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Governance of Rice Distribution Under the Food Supply and Price Stabilization Program (SPHP): A Study of The Partnership Between Village-Owned Enterprises (BUM Desa) and The State Logistics Agency (Perum Bulog) in Bojonegoro Regency

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Abstract

The limited participation of Village-Owned Enterprises (Badan Usaha Milik Desa, hereafter BUM Desa) in national food distribution networks constitutes a critical governance challenge in Indonesia: as of 2024, only five of 419 BUM Desa in Bojonegoro Regency had established formal partnerships with the State Logistics Agency (Perum Bulog). This study examines the governance of the BUM Desa–Perum Bulog partnership under the Food Supply and Price Stabilization Program (Stabilisasi Pasokan dan Harga Pangan, SPHP), applying the Integrative Framework for Collaborative Governance developed by Emerson, Nabatchi, and Balogh (2012) in combination with the Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations (MACTOR) analytical method. A descriptive qualitative design was employed; data were generated through in-depth interviews, non-participant observation, and document analysis, and were interpreted using the Miles, Huberman, and Saldaña (2014) interactive model. The findings show that, while the partnership is functionally operational, it remains predominantly transactional. Across the four collaborative dimensions, drivers are convergent and strong; principled engagement is top-down and lacks deliberative depth; shared motivation is grounded in an organically constructed track record of performance integrity; and capacity for joint action emerges as the weakest dimension, constrained by limited human resources, disproportionate logistical burdens, and the absence of shared standard operating procedures. MACTOR analysis confirms a high degree of interest convergence between Bulog and BUM Desa, yet indicates that collective capacity for joint action requires systematic institutional strengthening. The study contributes to collaborative governance scholarship by integrating a diagnostic (Emerson et al.) and a strategic-relational (MACTOR) framework at the village scale, and by evidencing how state–village institutional asymmetries reshape the operation of principled engagement and joint-action capacity in a Global South food-governance setting. Concrete, evidence-based recommendations are offered for Perum Bulog, BUM Desa, the Department of Community Empowerment and Villages (DPMD), village governments, the National Food Agency, and the Ministry of Villages.

Keywords:
Village-Owned Enterprises; State Logistics Agency; Collaborative Governance; MACTOR; Food Supply and Price Stabilization; Food Security.

1. INTRODUCTION

Food security constitutes one of the strategic priorities of Indonesia's national development agenda. Under Article 55 Paragraph (1) of Law Number 18 of 2012 on Food, the government is mandated to stabilize the supply and prices of staple food commodities at both the producer and consumer levels. This mandate is operationalized by assigning Perum Bulog as the principal implementing agency for the Food Supply and Price Stabilization Program (SPHP), technically regulated by the Decree of the Head of the National Food Agency Number 05/TS.02.02/K/1/2024. Under this scheme, rice is designated as a strategic commodity whose retail price must be maintained below the government-determined Maximum Retail Price (Harga Eceran Tertinggi, HET).

The urgency of the SPHP is underscored by a persistent paradox in Indonesia's food governance. Despite theoretically sufficient domestic rice production, Indonesia recorded its highest rice import volume in five years during 2024. According to the Central Statistics Agency (BPS, 2025), rice imports between January and November 2024 reached approximately 4.519 million tons, while national paddy production in the same year amounted to 53.14 million tons of milled dry grain harvested from 10.05 million hectares. This gap between high aggregate production and elevated import dependency indicates that Indonesia's food security challenge is not primarily one of production but of distribution, access, and price stabilization at the grassroots level.

Within this distributive landscape, Village-Owned Enterprises (BUM Desa) have emerged as institutions normatively positioned to play a strategic role. Government Regulation Number 11 of 2021 on BUM Desa, Article 3 Paragraph (b), stipulates that BUM Desa are mandated to provide public services through the supply of goods and services to meet the general needs of village communities, including the management of village food barns (lumbung pangan desa). Ministerial Regulation of the Ministry of Villages and Rural Development Number 2 of 2024 further requires a minimum allocation of 20 per cent of Village Funds (Dana Desa) for food security programs that must involve BUM Desa or village community economic institutions. Nationally, 62,472 BUM Desa are distributed across Indonesia (Ministry of Villages, 2025), constituting a highly significant institutional network for last-mile food distribution.

Nevertheless, this institutional potential has not translated into corresponding empirical performance. In Bojonegoro Regency, retail rice prices in 2024 rose to IDR 13,500–14,000 per kilogram for the lowest grade, IDR 15,500–16,000 for medium grade, and IDR 17,500–18,000 for premium grade an increase of approximately IDR 2,500–3,000 above normal levels (Tribun Bojonegoro, 2024). The paradox is sharpened by Bojonegoro's status as one of East Java's principal rice-producing regions, with 2024 paddy output of 410,272 tons (BPS Bojonegoro, 2025). Of the 419 BUM Desa in the regency, only five had established formal SPHP partnerships with Perum Bulog by the close of 2024: BUM Desa Pacul, Temayang, Sudah, Sidobandung, and Campurejo (DPMD Bojonegoro, 2025). The disjunction between institutional potential and realized partnership coverage motivates the present inquiry.

These conditions converge on a central research question: how can the governance of the BUM Desa–Bulog partnership be organized collaboratively to ensure that food distribution reaches village communities effectively and equitably? To interrogate this question, the study adopts collaborative governance as its analytical framework. Ansell and Gash (2008) define collaborative governance as a governing arrangement in which one or more public agencies directly engage non-state stakeholders in a formal, consensus-oriented, deliberative decision-making process. Emerson, Nabatchi, and Balogh (2012) subsequently articulated an integrative framework organized around four dimensions — drivers, principled engagement, shared motivation, and capacity for joint action — that together explain both the formation and the sustained functioning of collaborative regimes. This framework is well suited to the present study because it accommodates cross-actor collaboration among partners of unequal institutional capacity, as is the case between Bulog (an established state-owned enterprise) and BUM Desa (village-level entities whose institutional capacity remains in development).

Research on the governance of the BUM Desa–Bulog partnership within the SPHP framework remains limited. Existing studies on village-level food security have concentrated on agricultural production dynamics (Prayitno et al., 2023), on Bulog's macro-level price-stabilization role (Utomo, 2020), or on the general development of BUM Desa as economic institutions (Iswanto et al., 2024; Herjayanto et al., 2021), without specifically examining the collaborative dynamics between these actors in the context of village-based food distribution. The originality of the present study rests on four interlocking contributions. First, it advances a novel methodological combination — the Integrative Framework for Collaborative Governance (Emerson et al., 2012) coupled with the MACTOR strategic-actor analysis — which allows the diagnostic mapping of collaborative dimensions to be triangulated with a formal analysis of actor convergence and divergence. Second, it operationalizes collaborative governance at the village scale, an analytical layer that remains underdeveloped in a literature still dominated by metropolitan, watershed, or regional cases (Bianchi, Nasi, and Rivenbark, 2021; Douglas et al., 2020). Third, it examines institutional partnership between a large state-owned enterprise and a village enterprise — a form of state–village vertical partnership that surfaces institutional asymmetries insufficiently theorized in the existing collaborative governance canon. Fourth, it centers Indonesia as a case within Global South food governance, thereby extending a body of scholarship that has been generated predominantly in high-income institutional settings.

Beyond the Indonesian context, the case carries broader international relevance. Many low- and middle-income countries face structurally similar problems: strong agricultural production but weak last-mile distribution, ambitious national price-stabilization mandates delegated to state agencies with limited village-scale infrastructure, and emerging village enterprises whose institutional maturity lags behind their formal mandates. By tracing how a state–village partnership actually operates what enables it, where it fractures, and how its collaborative capacity might be strengthened the study offers empirically grounded lessons for public administration scholarship on collaborative governance in resource-constrained settings, and practical insights for other developing economies seeking to leverage decentralized village institutions in national food security programs.

On this basis, the study pursues two objectives: (1) to describe the governance of the BUM Desa–Perum Bulog partnership under the SPHP program in Bojonegoro Regency through the collaborative governance framework of Emerson et al. (2012); and (2) to analyze the factors influencing this partnership using the MACTOR method. The study aims to produce concrete, evidence-based policy recommendations for strengthening village-based food distribution partnerships in Indonesia and comparable settings.

2. RESEARCH METHOD

This study employed a descriptive qualitative approach to analyze the governance of the partnership between Village-Owned Enterprises (BUM Desa) and Perum Bulog under the Food Supply and Price Stabilization Program (SPHP) in Bojonegoro Regency, East Java. The research sites comprised the five BUM Desa that hold official SPHP partnerships with Bulog: BUM Desa Pacul, Temayang, Sudah, Sidobandung, and Campurejo. Informants were selected through purposive sampling and included the Directors of each BUM Desa, representatives of Perum Bulog Sub-Regional Division Bojonegoro (Sub-Divre Bojonegoro), Village Heads, officials from the Department of Community Empowerment and Villages (DPMD), and community members who benefited from the program. Data collection combined in-depth interviews, non-participant field observation at distribution points and warehouses, and documentary analysis of partnership agreements, distribution reports, and regulatory instruments. Data were analyzed using the interactive model of Miles, Huberman, and Saldaña (2014), which comprises data condensation, data display, and conclusion drawing and verification. The analysis was structured around the four dimensions of collaborative governance articulated by Emerson, Nabatchi, and Balogh (2012): drivers, principled engagement, shared motivation, and capacity for joint action. To reinforce the inter-actor relational analysis, the study additionally applied the Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations (MACTOR) method, which maps the influence, interests, and convergence of the strategic actors involved in the SPHP partnership. Triangulation across informant categories, observational data, and documentary sources was used to establish the credibility of findings.

3. RESULTS AND DISCUSSION

3.1. Governance of the BUM Desa–Perum Bulog Partnership Under the SPHP Program

The SPHP program in Bojonegoro Regency is administered by Perum Bulog Sub-Divre Bojonegoro, which distributes an average of 167 tons of rice per month. Distribution proceeds through four principal channels; the five BUM Desa partners absorb approximately 10 per cent of total volume while occupying a strategically important position as the final segment of distribution to grassroots communities. Table 1 summarizes the distribution pattern.

Table 1. Estimated Annual SPHP Distribution by Partner Channel

Distribution Channel	Volume/Year (tons)	Percentage (%)
Market operations (Pasar operasi)	1,300	65
Retail traders (Pedagang pengecer)	400	20
Modern retail (Ritel modern)	100	5
Village-Owned Enterprises (BUM Desa)	200	10
Total	2,000	100

Source: Perum Bulog Sub-Divre Bojonegoro, 2024 (processed).

As Table 1 indicates, the share of distribution routed through BUM Desa remains modest relative to other channels. Of the approximately 2,000 tons distributed annually, around 200 tons — 10 per cent — pass through the five BUM Desa partners (Sidobandung, Pacul, Temayang, Campurejo, and Sudah). BUM Desa Sidobandung records the highest realized distribution among the five, reflecting greater institutional capacity and wider service reach. This baseline provides the empirical point of departure for the governance analysis that follows, structured around the four dimensions of the Emerson et al. (2012) framework, and summarized in Table 2.

Table 2. Partnership Governance Analysis Based on the Emerson et al. (2012) Collaborative Governance Framework

Dimension	Empirical Conditions	MACTOR Value	Regulatory/Policy Support
Drivers	Three convergent factors: rice price instability at village level, SPHP mandate, and BUM Desa institutional initiative supported by village heads	Bulog–BUM Desa convergence: highest among all actor pairs	Law 18/2012 Art. 55; Gov. Reg. 11/2021 Art. 3b; NFA Decree 05/2024; Permendesa PDT 2/2024
Principled Engagement	Top-down process: BUM Desa as rule-takers under Bulog-determined procedures; informal WhatsApp coordination; no regular evaluation forum	Moderate distance between Bulog and DPMD; DPMD active only at initial phase	Gov. Reg. 11/2021 Art. 54 (BUM Desa may partner with SOEs); no regional technical regulation
Shared Motivation	Strong performance-based trust; zero price violations; motivation dominated by social orientation over financial gain	DRV–PRE–SM convergence: 36 (highest)	Permendesa PDT 2/2024: min. 20% Dana Desa for food programs must involve BUM Desa
Capacity for Joint Action	Weakest dimension: limited HR, disproportionate logistical burden, absence of shared SOPs	CJA convergence: 34 (lowest)	Kepmendesa PDT 3/2025 (Village Fund food security guidelines); no technical policy on BUM Desa capacity in SPHP

Source: Compiled from interviews, field observation, and MACTOR analysis, 2024.

The findings reveal a partnership that has become functionally established yet remains predominantly transactional in character. Each of the four dimensions is examined below, with the empirical evidence interpreted critically and situated within recent international scholarship (2021–2025) on collaborative governance.

3.1.1. Drivers: Convergent Pressures Motivating the Formation of the Partnership

The drivers dimension examines the conditions that triggered the formation of the partnership. Three primary driving forces are identified as convergent: (1) rice price instability at the village level arising from monthly deficits during lean seasons (paceklik); (2) national policy pressure through the SPHP program, which mandates expansion of distribution networks to the village level; and (3) institutional initiative on the part of BUM Desa, reinforced by active support from village heads and the DPMD of Bojonegoro Regency.

Field data show that all sub-districts included in the research sites recorded aggregate food surplus conditions in 2024. Kapas Sub-district exhibited the highest paddy production at 44,351.04 tons, with rice availability reaching 25,576.08 tons against community consumption of only 4,855.62 tons. Similar patterns were observed in Malo, Temayang, and Bojonegoro sub-districts, indicating that regional food production capacity is comparatively adequate. Yet high production does not automatically translate into food affordability for village households. A large population combined with limited distribution access means that segments of the community continue to face difficulties in obtaining rice at stable prices, particularly during lean seasons. The problem, in short, is a distribution and accessibility problem rather than a production problem — a finding consistent with the argument of Febriansyah, Nadjib, and Prabujaya (2024) that village-level food security is fundamentally a matter of distribution and access.

The problem we faced was simple but had significant consequences. Rice prices could rise suddenly, especially before the harvest season. Most of our residents are farmers, yet they do not always have sufficient rice stocks outside the harvest period. When Bulog offered us the opportunity to join the SPHP, we were immediately interested because it was a concrete solution. (Director of BUM Desa Pacul, interview, 2025).

From a regulatory standpoint, three policy instruments operating at successive levels reinforce the legitimacy of the partnership. Government Regulation Number 11 of 2021, Article 3 Paragraph (b), authorizes BUM Desa to manage village food barns as part of their general public service function; the Decree of the Head of the National Food Agency Number 05/TS.02.02/K/1/2024 mandates the expansion of the SPHP distribution network to the lowest levels, including through BUM Desa; and Ministerial Regulation of the Ministry of Villages Number 2 of 2024 requires a minimum allocation of 20 per cent of Village Funds for food security programs involving BUM Desa. The alignment of these three instruments creates a strong policy-legitimacy driver, consistent with Ansell and Gash's (2008) proposition that policy legitimacy constitutes one of the most effective triggers for drawing heterogeneous actors into a collaborative arena.

Compared with recent international scholarship, the pattern observed here both confirms and complicates existing accounts. Bianchi, Nasi, and Rivenbark (2021), in their review of implementation experiences in collaborative governance, emphasize that convergent policy legitimacy is a necessary but insufficient driver: unless legitimacy is coupled with resource commitments, collaborations remain declaratory. The Indonesian case corroborates this warning — the three regulatory instruments enumerated above align in principle but are not yet backed by dedicated financial or logistical instruments targeted at BUM Desa participation, so the driver's dimension is strong on legitimacy but thin on resource support. Douglas et al. (2020), drawing on their collaborative-governance case databank, further distinguish crisis-driven, opportunity-driven, and mandate-driven collaborations. The Bojonegoro case exhibits a hybrid profile: a mandate-driven trigger (national SPHP policy) intersects with a slow-burn crisis (price instability during lean seasons) and an opportunity (Village Fund allocation), producing an unusually dense driver configuration. The theoretical implication is that in Global South village-scale settings, driver configurations may be structurally more layered than the single-dominant-trigger typologies developed in high-income contexts suggest, and this layering itself may partially compensate for otherwise thin resource commitments.

Taken together, the drivers dimension reveals a convergence among community needs for affordable food access, the national policy mandate to expand SPHP distribution, and the institutional support of village governments. This convergence constitutes the foundational impetus for the Perum Bulog–BUM Desa partnership under the SPHP program in Bojonegoro Regency.

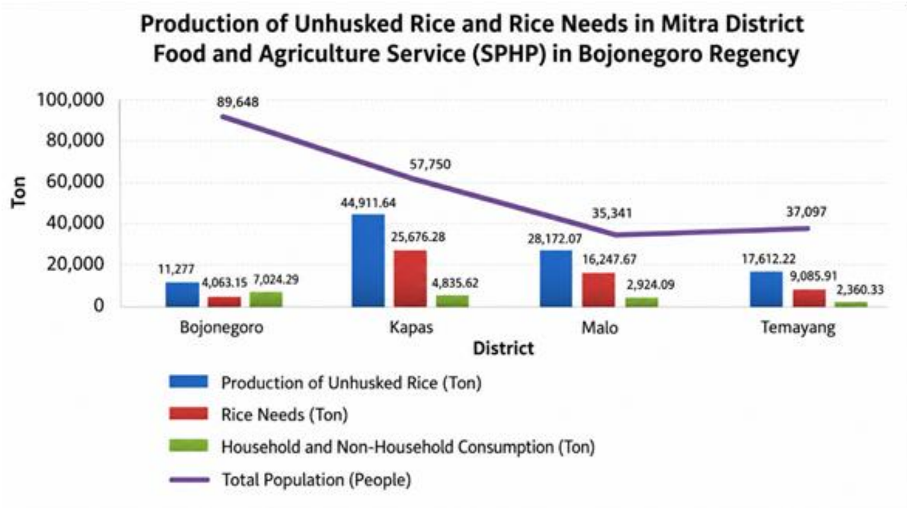

Figure 1. Paddy Production, Rice Availability, Consumption Needs, and Population in SPHP Partner Sub-Districts in Bojonegoro Regency, 2024 (Source: Food Security Agency of Bojonegoro Regency, 2024)

As shown in Figure 1, all sub-districts included in the research sites recorded aggregate food surplus conditions. Kapas Sub-district exhibited the highest paddy production at 44,351.04 tons, with rice availability reaching 25,576.08 tons, while community consumption needs amounted to only 4,855.62 tons. Similar conditions were observed in Malo, Temayang, and Bojonegoro sub-districts, indicating that the regional food production capacity is relatively adequate. However, high production and rice availability levels do not automatically guarantee food affordability for village communities. A large population combined with limited distribution access means that a portion of the community continues to face difficulties in obtaining rice at stable prices, particularly during lean seasons. These findings suggest that the food security challenge in the research area is more closely related to issues of distribution and accessibility than to production capacity per se.

3.1.2. Principled Engagement: A Process Still Dominated by Top-Down Dynamics

The principled engagement dimension examines the quality of the actor-engagement process. Emerson et al. (2012) prescribe four sequential sub-processes: discovery (joint problem identification), definition (joint solution formulation), deliberation (equal deliberation), and determination (consensus-based decision-making). The findings indicate that while the discovery process has taken place through initial socialization activities facilitated by Bulog in collaboration with DPMD, the deliberation and determination sub-processes remain severely constrained, as technical rules are determined unilaterally by Bulog.

The rules of engagement come entirely from Bulog. We only need to understand and agree to them. There is no negotiation over prices or quotas. But we feel the rules are reasonable and workable. What matters is that there is clarity. (Director of BUM Desa Pacul, interview, 2025).

This top-down dynamic reflects a structural asymmetry in bargaining position between Bulog, a state-owned enterprise with substantial institutional power, and BUM Desa, village-level entities whose capacity is still developing. Ansell and Gash (2008) identify such asymmetry as a significant barrier to effective collaborative governance because it erodes the weaker party's sense of ownership over the process. In the present case, the asymmetry does not appear to have generated overt resistance — BUM Desa directors accept the Bulog-authored rules as reasonable — but it does foreclose the deliberative sub-process through which shared operational standards could be co-produced.

Most of our communication takes place via WhatsApp. When we want to order rice, we contact the Bulog officer, they confirm the stock, and then we come to pick it up at the Kalitidu warehouse. There is no regular meeting specifically for evaluating this partnership. (Director of BUM Desa Temayang, interview, 2025).

Informal coordination through messaging applications offers real advantages in speed and flexibility, and these are appreciated by participants (Park, Krause, and Hawkins, 2021; Purnomo et al., 2025). Yet in a food-distribution governance context — where accountability and standardization are non-negotiable — the absence of regular evaluation forums and written shared standard operating procedures (SOPs) represents a governance gap with the potential to generate conflicts of interest under conditions of scale, staff turnover, or exogenous shock. This gap is compounded by the absence of a Regional Regulation (Peraturan Daerah) or Regent's Regulation (Peraturan Bupati) specifically governing the BUM Desa–Bulog partnership mechanism in Bojonegoro Regency, producing what Iswanto et al. (2024) characterize as a regulatory vacuum in which collaborative initiatives remain ad hoc and non-standardized.

Comparison with recent international literature clarifies why this pattern matters. Park, Krause, and Hawkins (2021) demonstrate that formal and informal coordination mechanisms operate in a complementary duality: informal channels foster relational trust and rapid problem-solving, while formal mechanisms institutionalize accountability and durability. Where one is present without the other, collaboration tends either toward brittleness (formal without informal) or toward fragility across leadership transitions (informal without formal). The BUM Desa–Bulog partnership exhibits the second pathology. Qi and Ran (2024), extending this line of analysis, argue that principled engagement in vertically asymmetric collaborations is paradoxical: the more one party dominates rule-setting, the more the collaboration appears orderly and consensual in the short run, while foreclosing precisely the deliberative processes that generate long-run adaptive capacity. This paradox is legible in the Bojonegoro case, where present procedural clarity coexists with a limited institutional capacity to renegotiate rules should conditions change. Elston, Rackwitz, and Bel (2024) show empirically that collaborations lacking deliberative depth are more prone to ex-post dissolution when interdependence weakens. The theoretical implication for collaborative governance scholarship is that in state–village vertical partnerships, principled engagement cannot be assessed on procedural clarity alone; the depth of deliberative and determination sub-processes must be examined separately, because their thinness is masked by the very order that top-down engagement produces.


BULOG

SURAT PERMOHONAN

Kepada YTH :

Di tempat

Dengan Hormat,

Nama Pemilik

Alamat Tempat Usaha

Nama Rumah Pangan Kita

Nomor Telepon / Nomor Ponsel

Alamat Email Aktif

Nomor NPWP

Kode Pos

Bersedia menjadi anggota Rumah Pangan Kita Perum BULOG dan menyatakan bersedia mengikuti aturan-aturan yang ditetapkan oleh Perum BULOG.

Demikian Surat Permohonan ini kami sampaikan, atas perhatian dan kerjasamanya diucapkan terima kasih.

Figure 2. Rice Purchase Request Letter
(Source: Documentation of BUM Desa Pacul, 2024)

Informal coordination through messaging applications does offer advantages in terms of speed and flexibility that are appreciated by participants (Park, Krause, and Hawkins, 2021; Purnomo et al., 2025). However, in the context of food distribution governance—which requires accountability and standardization—the absence of regular evaluation forums and written shared standard operating procedures (SOPs) represents a governance gap with the potential to generate conflicts of interest in the future. This situation is further compounded by the lack of a Regional Regulation (Peraturan Daerah) or Regent's Regulation (Peraturan Bupati) specifically governing the BUM Desa–Bulog partnership mechanism in Bojonegoro Regency, which, as noted by Iswanto et al. (2024), creates a regulatory vacuum in which collaborative initiatives tend to remain ad hoc and non-standardized.

3.2. Practical Implications for Village-Level Collaborative Governance

The empirical patterns above suggest a workable operational model for translating the collaborative-governance findings into village-level practice. The model is organized around four elements: implementation stages, institutional arrangements and actor responsibilities, a governance workflow anchored in monitoring and evaluation, and sustainability mechanisms. It is presented not as a normative prescription but as a distilled architecture that follows from what the data show works and what does not.

Implementation proceeds in three sequential stages. The initiation stage (months 0–3) involves formal identification of eligible BUM Desa by DPMD in coordination with Bulog Sub-Divre, joint due-diligence on institutional readiness, and the signing of a partnership agreement whose content is co-drafted rather than unilaterally supplied by Bulog. The consolidation stage (months 4–12) establishes baseline distribution operations, embeds a written shared SOP covering ordering, transport, price display, reporting, and complaints handling, and initiates a quarterly tripartite evaluation forum. The scaling stage (year two onward) extends distribution volume in step with documented capacity, adds neighboring BUM Desa through a peer-mentoring mechanism, and formalizes the partnership within a Regent's Regulation (Peraturan Bupati) to secure its status against leadership transitions.

Institutional arrangements assign clear, non-overlapping responsibilities. Perum Bulog Sub-Divre is responsible for supply reliability, quota transparency, price integrity oversight, and, where feasible, participation in shared logistics arrangements. BUM Desa is responsible for last-mile distribution, price display, community-facing complaints handling, and orderly reporting. Village Heads are responsible for political-legitimacy support and issuance of a Village Regulation (Peraturan Desa) establishing BUM Desa's role in food distribution. DPMD is responsible for continuous rather than initial-phase-only facilitation, HR capacity-building programs, and secretariat functions for the tripartite forum. The National Food Agency is responsible for policy alignment, quota calibration, and inclusion of BUM Desa participation metrics in SPHP performance dashboards. The Ministry of Villages is responsible for integrating BUM Desa food-distribution roles into Village Fund utilization guidelines and for supporting technical assistance nationally.

The governance workflow moves through five loops. First, an operational loop of ordering, dispatch, receipt, distribution, and reporting; second, a monthly reconciliation loop between BUM Desa records and Bulog dispatch logs; third, a quarterly evaluation loop convened by DPMD, bringing Bulog, BUM Desa, village governments, and community representatives together; fourth, an annual policy loop in which aggregated findings are transmitted to the National Food Agency and Ministry of Villages for consideration in the following year's SPHP quota and Village Fund guidance; and fifth, a discretionary crisis loop activated during price shocks or supply disruptions. Monitoring is anchored in a small set of measurable indicators — realized distribution volume, price compliance, reporting timeliness, complaint resolution rate, and household reach — recorded through a lightweight digital dashboard rather than paper logs. Evaluation is criteria-based, transparent, and public within the village.

Sustainability mechanisms address the person-embedded rather than system-embedded fragility identified in the shared-motivation analysis above. Four mechanisms are essential: (1) a written shared SOP that survives director and village-head transitions; (2) a Village Regulation formalizing BUM Desa's food-distribution role, so that the mandate does not depend on the discretion of any individual leader; (3) a documented succession protocol for BUM Desa distribution officers, including cross-training and record handover; and (4) a peer network among partner BUM Desa that circulates practice knowledge horizontally, reducing the dependence of each unit on a single individual's tacit expertise. Collectively, these arrangements convert what is presently a partnership sustained by the goodwill and integrity of specific people into one sustained by an institutional architecture — precisely the transition Lahat et al. (2021) identify as the exit from collaborative inertia.

Figure 3. Distribution of SPHP Rice to the Community (Source: Bulog Documentation, 2024)

3.3. Strategies for Strengthening Collaborative Governance Capacity

The capacity-for-joint-action gap identified in the diagnostic analysis calls for a strategy that is operational rather than merely conceptual. Eight strategic clusters, derived directly from the empirical findings, are proposed. Each cluster carries a defined instrument, a lead actor, and a measurable outcome.

First, human resource development. The evidence shows managerial rather than merely quantitative shortfalls. The proposed instrument is a two-tier certified training curriculum led by DPMD in partnership with a local university: a core module for all partner BUM Desa (financial management, distribution recording, price-integrity governance, basic digital literacy) and an advanced module for BUM Desa directors (contract management, risk assessment, expansion planning). Certification is a precondition for continued partnership eligibility, and refresher training is required annually. The measurable outcome is the share of partner BUM Desa staff holding valid certification.

Second, digital governance. The absence of written SOPs and the reliance on WhatsApp coordination are addressed through a lightweight digital dashboard shared between Bulog Sub-Divre, DPMD, and partner BUM Desa. The dashboard displays real-time quota availability, order status, dispatch confirmation, price compliance, and complaint tickets. Design principles are minimal complexity (usable on a mid-range smartphone), interoperability with existing Bulog systems, and open access for authorized village-government users. The measurable outcome is reporting-timeliness and complaint-resolution rate.

Third, shared SOP development. The current top-down rule regime is replaced by a co-drafted written SOP produced through a structured deliberation process convened by DPMD, with Bulog and partner BUM Desa participating as equal drafters. The SOP covers ordering, transport, warehousing, price display, reporting, complaints, and dispute resolution. It is annexed to the partnership agreement and reviewed annually. The measurable outcome is SOP adherence audited against a defined checklist.

Fourth, institutional strengthening. BUM Desa's legal-entity status must be extended from the current 138 of 419 units in Bojonegoro to full coverage, prioritizing units with demonstrated distribution capacity. Institutional strengthening also includes governance of BUM Desa boards, separation of operational and supervisory functions, and mandatory publication of annual reports. The measurable outcome is the share of BUM Desa with legal-entity status and current-year public annual reporting.

Fifth, logistics cost reduction. Given that logistics is the largest contributor to trade margins (CIPS, 2022), three concrete instruments are proposed: (a) a targeted freight subsidy scheme for BUM Desa distributing SPHP rice, financed through a dedicated Village Fund line under Kepmendesa PDT No. 3 of 2025; (b) shared transport pooling among neighboring BUM Desa, coordinated by DPMD; and (c) Bulog-provided delivery for BUM Desa located beyond a defined distance threshold from the Bulog warehouse. The measurable outcome is the share of gross margin retained by BUM Desa after logistics costs.

Sixth, multi-stakeholder coordination. The tripartite evaluation forum described in Section 3.3 is institutionalized through a Regent's Regulation, with quarterly meetings, a rotating chair, a formal secretariat function assigned to DPMD, and community representation embedded in the standing agenda. The measurable outcome is the number of forum meetings held and the share of resulting recommendations implemented within the following quarter.

Seventh, performance evaluation. A criteria-based annual performance review of each partner BUM Desa is introduced, aligned with the digital-dashboard indicators. Results are published, feeding into partnership continuation, expansion, or exit decisions. Performance evaluation is coupled with a positive-recognition mechanism (best-performing BUM Desa recognized at the annual regency-level food security event) to reinforce integrity motivation. The measurable outcome is the share of BUM Desa reviewed annually and the share whose performance improves year over year.

Eighth, regulatory improvements at three tiers. At the village tier, each partner village issues a Peraturan Desa formalizing BUM Desa's role in food distribution and the allocation of Village Funds to support it. At the regional tier, Bojonegoro Regency issues a Peraturan Bupati governing the BUM Desa–Bulog partnership mechanism, closing the regulatory vacuum identified by Iswanto et al. (2024). At the national tier, the National Food Agency and the Ministry of Villages jointly issue a technical guideline integrating BUM Desa participation into SPHP performance frameworks and into Village Fund food-security guidance. The measurable outcome is the completeness of the regulatory stack across the three tiers in partner regions. These eight clusters do not stand alone. They are mutually reinforcing: certified staff can operate the digital dashboard; the dashboard produces the data on which the performance review depends; the review feeds into the regional regulation cycle; the regulation stack legitimizes the freight subsidy; the freight subsidy relieves the margin pressure that constrains capacity to invest in staff. The strategic ambition is not to add discrete instruments but to construct an interlocking institutional architecture within which collaborative governance can operate at scale.

Figure 4. Rice Collection at the Bulog Warehouse
(Source: Researcher Documentation, 2024)

3.4. Policy Implications

The findings of this study generate policy implications operating across six mutually reinforcing levels. Taken together, these implications reframe the SPHP program from a distribution instrument administered through Bulog into a collaborative food-governance architecture that mobilizes the national network of BUM Desa as functional last-mile institutions.

At the national level, three implications are salient. First, the SPHP performance framework administered by the National Food Agency should incorporate BUM Desa participation as a formal indicator, alongside volume distributed and price compliance. What is not measured is not managed, and the current invisibility of the BUM Desa channel in national performance dashboards is a structural obstacle to its expansion. Second, the national alignment between the National Food Agency, the Ministry of Villages, and the Ministry of State-Owned Enterprises (as Bulog's shareholder representative) should be formalized in a joint technical guideline that clarifies mandates, resource commitments, and reporting lines. Absent such alignment, each ministry pursues food-security objectives through its own instruments without effective interoperability, and BUM Desa fall into the resulting seams. Third, national policy should recognize that legitimacy without resources is insufficient (Bianchi, Nasi, and Rivenbark, 2021): the current stack of regulatory instruments authorizes BUM Desa participation but does not fund the logistics, capacity-building, and digital infrastructure required to realize it. A dedicated national line item for BUM Desa food-distribution enablement — funded through a modest reallocation within the Village Fund envelope or through a Bulog operational subsidy — would translate legitimacy into operational capacity.

At the regional level, three implications follow. First, Bojonegoro Regency and comparable regencies should issue a Peraturan Bupati specifically governing the BUM Desa–Bulog partnership mechanism, closing the regulatory vacuum documented above and standardizing engagement across all partner BUM Desa. Second, DPMD's mandate should be re-scoped from initial facilitation to continuous stewardship, with a defined budget line for HR capacity-building, secretariat functions of the tripartite forum, and monitoring of the digital dashboard. The empirical evidence that DPMD activity concentrates in the initial phase and thereafter fades is a governance failure that reduces the return on the initial facilitation investment. Third, regional governments should invest in shared logistics infrastructure — collection points, storage facilities, and pooled transport arrangements — that BUM Desa individually cannot afford. This is a classic case for coordinated public provision, because the logistics cost that binds each BUM Desa individually is largely eliminated when spread across the regional network.

At the village level, three implications are actionable. First, each partner village should issue a Peraturan Desa formalizing BUM Desa's role in food distribution. This converts a discretionary partnership into a village-legislated mandate, reducing dependence on the discretion of any incumbent village head. Second, Village Funds should be allocated in line with Kepmendesa PDT No. 3 of 2025 to support BUM Desa food-distribution operations, with a defined proportion earmarked for logistics support, staffing, and digital infrastructure. Third, village governments should embed community representation in the local governance of the partnership, addressing the pattern observed in the MACTOR analysis in which village communities are positioned as beneficiaries rather than participants. Community feedback mechanisms — a simple complaints channel and periodic beneficiary consultations — are inexpensive to install and materially improve the informational quality of the partnership.

At the institutional level, the study's implications concern the design of state-village vertical partnerships more broadly. The evidence suggests that vertical asymmetry cannot be eliminated but can be productively channeled. Where the stronger party (Bulog) accepts co-authorship of shared SOPs and participation in a tripartite forum, the asymmetry becomes a resource — Bulog's institutional weight lends durability to the arrangement while the deliberative process protects the weaker party's operational autonomy. Where the stronger party retains unilateral rule-setting, the asymmetry becomes a liability, foreclosing the deliberative depth on which long-run adaptive capacity depends (Qi and Ran, 2024). Institutional-level policy should therefore incentivize co-authorship — for example, by making formal partnership-governance quality a factor in Bulog's own performance framework — rather than treating rule-setting as an internal Bulog matter.

At the governance level, the study's implications intersect with the broader theory and practice of collaborative governance. The Bojonegoro case demonstrates that collaboration can be strong on drivers, principled engagement, and shared motivation while remaining constrained by joint-action capacity, and that the joint-action gap is the binding constraint on scaling. This has direct policy consequences: investments in convening, legitimation, or motivational campaigns yield diminishing returns unless accompanied by investments in operational capacity. The policy priority for governance-reform agendas in comparable settings is therefore to shift the balance of public investment from convening to capability — a rebalancing that is politically less visible but empirically more consequential.

At the food-security level, the implications extend to the design of national food-security architectures in developing economies more generally. Reliance on centralized distribution through Bulog-equivalent state agencies has produced known limits — long supply chains, high logistics costs, weak grassroots reach. The BUM Desa–Bulog model, if strengthened along the lines proposed, offers a hybrid architecture in which the state agency retains upstream responsibilities (procurement, quota calibration, price integrity) while the village institution handles downstream last-mile functions (community-facing distribution, price display, complaints, reporting). This hybrid architecture is potentially replicable — with local institutional substitutions — in other Global South contexts where a centralized food agency coexists with a network of village enterprises. In this sense, the policy implication is not merely operational but architectural: national food-security systems should be designed around the actual institutional geography of distribution rather than around the presumed reach of the central agency alone.

3.5. International Contribution and Theoretical Implications

The findings advance the international collaborative-governance literature along four intersecting lines. First, they document how the Emerson, Nabatchi, and Balogh (2012) framework operates at the village scale — a scale insufficiently represented in the existing empirical corpus, which has been dominated by watershed, metropolitan, or regional cases. The village scale is not merely a smaller version of these settings; it carries distinctive institutional features thin managerial capacity, tight social embedding, informal enforcement, dependence on higher-tier legal legitimacy that reshape how each of the four dimensions operates. Second, by combining the Emerson diagnostic framework with the MACTOR strategic-actor method, the study offers a methodological template for studies that seek to move beyond descriptive characterization of collaborative dimensions to formal analysis of actor convergence and divergence. Third, the state–village vertical-partnership form examined here surfaces institutional asymmetries that are theorized only obliquely in the existing literature. The finding that principled engagement can appear orderly while remaining deliberatively thin, and that shared motivation can be strong yet person-embedded rather than system-embedded, refines the theoretical vocabulary available for analyzing vertically asymmetric collaborations. Fourth, by centering an Indonesian case, the study extends the empirical geography of collaborative-governance scholarship into Global South food governance, where structurally similar problems strong production, weak last-mile distribution, ambitious mandates on institutionally thin agencies are widespread. For public administration researchers and policy designers in comparable settings, the model traced here offers a documented reference point rather than a template imported from a very different institutional environment.

4. CONCLUSION

The partnership is functionally operational but predominantly transactional. Across the four dimensions: drivers are strong and convergent, combining rice price instability at the village level, national policy mandate, and BUM Desa institutional initiative; principled engagement is top-down and lacks deliberative depth, with rules set unilaterally by Bulog and coordination sustained informally through messaging applications; shared motivation is grounded in an organically constructed track record of performance integrity but remains person-embedded rather than system-embedded; and capacity for joint action emerges as the weakest dimension, constrained by limited human resources, disproportionate logistical burdens, and the absence of shared SOPs. MACTOR analysis confirms high interest convergence between Bulog and BUM Desa (the highest among all actor pairs) but records the lowest convergence value on joint-action capacity (34 against 36 for the other three dimensions), identifying capacity as the binding constraint on scaling.

Recommendations for future implementation. Replication in other regencies is feasible under three institutional conditions: (a) a functioning DPMD willing to move from initial facilitation to continuous stewardship; (b) a local Bulog Sub-Divre prepared to co-author rather than dictate partnership rules; and (c) partner BUM Desa with baseline legal-entity status and a demonstrated track record in at least one line of business. Risks to be anticipated include leadership-transition discontinuity in the absence of a Village Regulation formalizing BUM Desa's role, financial fragility if freight subsidies are not established, and reputational risk if price integrity is compromised. Local governments preparing to replicate the model should sequence their preparations: legal-entity certification and HR capacity-building first, digital-dashboard rollout second, tripartite forum institutionalization third, and volume expansion only after the first three are in place.

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