive green economy, Green public procurement, Governance paradox, Food security stability, School feeding systems

INTRODUCTION

1. Introduction

National school feeding programs have re-emerged globally as strategic policy instruments that simultaneously target child nutrition, human capital formation, and local economic development. In Indonesia, the *Makan Bergizi Gratis* (MBG) program represents one of the most ambitious public interventions in the food system, combining nutritional objectives with aspirations for inclusive local sourcing and environmentally responsible procurement. Unlike traditional welfare programs, MBG operates not only as a redistributive instrument but also as a large-scale public procurement system embedded within the broader agenda of inclusive green economic transformation. This repositioning shifts the analytical focus from nutritional outcomes alone toward the governance architecture that structures value distribution, risk allocation, and system stability.

Food security scholarship has long emphasized the four interdependent pillars of availability, access, utilization, and stability (Ramadhani, 2025). While large-scale feeding programs clearly intervene in the domains of access and utilization, the literature often assumes that increasing food provision mechanically strengthens food security. This assumption becomes analytically fragile under surge conditions—when scale expands rapidly, actor heterogeneity increases, and coordination complexity intensifies. In such contexts, the effectiveness of food security interventions is mediated not merely by supply volume but by governance configuration. The stability pillar, in particular, becomes sensitive to procurement design, quality assurance mechanisms, and institutional monitoring capacity.

Parallel to food security debates, the inclusive green economy (IGE) paradigm argues that economic transformation must integrate environmental sustainability with equitable participation (Aditi et al., 2025; Oyadeyi & Oyadeyi, 2025). However, much of the IGE discourse remains macro-structural, focusing on energy transition, green investment, and industrial policy. Its application within social provisioning systems—such as national feeding programs—remains theoretically underdeveloped. When translated into procurement practice, IGE materializes through green public procurement (GPP), local sourcing mandates, and sustainability criteria embedded in contracting systems (Ortega Carrasco et al., 2025; Rosell, 2021). Yet, these mechanisms introduce competing institutional logics: efficiency, equity, and environmental compliance. Rather than harmonizing objectives, procurement reform frequently institutionalizes trade-offs.

This article challenges the implicit assumption that increasing inclusion within public procurement necessarily enhances food system resilience. Drawing on paradox theory Schoneveld (2022) and institutional complexity literature Saleh et al. (2025), we argue that scaling inclusion in Indonesia's MBG program amplifies governance tensions between local supplier participation and risk control. As supplier heterogeneity expands—particularly through the integration of small and medium enterprises (SMEs) and local farmers—monitoring costs, coordination demands, and quality variability increase. Intensified standardization, however, risks crowding out precisely those local actors the program seeks to empower. The resulting inclusion–control tension is not a temporary implementation obstacle but a structural paradox embedded in the governance design of inclusive green procurement.

Moreover, scale transforms risk structure. As national feeding systems expand, isolated operational failures may escalate into systemic reputational, fiscal, or public health risks. Governance complexity theory suggests that increased network density heightens vulnerability to cascading failures when coordination mechanisms lag behind expansion (Molla et al., 2022; Reggiani, 2022). Thus, scaling a feeding program does not linearly scale its benefits; it may simultaneously magnify systemic fragility.

Indonesia's MBG provides a particularly critical empirical setting because it seeks to integrate nutritional goals, local economic empowerment, and sustainability principles within a single national platform. Yet, scholarly examination has not sufficiently theorized how these ambitions interact under governance constraints. Existing discussions tend to celebrate multiplier effects of local procurement or emphasize macroeconomic stimulus without interrogating the structural risks embedded in scaling inclusive supply chains.

Accordingly, this article develops a governance trade-off framework for green public procurement in national school feeding systems. We conceptualize MBG as a paradoxical governance arena in which inclusion and control coexist in persistent tension. Rather than proposing harmonization, we identify threshold effects, structural contradictions, and boundary conditions under which inclusive procurement strengthens—or undermines—food system stability. By doing so, the article contributes to three literatures: (1) food security studies by foregrounding governance configuration as a determinant of stability; (2) inclusive green economy research by operationalizing IGE within social provisioning systems; and (3) public

management scholarship by theorizing procurement as a site of institutional paradox rather than administrative technique.

In reframing MBG through this lens, the analysis moves beyond program evaluation toward structural inquiry: under what governance configurations does scaling inclusion enhance resilience, and under what conditions does it generate systemic vulnerability? The sections that follow develop the theoretical foundations for answering this question.

LITERATURE REVIEW AND HYPOTHESIS FORMULATION

2. Theoretical Framing

2.1 Green Public Procurement as Value-Distribution Strategy

Green public procurement (GPP) has increasingly been framed as a policy instrument capable of steering markets toward sustainability while preserving economic competitiveness (Fusillo et al., 2025; Ortega Carrasco et al., 2025). Within inclusive green economy discourse, public procurement is not merely a purchasing mechanism but a structural lever for shaping production patterns, supplier participation, and environmental externalities (Aditi et al., 2025; Similä & Mwesiumo, 2024). By embedding environmental and social criteria into contracts, governments actively construct markets rather than passively transact within them.

However, the dominant framing of GPP often assumes goal compatibility: environmental sustainability, economic efficiency, and social inclusion are presented as mutually reinforcing. In practice, procurement systems are arenas of competing institutional logics (Greenwood et al., 2011). Efficiency logic prioritizes cost minimization and standardization; inclusion logic prioritizes participation of small and local suppliers; sustainability logic prioritizes environmental performance. These logics operate under different evaluative principles and accountability structures.

In the context of Indonesia's MBG program, GPP translates into local sourcing mandates, nutritional standardization, hygiene compliance, and fiscal accountability. Yet embedding inclusion criteria within procurement design introduces heterogeneity in supplier capacity, which may conflict with quality assurance and risk control requirements. Thus, GPP in large-scale feeding systems cannot be conceptualized as a harmonizing tool; it constitutes a governance configuration that redistributes risk across actors.

This reframing shifts analytical attention from outcome aspiration ("green" and "inclusive") toward structural design: who bears monitoring costs? who absorbs compliance burdens? and how are risks institutionalized within procurement architecture?

2.2 Institutional Complexity and the Persistence of Paradox

Institutional theory has demonstrated that organizations embedded in pluralistic environments face multiple, often incompatible demands (Dahlmans et al., 2024; Saleh et al., 2025). Public programs, in particular, operate at the intersection of political accountability, market efficiency, and social welfare. Rather than resolving such tensions, organizations frequently sustain them over time.

Paradox theory provides a lens to conceptualize these persistent contradictions (Pencle, 2022; Schaap & Vanlommel, 2024). A paradox arises when interdependent elements appear logically inconsistent yet persist simultaneously. In national school feeding systems, inclusion and control constitute such a paradox. Expanding participation of SMEs and local farmers enhances distributive justice and local economic multipliers. Yet heterogeneity in capacity, infrastructure, and compliance increases the need for formal monitoring, inspection, and standardization. Intensifying control mechanisms, however, risks excluding smaller actors who lack administrative and financial resilience.

The diagram below isolates the structural paradox between inclusion and control that underpins the governance tensions in inclusive green procurement. Rather than depicting a linear trade-off, the model clarifies the recursive loop through which inclusion generates heterogeneity, heterogeneity increases monitoring demand, monitoring intensifies control, and heightened control feeds back into participation constraints.

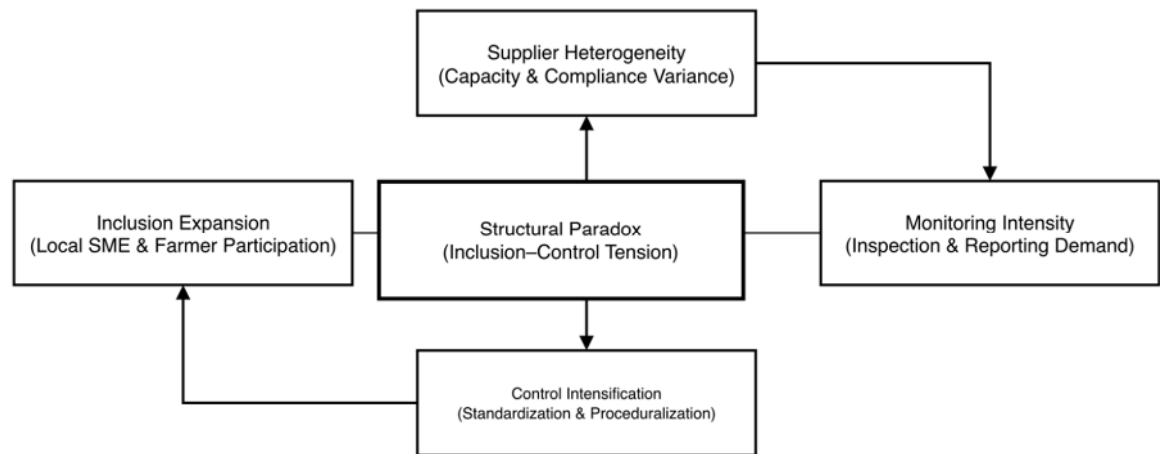


Figure 1. The Inclusion–Control Paradox in Inclusive Green Procurement

Source: Developed by the authors

The dynamic represented in Figure 1 clarifies that inclusion and control are not opposing endpoints of a simple trade-off but mutually reinforcing elements in a recursive loop. Expansion of local participation increases heterogeneity, which intensifies monitoring demands and triggers procedural control mechanisms. Heightened control, however, constrains participation capacity, feeding back into the inclusion dimension. By isolating this cycle, Figure 1 sharpens the article’s theoretical contribution: the governance challenge is not resolving the paradox but managing its iterative amplification under conditions of scale and institutional constraint.

Crucially, paradox theory rejects the assumption that trade-offs can be permanently solved. Instead, tensions are cyclical and may intensify under conditions of rapid scaling. Efforts to prioritize one pole (e.g., tighter standardization) often generate countervailing pressures (e.g., reduced inclusivity). In the MBG context, such oscillation may undermine system stability, particularly when policy expansion outpaces institutional adaptation.

This perspective allows us to move beyond implementation failure narratives. Governance tensions are not anomalies; they are structurally embedded in the attempt to combine inclusion and risk minimization within a single procurement system.

2.3 Scale, Network Density, and Risk Amplification

Scaling transforms the structural properties of governance systems. As national programs expand geographically and institutionally, network density increases, interdependencies multiply, and coordination demands intensify. Collaborative governance research has shown that multi-actor systems require robust coordination mechanisms to prevent fragmentation and accountability gaps (Lægreid & Rykkja, 2022; Reggiani, 2022).

In large-scale feeding programs, risk structure evolves qualitatively. Localized disruptions—such as supplier delays or hygiene failures—may cascade across regions, generating reputational, fiscal, or public health crises. Thus, scale introduces systemic risk beyond additive operational risk.

Moreover, monitoring systems often expand linearly, whereas complexity grows nonlinearly. When institutional capacity lags behind expansion, oversight gaps widen. Under such conditions, inclusive procurement may inadvertently amplify instability rather than resilience.

Therefore, the relationship between scale and system stability is unlikely to be monotonic. Instead, threshold effects may emerge: up to a certain point, scale enhances coordination efficiency and bargaining power; beyond that point, governance overload increases vulnerability. This insight is critical for analyzing MBG as a national platform rather than a localized intervention

2.4 Toward a Governance Trade-off Perspective

Synthesizing these strands, we conceptualize Indonesia's MBG procurement system as a governance arena structured by three interlocking tensions:

1. **Inclusion vs Control** – Expanding local participation increases monitoring intensity requirements.

2. **Standardization vs Flexibility** – Uniform quality standards reduce variability but constrain local adaptation.

3. **Scale vs Stability** – Expansion enhances coverage but magnifies systemic exposure to failure.

These tensions do not operate independently. Intensifying control to mitigate scale-induced risk may reduce inclusion; decentralizing procurement to enhance inclusion may increase variability and instability. Governance design thus becomes an exercise in managing persistent contradictions rather than optimizing a single objective.

The next section develops a conceptual model specifying how these tensions interact and under what configurations they stabilize or destabilize the national feeding system.

3. Conceptual Development: Configurational Governance and the Nonlinearity of Inclusion

The governance architecture of Indonesia's MBG program cannot be adequately understood through additive or linear causal reasoning. The interaction between inclusion, control, scale, and institutional capacity produces effects that are configurational rather than independent. Stability does not arise from maximizing any single dimension; instead, it emerges—or collapses—through their interaction under conditions of institutional constraint. Accordingly, this section advances a configurational governance perspective that treats MBG as a complex system structured by recursive feedback loops rather than discrete policy levers.

The conceptual architecture below synthesizes the article's core argument that stability in inclusive green procurement emerges from configurational alignment rather than linear optimization. The model clarifies how inclusion, control, operational scale, and institutional elasticity interact through reciprocal effects, collectively shaping food system stability.

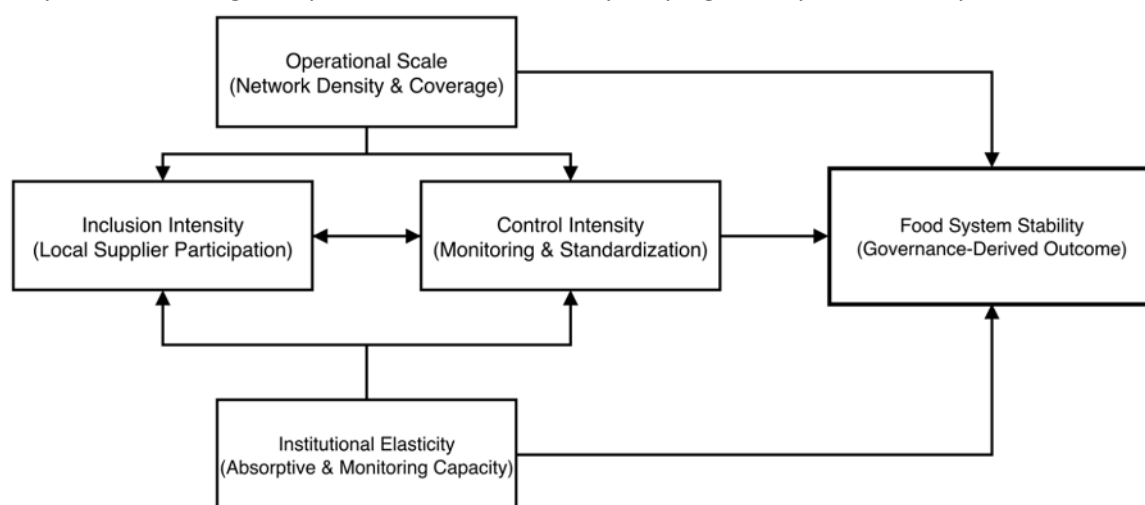


Figure 2. Configurational Governance Architecture of Inclusive Green Procurement

Source: Developed by the authors

As illustrated in Figure 2, food system stability is modeled as a governance-derived outcome emerging from the interaction among inclusion intensity, control intensity, operational scale, and institutional elasticity. The reciprocal arrows between inclusion and control represent structural tension rather than linear causality, while scale and institutional elasticity condition the configuration as a whole. Figure 2 therefore anchors the article's core claim that resilience in national feeding systems depends on dynamic alignment among interdependent governance dimensions rather than on the maximization of any single objective.

3.1 Inclusion as a Generator of Governance Complexity

Incorporating local suppliers into national procurement systems is frequently framed as a distributive strategy that strengthens regional economies while shortening supply chains. Within inclusive green economy discourse, local sourcing is assumed to align environmental efficiency with social equity (Aditi et al., 2025; Niu et al., 2024). Yet inclusion in procurement systems simultaneously restructures the architecture of coordination. Heterogeneous suppliers introduce variation in production scale, infrastructure quality, managerial competence, and compliance familiarity. This heterogeneity does not merely increase diversity; it amplifies uncertainty.

Institutional complexity theory suggests that multiplicity of actors generates overlapping accountability demands and evaluative criteria (Dahlmans et al., 2024; Eilstrup-Sangiovanni & Hofmann, 2024). In MBG, nutritional standards, hygiene protocols, fiscal audits, and sustainability criteria converge upon actors with uneven absorptive capacity. Inclusion thus expands participation while intensifying governance demands. The system responds by increasing proceduralization—formal reporting requirements, certification regimes, inspection frequency, and contractual safeguards.

However, procedural intensification is not a neutral corrective. Compliance regimes generate fixed administrative burdens that disproportionately affect smaller actors. Over time, regulatory thickening may re-stratify participation, privileging suppliers capable of absorbing bureaucratic costs. Inclusion therefore contains the seeds of its own contraction. The effort to secure distributive justice through participation expands the governance load, which in turn pressures the system toward formalization and potential exclusion.

This recursive dynamic suggests that inclusion cannot be treated as an unqualified good. Its expansion modifies the system's informational and monitoring requirements, thereby altering the equilibrium between distributive and stabilizing objectives.

3.2 Scale as Risk Multiplier Rather than Benefit Multiplier

Scaling MBG from localized implementation to nationwide coverage qualitatively transforms its risk structure. At limited scale, failures remain spatially and administratively bounded. As coverage expands, network density increases and interdependencies deepen. Supply disruptions, hygiene breaches, or procurement irregularities no longer remain isolated events; they propagate through interconnected administrative and political channels.

Collaborative governance research underscores that network expansion requires commensurate institutional capacity to maintain coordination integrity (van der Plank et al., 2022). Yet capacity development typically lags behind political ambition. When expansion proceeds faster than oversight maturation, fragility accumulates. Monitoring infrastructures, inspection units, and data systems grow incrementally, while actor interdependence multiplies nonlinearly.

Under such conditions, scale ceases to function solely as an efficiency enhancer. Although larger procurement volumes may improve bargaining leverage and standardization, they

simultaneously amplify exposure to systemic disruption. The relationship between scale and stability is therefore non-monotonic. Beyond a critical point, marginal expansion increases vulnerability rather than resilience. Stability becomes conditional upon the elasticity of institutional capacity relative to network growth.

The following model formalizes the article's claim that the relationship between operational scale and food system stability is non-monotonic. Rather than assuming that expansion linearly strengthens resilience, the curve specifies a threshold beyond which additional scale amplifies systemic vulnerability.

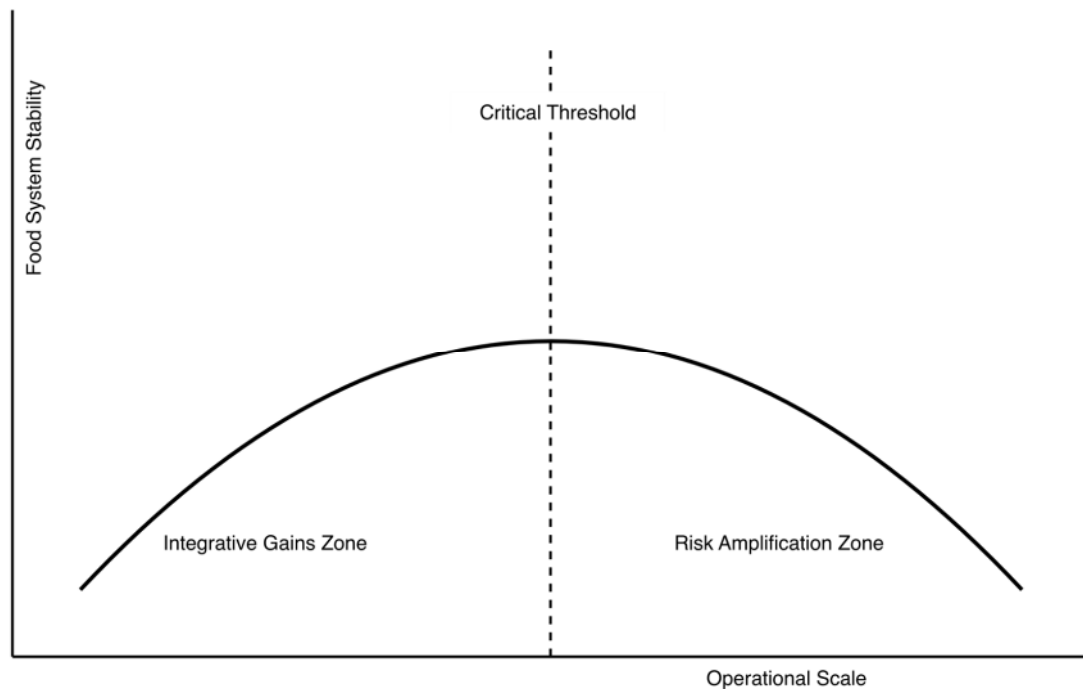


Figure 3. Nonlinear Relationship Between Operational Scale and Food System Stability

Source: Developed by the authors

The inverted-U configuration shown in Figure 3 specifies that moderate expansion can enhance coordination efficiency and bargaining leverage, thereby strengthening stability. However, once operational scale surpasses a critical threshold, interdependencies intensify faster than monitoring and adaptive capacity, shifting the system into a risk amplification zone. Figure 3 therefore substantiates the article's nonlinearity claim by demonstrating that expansion is conditionally stabilizing rather than inherently resilience-enhancing.

This nonlinearity complicates developmental narratives that equate national expansion with structural strengthening. In feeding systems embedded within complex socio-political environments, scale magnifies both integrative capacity and systemic fragility.

3.3 Standardization, Adaptation, and the Suppression of Local Variance

National feeding programs operate under normative imperatives of nutritional adequacy and safety assurance. Standardization reduces variance in caloric provision, hygiene practice, and fiscal reporting. By limiting discretion, it reduces monitoring complexity and constrains opportunistic behavior. However, standardization also compresses contextual diversity.

Local dietary preferences, seasonal availability, and logistical realities vary across Indonesia's regions. Strict uniformity may suppress local adaptation, producing unintended behavioral consequences such as food rejection or substitution outside program channels. Excessive rigidity

risks decoupling nutritional design from social practice. Conversely, extensive local discretion introduces variance that complicates oversight and increases uncertainty regarding compliance.

The tension between standardization and adaptation is not reducible to centralization versus decentralization. It reflects a deeper conflict between predictability and responsiveness. Efforts to secure predictability through procedural uniformity may inadvertently undermine program legitimacy or efficiency at the consumption level. Yet prioritizing responsiveness expands the informational demands placed upon monitoring institutions.

The challenge, therefore, is not selecting one pole but recognizing that both are constitutive of governance stability. Attempts to eliminate variance entirely may intensify hidden instability, while excessive flexibility may erode systemic coherence.

3.4 Governance as Dynamic Configuration

Taken together, inclusion, scale, control, and institutional capacity operate as interdependent dimensions of a dynamic configuration. System stability emerges from their relational alignment rather than their individual maximization. When expansion of one dimension outpaces the adaptive adjustment of others, structural strain accumulates. Inclusion without commensurate monitoring capacity intensifies uncertainty. Control without adaptive flexibility may displace small actors and undermine distributive objectives. Scale without infrastructural elasticity amplifies cascading risk.

This configurational perspective reframes MBG governance as a problem of dynamic calibration under persistent contradiction. The system must continually renegotiate the balance between distributive justice and risk containment, between flexibility and predictability, and between expansion and institutional absorption. No static equilibrium guarantees resilience. Instead, stability remains contingent upon the program’s ability to modulate tensions without allowing any single dimension to dominate to the point of structural distortion.

The next section interrogates these tensions more explicitly by identifying the strategic paradoxes and structural risks embedded within this governance configuration, and by specifying the boundary conditions under which the system may stabilize or unravel.

RESULTS & DISCUSSION

4. Strategic Tensions and Structural Risks

The configurational model developed in the previous section suggests that governance stability in Indonesia’s MBG program is inherently conditional. Stability does not emerge from the elimination of tension but from its temporary containment. When calibration fails, latent contradictions intensify and may transform from manageable trade-offs into structural risks. This section examines the core paradoxes embedded in inclusive green procurement and identifies how they may evolve into destabilizing dynamics.

A structured synthesis is necessary at this stage to consolidate the strategic tensions identified in the argument and to prevent conceptual dispersion. The table below systematizes the governance dimensions, their intended objectives, the mechanisms through which tension emerges, and the pathways through which manageable trade-offs may escalate into structural risk.

Table 1. Governance Tensions and Structural Risks in Inclusive Green Procurement				
Governance Dimension	Intended Objective	Mechanism of Tension	Risk Escalation Path	Potential Breakdown Scenario
Inclusion Intensity	Broaden participation of	Supplier heterogeneity	Monitoring demand grows	Supplier attrition,

	local SMEs and farmers; enhance distributive equity and local economic multipliers	increases variance in capacity, infrastructure, and compliance familiarity	faster than oversight capacity; administrative burden intensifies	uneven compliance, supply instability, reputational strain
Control Intensity	Safeguard food safety, fiscal accountability, and standard compliance	Proceduralization raises fixed compliance costs and formal entry thresholds	Smaller suppliers face disproportionate regulatory burden; participation narrows	Market concentration, dependency on fewer suppliers, reduced distributive reach
Operational Scale	Expand coverage and achieve nationwide integration efficiency	Network density multiplies interdependencies and coordination complexity	Localized failures cascade across regions; feedback cycles compress	Systemic reputational crisis, large-scale supply disruption, governance overload
Standardization	Ensure nutritional uniformity and reduce performance variability	Uniform rules suppress contextual adaptation and local flexibility	Behavioral misalignment (e.g., food rejection); hidden operational strain	Program inefficiency, increased waste, weakened legitimacy
Sustainability Criteria	Align procurement with environmental objectives	Symbolic compliance or uneven enforcement across heterogeneous suppliers	Decoupling between formal green standards and operational practice	Legitimacy erosion, regulatory tightening that indirectly excludes smaller actors

Source: Developed by the authors

Table 1 clarifies how each governance dimension carries an internally productive objective while simultaneously generating structural tension. By organizing intended goals, tension mechanisms, and escalation pathways within a single analytical frame, Table 1 reinforces the article's central claim that inclusive green procurement operates as a dynamic trade-off system rather than a harmonized policy instrument. The table makes explicit how stability depends not on maximizing any single dimension but on preventing tension from escalating into systemic breakdown.

4.1 The Paradox of Inclusion: Equity as a Source of Instability

Inclusion is normatively compelling. Integrating local farmers and SMEs into procurement systems aligns with distributive justice, local economic multipliers, and the social pillar of sustainability (Obeng Adomaa et al., 2022; Oyadeyi & Oyadeyi, 2025). Yet inclusion modifies the structural composition of the supply network. As actor heterogeneity increases, variance in

operational reliability expands. Differences in cold-chain access, food safety knowledge, logistical coordination, and financial buffering capacity introduce uneven risk profiles across regions.

Institutional complexity literature indicates that pluralistic environments multiply accountability demands and heighten ambiguity in performance evaluation (Dahlmans et al., 2024; Ekaristi et al., 2025). Within MBG, this manifests as tension between distributive objectives and performance reliability. When supply disruptions or compliance failures occur, the legitimacy of inclusive sourcing may be questioned, generating pressure to recentralize procurement or tighten standardization.

The paradox lies in the fact that inclusion, designed to strengthen local resilience, may under certain conditions erode system predictability. If monitoring systems lack sufficient elasticity, the effort to expand participation can overwhelm oversight capacity. The resulting instability may trigger corrective responses that disproportionately affect smaller actors, thereby reproducing exclusion through regulatory intensification. Inclusion thus oscillates between empowerment and vulnerability, depending on the adaptive capacity of governance institutions.

4.2 The Paradox of Control: Standardization as Both Safeguard and Barrier

Control mechanisms—inspection regimes, certification requirements, standardized menus, and financial audits—are instituted to safeguard public health and fiscal accountability. In large-scale feeding systems, such mechanisms are indispensable to maintaining legitimacy and compliance. Yet control is not costless. It redistributes administrative burden and alters competitive conditions.

As control intensity increases, compliance thresholds may rise beyond the absorptive capacity of smaller suppliers. Formalization, while reducing opportunism and variance, may simultaneously privilege actors with greater administrative infrastructure. This dynamic reflects the broader institutional insight that regulation can unintentionally consolidate market power by raising entry barriers (Fusillo et al., 2025; Schittekatte et al., 2021).

Within MBG, excessive proceduralization risks narrowing the supplier base, undermining the very inclusion objectives embedded in inclusive green economy discourse. The paradox of control is therefore not merely technical but structural: the instruments deployed to secure stability may gradually erode distributive breadth. Over time, a procurement system initially designed to diversify participation may drift toward concentration, potentially increasing systemic vulnerability through dependency on fewer actors.

4.3 Scale-Induced Fragility and Cascading Risk

Scale amplifies both integrative capacity and fragility. As MBG expands geographically and administratively, localized failures acquire systemic implications. Food safety incidents or procurement irregularities may propagate reputational damage at national level, intensifying political scrutiny and public distrust. Networked governance systems are particularly sensitive to cascading failures when interdependencies are dense and monitoring lag is significant (Ghasemi & de Meer, 2023; Reggiani, 2022).

The structural risk emerges when expansion proceeds faster than institutional learning. Rapid scaling compresses feedback cycles, reducing the system's ability to detect and correct emerging weaknesses. Under such conditions, minor coordination failures may escalate into systemic disruption. The paradox here lies in the political imperative to scale rapidly in pursuit of coverage and visibility, while institutional capacity evolves incrementally.

If scale outpaces adaptive recalibration, the program may experience governance overload—an accumulation of unresolved tensions that erodes stability. What begins as distributive expansion may culminate in systemic fragility if oversight infrastructures remain comparatively static.

4.4 Symbolic Green Governance and the Risk of Decoupling

Another structural risk emerges from symbolic compliance. Inclusive green procurement frameworks may be adopted rhetorically without corresponding monitoring depth. Institutional theory has long recognized the phenomenon of decoupling, wherein formal structures signal conformity while operational practices diverge (Agarwal et al., 2024; Roszkowska-Menkes et al., 2024). In the MBG context, labeling procurement as “local” or “green” without robust verification mechanisms may create ceremonial legitimacy rather than substantive transformation.

Such symbolic adoption generates dual risks. First, it undermines environmental and inclusion objectives by allowing opportunistic behavior to persist beneath formal compliance. Second, exposure of such decoupling may damage public trust, intensifying demands for stricter control. The cycle reinforces the paradox of control: symbolic governance invites regulatory tightening, which may subsequently marginalize smaller actors.

Symbolic green governance therefore represents not a neutral deficiency but a destabilizing force capable of accelerating oscillation between inclusion and exclusion.

4.5 When Tension Becomes Breakdown

Tensions become structurally dangerous when adaptive mechanisms fail to recalibrate the system. Governance breakdown may occur when inclusion expands without proportional monitoring capacity, when control intensifies without sensitivity to supplier heterogeneity, or when scale accelerates beyond institutional absorption limits. Under these conditions, the paradox shifts from dynamic tension to destabilizing contradiction.

Importantly, breakdown does not necessarily manifest immediately. Instability may accumulate gradually through administrative overload, supplier attrition, uneven compliance, and reputational strain. The tipping point often becomes visible only when a critical incident—such as widespread food safety failure—reveals underlying structural imbalance.

Thus, governance in MBG must be conceptualized not as equilibrium-seeking but as tension-managing. The structural risks identified here are not anomalies but endogenous to the attempt to reconcile inclusion, sustainability, and stability within a single procurement framework.

5. Boundary Conditions and Model Failure

The governance trade-off framework developed in this article does not assume universal applicability. Its explanatory strength depends on specific institutional and structural conditions. This section delineates the boundaries under which inclusive green procurement in Indonesia’s MBG program stabilizes food system performance—and the conditions under which it deteriorates into systemic fragility.

A specification of boundary conditions is necessary to prevent theoretical overreach and to clarify the scope under which the governance trade-off framework operates. The table below distinguishes stabilizing from destabilizing configurations across key conditioning variables, thereby making explicit the circumstances under which inclusive green procurement strengthens resilience—or accelerates fragility.

Table 2. Boundary Conditions for Stabilizing vs Destabilizing Governance Configurations			
Conditioning Variable	Stabilizing Configuration	Destabilizing Configuration	Theoretical Implication
Institutional Elasticity	Monitoring capacity expands proportionately with inclusion and scale; data integration and	Inclusion and expansion outpace supervisory capacity; fragmented oversight and weak enforcement	Stability depends on alignment between network density and institutional absorption capacity

	inspection systems mature iteratively		
Temporal Alignment	Gradual scaling accompanied by feedback loops and incremental recalibration	Politically accelerated expansion compresses learning cycles and adaptive adjustment	Nonlinear scale effects intensify when expansion exceeds governance learning capacity
Contractual Incentive Design	Contracts balance reliability, quality, accessibility, and sustainability criteria	Incentives prioritize cost or volume over compliance and inclusion; excessive penalties deter participation	Procurement architecture mediates the inclusion–control paradox through incentive structuring
Enforcement Consistency	Sustainability and compliance standards applied transparently and proportionately across supplier types	Symbolic compliance tolerated or uneven enforcement creates selective burden	Decoupling between formal policy and practice amplifies legitimacy risk
Supplier Capacity Support	Capacity-building mechanisms accompany inclusion mandates; technical assistance reduces heterogeneity gaps	Inclusion mandates imposed without training or infrastructural support	Inclusion becomes volatility-generating when absorptive capacity gaps remain unaddressed
Socio-Cultural Adaptation	Standardization balanced with contextual dietary flexibility	Rigid uniformity suppresses local adaptation and consumption fit	Governance stability is partially conditioned by behavioral alignment at the consumption level

Source: Developed by the authors

Table 2 delineates the structural limits of the governance trade-off framework by identifying the conditions under which paradox remains manageable versus destabilizing. By distinguishing stabilizing and destabilizing configurations, Table 2 reinforces the article’s core argument that inclusive green procurement does not inherently produce resilience; its outcomes are contingent upon institutional elasticity, temporal calibration, contractual coherence, and adaptive governance mechanisms.

5.1 Institutional Capacity as a Conditioning Variable

The interaction between inclusion and control is mediated by institutional capacity. Monitoring infrastructure, data integration systems, inspector competence, and enforcement credibility collectively determine whether governance tension remains productive or becomes destabilizing. When institutional capacity expands proportionately with inclusion and scale, procedural intensification may enhance reliability without excluding small actors. Under such conditions, governance friction remains contained.

However, where monitoring systems are fragmented, under-resourced, or politically constrained, increasing inclusion amplifies uncertainty faster than oversight mechanisms can compensate. Administrative overload emerges not merely from scale, but from misalignment between network density and supervisory capability. In such contexts, the inclusion–control tension shifts from productive paradox to structural strain.

The framework therefore holds only where institutional elasticity—defined as the capacity to absorb complexity without loss of coordination integrity—is sufficiently robust. Without elasticity, inclusion may generate volatility rather than resilience.

5.2 Political Acceleration and Temporal Misalignment

Public programs often operate under political timelines that prioritize rapid visibility over incremental institutional consolidation. Accelerated expansion of MBG, particularly under electoral or reputational pressure, may compress learning cycles. Governance systems require time to accumulate experiential knowledge, calibrate monitoring mechanisms, and refine supplier qualification processes.

When expansion precedes institutional maturation, temporal misalignment occurs. Scale increases faster than adaptive governance capacity. Under such conditions, the inverted-U relationship between scale and stability collapses prematurely; fragility emerges at lower thresholds than theoretically anticipated. Political acceleration thus constitutes a boundary condition that weakens the model's stabilizing assumptions.

If expansion is gradual and accompanied by iterative adjustment, the governance trade-off may remain manageable. If expansion is abrupt and politically driven, structural vulnerability intensifies.

5.3 Contractual Misalignment and Incentive Distortion

Procurement systems translate governance objectives into contractual incentives. If contract design rewards volume fulfillment over quality assurance, or cost minimization over reliability, suppliers may respond strategically in ways that undermine inclusion and stability. Misaligned incentives can produce hidden deterioration in hygiene standards, substitution of lower-quality inputs, or opportunistic cost-cutting.

Under such incentive distortion, the inclusion–control dynamic is reshaped. Increased control may detect compliance breaches, but excessive penalty structures may deter participation by smaller suppliers, accelerating market concentration. Alternatively, weak enforcement may encourage symbolic compliance, reinforcing decoupling between formal policy and operational practice (Agarwal et al., 2024; Roszkowska-Menkes et al., 2024).

The governance trade-off model presumes that contractual architecture aligns sustainability, inclusion, and performance objectives. Where incentive systems contradict these objectives, the framework's predictive capacity weakens. Governance configuration cannot stabilize outcomes if contractual logic systematically rewards behavior misaligned with program goals.

5.4 Socio-Cultural and Behavioral Constraints

Although this article centers on procurement governance, food system stability is partially contingent upon consumption practices. Standardized nutritional designs may not align with local dietary habits or taste preferences. If adaptation mechanisms are insufficient, food rejection and waste generation may increase, indirectly undermining program legitimacy and fiscal efficiency.

Where socio-cultural adaptation is minimal, intensifying control over suppliers cannot compensate for behavioral misalignment at the consumption level. Governance stability is thus bounded by the degree to which procurement design recognizes social practice dynamics. Ignoring behavioral constraints may convert technical compliance into practical inefficacy.

5.5 Structural Collapse Scenarios

The framework collapses under extreme asymmetry between expansion and governance capacity. Such collapse may manifest as cascading food safety incidents, widespread supplier withdrawal, severe reputational crises, or fiscal strain caused by emergency re-centralization of

procurement. In these scenarios, paradox ceases to be generative tension and becomes destabilizing contradiction.

Importantly, collapse is rarely instantaneous. It often emerges through cumulative micro-failures—uneven compliance, inconsistent inspections, localized shortages—that remain individually manageable but collectively erode system coherence. The tipping point is reached when corrective measures intensify one pole of the paradox (typically control), thereby undermining the other (inclusion), accelerating concentration and dependency risks.

The identification of these boundary conditions underscores a central claim of this article: inclusive green procurement in national feeding systems does not inherently produce resilience. Its stabilizing potential is conditional upon institutional elasticity, temporal alignment, contractual coherence, and adaptive governance. Absent these conditions, the very mechanisms designed to enhance food security may inadvertently generate systemic vulnerability.

6. Implications for Food Security and Local Economic Development

The preceding analysis reframes Indonesia's MBG program not as a linear nutritional intervention but as a structurally tensioned governance system. This reframing has direct implications for how food security and local economic development are conceptualized within inclusive green economy discourse. Rather than treating these outcomes as automatic consequences of program expansion, they must be understood as conditional achievements contingent upon governance configuration.

6.1 Reframing Food Security: From Provision to Governance Stability

Conventional interpretations of school feeding programs assume that increasing food provision enhances food security by strengthening access and utilization (Clapp et al., 2022). However, the governance trade-off perspective advanced in this article suggests that stability—the most structurally fragile pillar of food security—is not secured by provision alone. It depends on the system's ability to manage inclusion, control, and scale without generating cascading vulnerability.

Food security, in this light, becomes a derivative of governance alignment. When inclusion expands without proportional monitoring elasticity, supply instability may undermine consistent access. When control intensifies without sensitivity to supplier heterogeneity, participation may contract, increasing dependency on fewer actors and heightening systemic exposure. When scale accelerates beyond institutional absorption capacity, localized disruptions may escalate into nationwide instability.

Thus, food security in national feeding systems is not merely a function of caloric distribution but of governance resilience. Stability must be interpreted as a systemic property emerging from calibrated trade-offs rather than from aggregate output volume. This reframing challenges development narratives that equate expansion of coverage with structural strengthening.

6.2 Local Economic Multipliers: Conditional Rather Than Automatic

Inclusive green economy frameworks emphasize the multiplier effects of local procurement, suggesting that channeling public expenditure toward SMEs and farmers stimulates regional development (Aditi et al., 2025; Oyadeyi & Oyadeyi, 2025). Within MBG, this aspiration is embedded in the ambition to empower local producers through state purchasing power.

However, the governance trade-off model reveals that multiplier effects are contingent rather than guaranteed. When inclusion is not matched by capacity-building and calibrated oversight, local suppliers may experience volatility rather than empowerment. Regulatory intensification following compliance failures can raise barriers to entry, inadvertently favoring larger or better-capitalized actors. Under such dynamics, procurement concentration may emerge, diluting the distributive intent of inclusion.

Furthermore, if procurement design prioritizes cost efficiency under fiscal pressure, local sourcing may be symbolically maintained while substantive contracts gravitate toward actors capable of meeting large-scale requirements. In such scenarios, local economic multipliers become unevenly distributed, potentially reinforcing regional disparities rather than mitigating them.

Local economic development, therefore, should be understood as a byproduct of governance coherence rather than as a direct outcome of inclusion mandates. Without adaptive calibration, inclusive procurement may oscillate between over-fragmentation and re-concentration, producing unstable economic participation.

6.3 Sustainability Beyond Symbolism

The integration of environmental criteria within MBG procurement is intended to align food provisioning with sustainability objectives. Yet sustainability, as previously argued, risks becoming symbolic if verification mechanisms are weak. Decoupling between formal green criteria and operational practices may generate ceremonial compliance (Agarwal et al., 2024; Roszkowska-Menkes et al., 2024), weakening both environmental credibility and institutional legitimacy.

Where sustainability standards are rigorously enforced without adaptive support for smaller suppliers, exclusionary dynamics may intensify. Conversely, where enforcement is lenient, environmental objectives may be diluted. The tension between environmental rigor and inclusive participation thus mirrors the broader inclusion–control paradox.

Sustainability within MBG cannot therefore be treated as an independent pillar. It interacts structurally with distributive and stability objectives. Environmental governance must be calibrated within the same configurational logic that governs inclusion and scale.

6.4 Strategic Implications for Policy Design

The central implication of this analysis is not prescriptive optimization but strategic awareness of tension. Policymakers should recognize that governance calibration is iterative and contingent. Static regulatory frameworks risk amplifying contradiction when program conditions shift.

Adaptive mechanisms—incremental scaling, feedback-sensitive monitoring, capacity development aligned with supplier heterogeneity, and contract designs that balance reliability with accessibility—become critical. However, even adaptive governance cannot eliminate paradox. At best, it moderates oscillation.

The implication for strategic management scholarship is equally significant. Public procurement in large-scale feeding systems should not be conceptualized as a neutral administrative function. It constitutes a strategic arena where institutional logics collide, redistribute risk, and shape systemic resilience. Viewing procurement through this lens opens new research pathways at the intersection of food security, sustainability governance, and public management.

CONCLUSION

7. Conclusion

This article has reconceptualized Indonesia's MBG program not as a linear instrument of nutritional redistribution, but as a structurally tensioned governance system embedded within the broader agenda of inclusive green economic transformation. By foregrounding the interaction between inclusion, control, scale, and institutional capacity, the analysis challenges dominant assumptions that expanding local participation and embedding sustainability criteria inherently strengthen food system resilience.

Three theoretical contributions emerge.

First, the article reframes food security—particularly its stability pillar—not as a function of aggregate provision, but as a derivative of governance configuration. Stability in national feeding systems depends on the alignment of distributive ambition with monitoring elasticity. When inclusion, control, and scale expand asymmetrically, systemic fragility accumulates. This shifts the analytical focus in food security scholarship from output volume to structural calibration.

Second, the study advances inclusive green economy discourse by relocating it from macroeconomic rhetoric to procurement architecture. Rather than treating inclusion and sustainability as mutually reinforcing objectives, the analysis demonstrates their paradoxical interdependence within green public procurement systems. Inclusion generates complexity; complexity demands control; control reshapes participation. Inclusive green governance is therefore not a harmonizing formula but a dynamic tension field requiring continual recalibration.

Third, the article contributes to public management and institutional theory by conceptualizing procurement as a strategic site of paradox rather than a technical administrative function. In large-scale feeding programs, procurement redistributes risk, constructs market participation boundaries, and shapes systemic resilience. The paradox of inclusion and control, intensified by scale, cannot be permanently resolved. It must be managed under conditions of uncertainty, temporal pressure, and institutional constraint.

Importantly, the framework developed here does not prescribe a single optimal configuration. No static equilibrium guarantees stability. Instead, governance effectiveness depends on adaptive calibration and institutional elasticity. When expansion outpaces oversight capacity, when contractual incentives misalign with inclusion objectives, or when sustainability becomes symbolic rather than substantive, the system's stabilizing mechanisms weaken and contradictions intensify.

The broader implication is that national school feeding systems should be analyzed not only as social welfare programs but as complex governance infrastructures embedded in political economy dynamics. Their success depends less on normative aspiration—being inclusive, green, or expansive—and more on the structural coherence of their institutional design.

Future research may empirically examine the threshold conditions identified here, test non-linear scale effects, and explore how adaptive governance mechanisms mitigate or exacerbate paradox intensification. By situating MBG within a configurational governance perspective, this article opens a pathway for rethinking the relationship between inclusive green economy agendas and food system resilience in emerging economies.

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