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## FEEDING MINDS, BUILDING DIGNITY: INDONESIA'S FREE NUTRITIOUS MEAL POLICY (MBG), BARRIERS, PROSPECTS, AND POLICY RECOMMENDATIONS

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### Abstract

This policy analysis examines Indonesia's ambitious Free Nutritious Meal Program (Program Makan Bergizi Gratis), launched in 2025 as a flagship initiative to address chronic malnutrition and stunting among children and pregnant women. The program aims to provide free nutritious meals to millions of beneficiaries across the archipelago, targeting improved health outcomes, enhanced educational performance, and long-term human capital development. Drawing on implementation science frameworks and comparative policy analysis, this paper identifies critical barriers to program success, including logistical challenges in remote and archipelagic regions, quality assurance across diverse socioeconomic contexts, inadequate infrastructure in participating schools and health facilities, and coordination complexities among multiple stakeholders spanning education, health, and agriculture sectors. The analysis reveals promising prospects grounded in Indonesia's existing social protection infrastructure, strong political commitment at the highest levels, potential for local economic stimulation through agricultural partnerships, and growing public awareness of nutrition's role in breaking intergenerational poverty cycles. However, sustainability concerns emerge regarding long-term financing mechanisms, supply chain reliability, and human resource capacity at the district level. The paper concludes with evidence-based policy recommendations organized across five domains: strengthening intersectoral governance through dedicated coordinating bodies; investing in cold chain infrastructure and local food procurement systems; developing comprehensive nutrition literacy programs for parents and communities; establishing robust monitoring and evaluation frameworks with real-time data systems; and creating sustainable financing models that balance national budgets with district-level implementation costs. These recommendations emphasize the imperative of contextualizing global nutrition interventions within Indonesia's unique geographic, cultural, and institutional landscape while maintaining the program's core commitment to equity and dignity for all children.

**Keywords:** nutrition policy, school feeding programs, stunting prevention, social protection, Indonesia, food security, human capital development

## Introduction

Malnutrition remains one of the most pressing public health challenges confronting low- and middle-income countries in the 21st century, with profound implications for individual health trajectories, educational attainment, and national economic productivity (Dewey & Begum, 2011; Grantham-McGregor et al., 2007). The global burden of childhood stunting—defined as height-for-age falling more than two standard deviations below the World Health Organization (WHO) child growth standards—affects approximately 149 million children under five years of age worldwide, with Southeast Asia contributing disproportionately to this prevalence (UNICEF et al., 2021). Indonesia, as the world's fourth most populous nation and largest archipelagic state, confronts particularly acute nutritional challenges, with stunting rates hovering around 21.6% as of 2022, affecting nearly one in five children despite sustained economic growth and development initiatives over the past two decades (Ministry of Health Republic of Indonesia, 2023). This persistent prevalence situates Indonesia among countries experiencing what development economists term a "nutrition paradox," wherein macroeconomic progress fails to translate proportionately into improved nutritional outcomes for vulnerable populations (Roemling & Qaim, 2012).

The far-reaching consequences of early childhood malnutrition extend well beyond immediate health concerns, creating cascading effects across the life course that undermine human capital accumulation and perpetuate intergenerational cycles of poverty (Hoddinott et al., 2013; Victora et al., 2008). Longitudinal studies have demonstrated that children experiencing stunting in their first 1,000 days exhibit compromised cognitive development, diminished educational performance, reduced adult height, and lower economic productivity in adulthood, with estimated earnings reductions of 5-10% compared to adequately nourished peers (Alderman et al., 2006; Hoddinott et al., 2008). Furthermore, maternal malnutrition during pregnancy significantly increases the risk of low birth weight, preterm delivery, and subsequent developmental delays in offspring, thereby transmitting nutritional vulnerabilities across generations (Black et al., 2013; Christian et al., 2013). The economic implications of this nutritional burden are staggering; estimates suggest that malnutrition costs Indonesia approximately 2-3% of its gross domestic product annually through direct healthcare expenditures, lost productivity, and foregone human capital development (Galasso & Wagstaff, 2019).

Recognizing the urgency and magnitude of this challenge, governments worldwide have increasingly prioritized school feeding programs and targeted nutritional interventions as evidence-based strategies to simultaneously address food insecurity, improve educational outcomes, and invest in long-term human capital development (Bundy et al., 2009; Drake et al., 2017). Systematic reviews and meta-analyses have documented the multifaceted benefits of well-designed school meal programs, including improved attendance rates, enhanced cognitive performance, reduced short-term hunger, and positive impacts on micronutrient status among participating children (Kristjansson et al., 2007; Langford et al., 2011). The World Food Programme estimates that school feeding programs currently reach approximately 388 million children globally, representing one of the most extensive social safety net interventions in developing contexts (WFP, 2020). However, implementation effectiveness varies considerably across national contexts, with program success contingent upon numerous contextual factors including political commitment, administrative capacity, infrastructure adequacy, community engagement, and sustained financing mechanisms (Gelli et al., 2019; Sumberg & Sabates-Wheeler, 2011).

In response to these nutritional challenges, the Indonesian government launched the Free Nutritious Meal Program (*Program Makan Bergizi Gratis*) in January 2025 as a flagship presidential

initiative aimed at providing free, nutritionally adequate meals to millions of school-aged children, early childhood education participants, and pregnant women across the archipelago. This ambitious undertaking represents the most comprehensive nutritional intervention in Indonesia's history, with initial targeting of approximately 15 million beneficiaries in its first year of implementation, scaling to over 80 million individuals by 2029 ([Presidential Regulation No. 18, 2024](#)). The program's explicit objectives encompass multiple development domains: reducing stunting prevalence to below 14% by 2029, improving school attendance and academic performance, supporting pregnant women's nutritional needs, stimulating local agricultural economies through food procurement systems, and ultimately breaking intergenerational cycles of malnutrition and poverty ([Coordinating Ministry for Human Development and Cultural Affairs, 2024](#)). With an allocated budget exceeding 71 trillion Indonesian Rupiah (approximately USD 4.5 billion) over its initial phase, the program signals unprecedented political and financial commitment to addressing Indonesia's persistent nutrition crisis.

The implementation of large-scale school feeding and nutritional supplementation programs in diverse, geographically dispersed settings presents formidable challenges that extend beyond simple resource allocation. Recent scholarship on nutrition policy implementation has highlighted the critical importance of contextual factors, including governance structures, supply chain logistics, community participation, and intersectoral coordination, in determining program outcomes ([Gelli et al., 2016](#); [Snilstveit et al., 2015](#)). Studies examining school feeding initiatives across Sub-Saharan Africa, Latin America, and South Asia have documented recurring implementation barriers, including inadequate infrastructure in rural schools, inconsistent food quality and safety monitoring, limited capacity among local implementing actors, insufficient community engagement, and sustainability challenges related to financing and political transitions ([Adelman et al., 2018](#); [Aurino et al., 2018](#); [Chakraborty & Jayaraman, 2019](#)). Indonesia's unique geographic context—comprising over 17,000 islands with significant variations in infrastructure development, cultural practices, and local governance capacity—amplifies these implementation challenges while simultaneously offering opportunities for innovative, locally adapted solutions ([Kevane & Levine, 2003](#); [Kristiansen & Santoso, 2006](#)).

Comparative policy analyses of school feeding programs in middle-income countries reveal instructive lessons regarding both promising practices and potential pitfalls. Brazil's National School Feeding Program (*Programa Nacional de Alimentação Escolar*), widely regarded as a best-practice model, has demonstrated the feasibility of large-scale implementation through decentralized governance, mandatory local procurement from family farmers, comprehensive nutritional guidelines, and robust social accountability mechanisms ([Soares et al., 2013](#); [Swensson, 2015](#)). India's Mid-Day Meal Scheme, serving over 100 million children daily, offers insights into managing nutritional interventions at unprecedented scale while navigating complex federal-state relationships, though implementation quality remains highly variable across states ([Afridi, 2010](#); [Drèze & Goyal, 2003](#)). Mexico's *Programa de Desayunos Escolares* has illustrated the importance of nutritional education components alongside meal provision and the challenges of ensuring adequate micronutrient content in prepared meals ([McEwan, 2013](#)). These international experiences underscore the complexity of translating policy ambitions into tangible nutritional improvements, particularly in contexts characterized by resource constraints, institutional fragmentation, and geographic diversity.

Recent implementation science frameworks have emphasized the necessity of systematically examining the multilevel factors that facilitate or impede effective program delivery in real-world settings ([Nilsen, 2015](#); [Damschroder et al., 2009](#)). The Consolidated Framework for Implementation Research (CFIR) identifies five domains critical to implementation success: intervention characteristics (including evidence strength and adaptability), outer setting

(encompassing policy context and external pressures), inner setting (organizational culture and implementation climate), characteristics of individuals involved (knowledge, self-efficacy, and attitudes), and the implementation process itself (planning, engaging, executing, and evaluating) (Damschroder et al., 2009). Applied to nutritional interventions, this framework directs analytical attention toward the dynamic interplay among program design features, institutional contexts, stakeholder capacities, and implementation strategies that collectively determine whether intended beneficiaries receive adequate nutritional support (Gelli et al., 2016). Furthermore, recent scholarship has highlighted the importance of considering political economy factors—including elite interests, bureaucratic incentives, and citizen demands—in shaping nutrition policy outcomes (Gillespie et al., 2013; te Lintelo et al., 2014).

Indonesia's existing social protection architecture provides both opportunities and constraints for implementing the Free Nutritious Meal Program. The nation has developed sophisticated conditional cash transfer systems (*Program Keluarga Harapan*), subsidized rice distribution programs (*Rastra*), and health insurance schemes (*Jaminan Kesehatan Nasional*) that reach tens of millions of households (Sumarto & Bazzi, 2015; Sparrow et al., 2014). These programs have generated administrative infrastructure, targeting mechanisms, and implementation experience that could potentially be leveraged for nutritional interventions. However, evaluations of Indonesia's social protection programs have also documented persistent challenges, including targeting errors, local elite capture, inconsistent service quality, and coordination difficulties among ministries and between national and subnational governments (Alatas et al., 2012; Bazzi et al., 2021). The country's decentralization reforms, initiated in 2001, have transferred significant responsibilities to district (*kabupaten*) governments while creating coordination challenges for national programs requiring standardized implementation across diverse local contexts (Rosser et al., 2011; Hadiz, 2004).

Despite growing scholarly attention to school feeding programs and nutritional interventions in developing countries, significant research gaps persist regarding the implementation of large-scale, government-led nutrition initiatives in archipelagic, middle-income contexts characterized by extreme geographic diversity and complex governance arrangements. While existing literature has thoroughly documented the nutritional and educational benefits of school feeding programs in relatively homogeneous or geographically compact settings, limited empirical attention has been devoted to understanding how such programs can be effectively implemented across thousands of islands with vastly different infrastructure capacities, cultural food practices, and administrative capabilities (Gelli et al., 2019). Furthermore, most implementation research has focused on either small-scale pilot interventions or mature, long-established programs, leaving the critical early implementation phase—when program designs confront operational realities—underexamined (Aurino et al., 2018). The intersection of nutrition policy, decentralized governance, and local food systems in the Indonesian context remains particularly understudied, despite its potential to yield insights applicable to other geographically dispersed middle-income nations attempting to scale nutritional interventions.

Additionally, while political commitment and resource allocation are widely recognized as necessary conditions for program success, the translation of these commitments into sustained implementation capacity at district and community levels remains inadequately theorized and empirically investigated (Pelletier et al., 2012). The specific mechanisms through which national nutrition programs navigate Indonesia's complex intergovernmental relations, engage diverse stakeholders across education, health, and agriculture sectors, and maintain quality standards while adapting to local contexts warrant systematic examination. Moreover, the sustainability challenges confronting ambitious nutritional initiatives in middle-income countries—particularly regarding long-term financing, supply chain resilience, and human resource development—require deeper

analytical attention as these nations transition from donor-supported pilots to nationally funded, scaled programs (Gelli et al., 2016).

This policy analysis addresses these gaps by examining the early implementation phase of Indonesia's Free Nutritious Meal Program through a comprehensive assessment of its barriers, prospects, and policy implications. Specifically, this study is guided by the following research questions:

- What are the primary implementation barriers confronting the Free Nutritious Meal Program across Indonesia's diverse geographic, institutional, and socioeconomic contexts, and how do these barriers vary across different implementation levels (national, provincial, district, and community)?
- What prospects and enabling factors—including existing institutional infrastructure, political commitment, community readiness, and local economic opportunities—can be leveraged to enhance program effectiveness and sustainability?
- What evidence-based policy recommendations can be formulated to guide program refinement, enhance intersectoral coordination, ensure nutritional quality and safety, and establish sustainable implementation models that maintain the program's core commitment to equity and dignity for all beneficiaries?

By addressing these questions, this analysis contributes to both the specific policy discourse surrounding Indonesia's nutritional initiatives and broader scholarly understanding of large-scale nutrition program implementation in geographically complex, middle-income contexts.

### **Implementation Barriers Confronting Indonesia's Free Nutritious Meal Program: A Multi-Level Governance Analysis**

Indonesia's Free Nutritious Meal (Makan Bergizi Gratis/MBG) program represents the government's most ambitious nutritional intervention to date, targeting chronic malnutrition that continues to afflict Indonesian children. The program emerged within a critical public health context wherein stunting prevalence, despite governmental efforts, remained at 21.5% in 2023, affecting approximately one in five children under age five (Siramaneerat et al., 2024). Established through Presidential Regulation No. 83 of 2024 and launched as a national priority in early 2025, the MBG program seeks to improve children's nutrition, enhance school engagement, and stimulate inclusive economic growth through MSME engagement. However, implementation progress has remained modest, with only 4.23% of annual targets reached by mid-2025, necessitating comprehensive examination of multi-level implementation barriers (Bappenas, 2025). This analysis employs classical implementation theory frameworks—specifically Pressman and Wildavsky's (1973) implementation perspective, Lipsky's (1980) street-level bureaucracy theory, and Hooghe and Marks's (2003) multi-level governance framework—to examine how barriers manifest across national, provincial, district, and community levels within Indonesia's diverse geographic, institutional, and socioeconomic contexts.

#### ***Theoretical framework***

Pressman and Wildavsky's (1973) seminal work *Implementation: How Great Expectations in Washington Are Dashed in Oakland* established the foundational premise that policy implementation constitutes a distinct phase wherein initial policy aspirations often encounter systematic obstacles. Their framework elucidates how increasing organizational complexity and multiple decision points

diminish implementation congruence, a phenomenon profoundly relevant to Indonesia's MBG program spanning multiple governmental tiers and involving diverse stakeholders.

Lipsky's (1980, 2010) street-level bureaucracy theory complements this top-down perspective by examining frontline implementers—teachers, school administrators, local vendors—who function as de facto policymakers through discretionary authority. Lipsky (1980) argued that street-level bureaucrats "labor under huge caseloads, ambiguous agency goals, and inadequate resources," compelling them to adopt coping mechanisms that often diverge substantially from policy intentions (p. 27). This theoretical lens proves essential for understanding community-level implementation dynamics wherein policy meets practice.

Hooghe and Marks's (2003) multi-level governance framework analyzes "the changing relationships between actors situated at different territorial levels, both from the public and the private sectors" (p. 233), providing analytical tools for examining how implementation challenges cascade across Indonesia's national, provincial, district, and community levels. Their conceptualization of Type I multi-level governance—featuring general-purpose jurisdictions at multiple territorial levels—aptly characterizes Indonesia's governmental structure wherein authority and resources are dispersed across administrative tiers (Hooghe & Marks, 2001).

### ***National-level implementation barriers***

***Fiscal constraints and nutritional adequacy***, the MBG program confronts fundamental fiscal constraints that compromise nutritional adequacy. The per-meal allocation was reduced from IDR 15,000 to IDR 10,000 (approximately USD 0.60), prompting nutritional experts to express concerns about dietary adequacy (Rizqullah, 2024). Local vendors implementing the program have highlighted that meals at this reduced price point "often lack the diversity and essential components needed for a balanced diet," typically consisting of rudimentary combinations such as rice, eggs, and vegetables (Rizqullah, 2024, para. 4).

Regional price disparities exacerbate these constraints. In Jayapura, Papua, IDR 10,000 covers only rice, vegetables, tofu, and tempe, whereas in other regions slightly more varied protein sources are accessible (Rizqullah, 2024). This geographic variation in purchasing power creates profound nutritional inequities, undermining the program's universal aspirations. Given that Indonesia continues experiencing a high stunting prevalence—with eastern regions including Papua, Nusa Tenggara, and Sulawesi exhibiting significantly higher rates (Siramaneerat et al., 2024)—these fiscal constraints disproportionately affect populations with greatest nutritional vulnerabilities.

***Institutional and legal fragility***, from a policy standpoint, the MBG program lacks robust legal foundations in the form of dedicated legislation, creating institutional vulnerability (Bappenas, 2025). This legal fragility contrasts sharply with successful international models; Finland's school meal program, for instance, has been integrated into the national education system through comprehensive legislation since 1948 (Bappenas, 2025). Without strong legislative backing, Indonesia's program remains susceptible to political transitions, budgetary reallocations, and administrative discontinuities that threaten long-term sustainability.

***Centralized management inefficiencies***, the program's centralized management through large-scale Nutrition Service Units (SPPG) has proven "financially burdensome, operationally rigid, and contextually unsuitable for Indonesia's diverse geography" (Islamic Business Review, 2024, para. 1). The first implementation year revealed significant structural weaknesses, including underutilized budgets, unprepared infrastructure, inconsistent menu delivery, logistical delays, and recurring foodborne illness incidents (Islamic Business Review, 2024). These operational challenges reflect Pressman and Wildavsky's (1973) observation that increasing implementation

complexity diminishes policy congruence, as centralized management structures struggle to accommodate Indonesia's extraordinary geographic and cultural diversity.

### ***Provincial and district-level barriers***

***Geographic disparities and infrastructure deficits***, Indonesia's archipelagic geography creates profound implementation asymmetries across provincial and district levels. [Siramaneerat et al. \(2024\)](#) documented that "the prevalence of stunting varies between urban and rural areas, reflecting disparities in access to nutrition, healthcare, and other socioeconomic factors" (p. 2). The MBG program faces particular challenges in 3T regions (frontier, outermost, and disadvantaged areas), where partners encounter difficulties establishing communal kitchens ([Wicaksono, 2025](#)). This infrastructural barrier disproportionately affects precisely those regions exhibiting highest nutritional needs, perpetuating existing inequalities.

Infrastructure deficits extend beyond physical kitchens to encompass cold storage facilities, reliable transportation networks, and food safety systems. [Ludher and Nasution \(2024\)](#) emphasized that "early investments in infrastructure, such as cold storage, low-emission stoves, and resource management, are required to maximize climate benefits" and contribute to long-term sustainability (para. 15). Provincial and district governments lacking such foundational infrastructure struggle to maintain program quality and consistency, particularly in remote regions where logistical challenges are most acute.

***Fiscal decentralization tensions***, Indonesia's fiscal decentralization framework creates tensions between national priorities and regional fiscal autonomy. A Rp 50.59 trillion reduction in transfers to regions (TKD) has potential to "hinder key local development programs and deepen existing inequalities, making MBG delivery in 3T areas even more difficult" ([Wicaksono, 2025, para. 4](#)). This fiscal constraint exemplifies challenges within multi-level governance structures wherein different governmental tiers possess competing priorities and limited resources ([Hooghe & Marks, 2003](#)). Districts and provinces must balance MBG implementation against competing developmental imperatives—education infrastructure, healthcare services, economic development—creating resource allocation dilemmas that compromise program effectiveness.

***Administrative capacity constraints***, provincial and district governments exhibit variable administrative capacity for nutrition program implementation. Many districts lack personnel with specialized expertise in nutrition program management, supply chain logistics, or quality assurance protocols ([Andrestian et al., 2025](#)). [Sager \(2022\)](#) noted that implementation success depends substantially on "context, nature of implemented policy, organizational and institutional settings, as well as street-level bureaucrats responsible for implementation" (p. 668). This administrative capacity deficit manifests in inconsistent program delivery, inadequate monitoring systems, and limited adaptive management capabilities across districts.

### ***Community-Level Implementation Barriers***

***Street-level bureaucratic challenges***, at the community level, school personnel, local vendors, and nutrition service providers function as street-level bureaucrats whose discretionary decisions substantially shape program outcomes. [Lipsky \(2010\)](#) observed that these frontline workers "are forced to adopt practices such as rationing resources, screening applicants for qualities their organizations favor, and routinizing client interactions by imposing the uniformities of mass processing on situations requiring human responsiveness" (p. 83). Teachers and school administrators, already burdened with educational responsibilities, now shoulder additional

nutritional program management duties without corresponding training, compensation, or administrative support.

This discretionary space enables frontline workers to adapt policies to local contexts but simultaneously creates inconsistencies in program delivery. Eriksson and Andersson (2023) emphasized that "policy goals are often not clearly stated and policy details are not finalized before implementation," compelling street-level bureaucrats to exercise considerable discretion (p. 4). The resulting implementation variability undermines program standardization while potentially enabling context-appropriate adaptations—a paradox inherent to street-level bureaucracy.

**Food safety and quality control vulnerabilities**, recurring foodborne illness incidents underscore fundamental weaknesses in community-level quality assurance mechanisms (Islamic Business Review, 2024). Local vendors, particularly MSMEs lacking formal food safety certifications, struggle to maintain consistent hygiene standards while operating within severe budgetary constraints. Between October 2024 and January 2025, the Ministry's public grievance mechanism recorded 27 complaints with merely 31.8% follow-up rate, indicating substantial gaps in public responsiveness and quality control (Bappenas, 2025).

**Cultural and dietary diversity challenges**, Indonesia's extraordinary cultural heterogeneity necessitates careful consideration of diverse dietary preferences and regional food traditions. Standardized menu approaches fail to accommodate religious dietary requirements, local food preferences, and traditional nutritional practices. The program has been criticized for insufficient attention to regional typologies; as one government official noted, "We can't have a one-size-fits-all solution for all of Indonesia," emphasizing the need for regionally adapted protein sources and culturally appropriate foods (Koalisi Rakyat, 2025, para. 5).

**Community participation deficits**, Ludher and Nasution (2024) emphasized that "results of past intermittent school meal programmes in Indonesia reveal the need for sufficient financial resources, engagement with the community in design and implementation, and support for the local agricultural sector" (para. 13). Current implementation exhibits insufficient community consultation and participation, limiting local ownership and sustainability. Finland's sustained implementation over 77 years succeeded partially through "emphasis on early behaviour change and shared responsibility," including student participation in menu planning (Bappenas, 2025, p. 305)—elements notably absent from Indonesia's current approach.

### ***Cross-Cutting Systemic Barriers***

**Corruption vulnerability**, the goods-based transfer mechanism creates multiple intervention points susceptible to corruption. Critics noted the program's vulnerability because "aid is in the form of goods rather than direct cash assistance," with concerns that procurement, distribution, and monitoring processes provide opportunities for rent-seeking behavior (Rizqullah, 2024, para. 3). Without robust transparency mechanisms and anti-corruption safeguards, systematic value erosion threatens program integrity across all implementation levels.

**Monitoring and evaluation deficiencies**, Wicaksono (2025) emphasized that "public money should only be spent to create real change," requiring "performance indicators based on results—not just the quantity of food distributed, but also measurable impact on children's quality of life" (para. 6). Current monitoring systems emphasize input indicators (meals served, kitchens established) rather than outcome indicators (nutritional status improvements, stunting reduction). This evaluation gap prevents evidence-based adaptive management and learning, limiting the program's capacity for continuous improvement.

**Supply chain fragmentation**, the supply chain connecting agricultural producers, food processors, distributors, and service providers remains fragmented and inefficient. International

evidence suggests potential for school meal programs to catalyze agricultural development; Taiwan's school meal program resulted in organic farming areas increasing 15-fold since 2013 through preferential procurement policies (Ludher & Nasution, 2024). Indonesia's current supply chain lacks such integration between agricultural development and nutritional programs, representing a missed opportunity for simultaneous nutritional and economic objectives.

**Data integration challenges**, successful MBG implementation "hinges on strong governance, real-time adaptability, harmonised data collection across government agencies, and stakeholder engagement" (Ludher & Nasution, 2024, para. 18). However, current information systems remain siloed across ministries and governmental levels, preventing holistic beneficiary identification and comprehensive impact assessment. The need for "transparent real-time dashboards" and "integration of data from national education databases and regarding stunting prevalence" remains largely unmet (Wicaksono, 2025, para. 7).

Indonesia's Free Nutritious Meal program confronts formidable implementation barriers across national, provincial, district, and community levels, as illuminated through Pressman and Wildavsky's (1973) implementation theory, Lipsky's (1980, 2010) street-level bureaucracy framework, and Hooghe and Marks's (2003) multi-level governance approach. At the national level, fiscal constraints, legal fragility, and centralized management inefficiencies establish unfavorable conditions cascading throughout lower governmental tiers. Provincial and district barriers—including geographic disparities, infrastructure deficits, fiscal tensions, and administrative capacity limitations—intensify these challenges, creating stark regional implementation variations. Community-level obstacles, manifested through street-level bureaucratic constraints, food safety vulnerabilities, cultural diversity challenges, and participation deficits, ultimately determine whether policy intentions translate into improved nutritional outcomes.

Given that stunting prevalence varies substantially between urban and rural areas due to "disparities in access to nutrition, healthcare, and other socioeconomic factors" (Siramaneerat et al., 2024, p. 1), overcoming these multi-level barriers requires comprehensive interventions including strengthening legal foundations, decentralizing operational authority while maintaining quality standards, investing in regional infrastructure, enhancing administrative capacity, establishing outcome-focused monitoring systems, and fostering genuine community participation. As Sager (2022) emphasized, "implementation determines policy's form and effect while lying at the intersection of politics, policy, and the public" (p. 667), underscoring that the MBG program's ultimate success depends not merely on policy design but on addressing these comprehensive multi-level implementation challenges across Indonesia's diverse geographic, institutional, and socioeconomic contexts.

### **Leveraging Prospects and Enabling Factors for Indonesia's Free Nutritious Meal Program: Institutional Infrastructure, Political Commitment, Community Readiness, and Economic Opportunities**

While Indonesia's Free Nutritious Meal (Makan Bergizi Gratis/MBG) program confronts substantial implementation challenges, considerable prospects and enabling factors exist that can enhance program effectiveness and sustainability. Recent research by Abadi et al. (2025) emphasized that "school lunch programs play a crucial role in shaping the nutritional status and academic performance of children, making them a cornerstone of public health initiatives worldwide" (p. 1). This analysis examines how existing institutional infrastructure, political commitment, community readiness, and local economic opportunities can be strategically leveraged to transform implementation challenges into developmental opportunities, drawing

upon social capital theory (Coleman, 1988; Putnam, 1993, 2000) and empirical evidence from Indonesia's ProGAS program and successful international school feeding initiatives.

### ***Theoretical framework: Social capital and participatory development***

Social capital theory provides a robust framework for understanding how community resources facilitate program success. Putnam (1993) conceptualized social capital as "features of social organization, such as networks, norms and trust that facilitate coordination and cooperation for mutual benefit" (p. 35). Coleman (1988) defined social capital "by its function" as aspects of social structure that "facilitate certain actions of actors...within the structure" (p. S98), emphasizing its instrumental role in enabling collective action.

These theoretical perspectives illuminate how Indonesia's existing social structures—family networks, community organizations, religious institutions, and local governance mechanisms—can be mobilized for MBG implementation. Putnam (2000) distinguished between bonding social capital (ties within homogeneous groups) and bridging social capital (connections across diverse groups), both essential for nutrition programs requiring community cohesion and cross-sectoral coordination. Research demonstrates that communities possessing robust networks, reciprocity norms, and trust mechanisms exhibit enhanced capacity for collective action and program sustainability (Coleman, 1990; Putnam, Leonardi, & Nanetti, 1993).

### ***Institutional infrastructure and evidence-based program design***

***Existing nutritional governance architecture***, Indonesia possesses established institutional infrastructure that can be leveraged for MBG optimization. Recent empirical research on Indonesia's ProGAS (Program Gizi Anak Sekolah) program demonstrated significant positive outcomes. Sekartini et al. (2025) found that "ProGAS significantly improved students' dietary diversity, meal frequency, handwashing with soap, and nutrition knowledge, alongside a positive trend in school attendance" (p. 1). This evidence from Indonesia's own national school feeding program validates the institutional capacity for nutritional interventions.

The National Nutrition Agency (BGN), established August 15, 2024, provides dedicated organizational architecture. By August 2025, the agency had established 5,885 Nutrition Fulfillment Service Units (SPPG) serving 20.5 million beneficiaries (ANTARA News, 2025a), demonstrating rapid institutional capacity development. The BGN has published "nutrition and safety standard modules for ready-to-eat food" through multi-stakeholder collaboration including ministries, BPOM, IPB, UNICEF, and professional associations (ANTARA News, 2025a, para. 3), representing valuable institutional capital.

***Educational system integration opportunities***, the program benefits from Indonesia's extensive educational infrastructure. Research on school feeding programs confirms educational benefits: Ximenes (2025) found in a systematic review that "SFPs significantly improve school enrolment, attendance, and student motivation, particularly in low-income communities" (p. 1). Bappenas (2025) reported that "preliminary reports from schools in Bogor Regency and South Lampung indicate a 2–3% increase in student attendance following the implementation of the MBG Program" (p. 306), mirroring international success patterns.

Academic performance improvements have been documented in Indonesian contexts. Research by Rizki, Ayu, and Bambang (2023) demonstrated that "school meal program has impact to increase children cognitive score on mathematic" (p. 84), providing empirical evidence for educational benefits within Indonesia's specific context.

***Decentralized governance as adaptive advantage***, Indonesia's decentralized governance structure enables context-appropriate implementation. Bappenas (2025) identified that "stakeholders include local governments, village-owned enterprises (BUMDes), MSMEs, schools, and community health workers" (p. 299), highlighting multi-level governance architecture. This decentralization allows adaptive implementation responsive to local contexts—critical given Indonesia's extraordinary diversity. Skinner et al. (2018) documented success factors from Indonesia's crisis-era school feeding programs, finding that "characteristics that may be important in explaining success include the involvement of a range of community stakeholders, engagement with existing village administrative structures, scope for local community adaptation and innovation, and the use of local foods" (p. 7). These historical lessons provide blueprints for current implementation.

### ***Political commitment and strategic policy learning***

***Presidential priority and high-level engagement***, the MBG program enjoys unprecedented political commitment as President Prabowo Subianto's signature initiative. Sumando (2025) observed that Prabowo's January 2025 visit to India "signalled Indonesia's desire to learn from India's celebrated school feeding program," demonstrating high-level political engagement with evidence-based policy learning (para. 1). Snyder and Muhyiddin (2024) reported that budget forecasts indicate the program would "add 0.1 percentage points to GDP growth in 2025 and support 820,000 jobs" with "stimulatory effects expected to increase in future years" (para. 15).

***Evidence-based international learning***, Indonesia demonstrates commitment to evidence-based policy learning. Sumando (2025) emphasized that "Indonesia must learn from India's experience—adopting gradual expansion, legal safeguards, local sourcing, strict governance and innovative funding models—to ensure that MBG makes a lasting positive impact" (para. 12). India's PM POSHAN program evolved through "gradual expansion, backed by legal measures and continuous evaluation" beginning as "a local initiative in 1925" with national expansion in 1995 (Sumando, 2025, para. 3). Bappenas (2025) highlighted Finland's model that "integrates free meals into the national education system since 1948, combining nutrition quality, food literacy, and student participation in menu planning," proving "effective in reducing food waste and increasing student satisfaction" through "emphasis on early behaviour change and shared responsibility" (p. 305). These international models provide evidence-based frameworks for Indonesian adaptation.

***Phased implementation strategy***, Sumando (2025) advocated that "MBG should start with pilot projects in regions where malnutrition is most severe, such as Eastern Indonesia, Kalimantan, Sumatra and rural Java," allowing policymakers "to test the program, refine their methods and address challenges before expanding nationally" (para. 7). This phased approach aligns with implementation theory's emphasis on adaptive learning (Pressman & Wildavsky, 1973). Sumando (2025) cautioned that "the success of a school feeding program depends on how well it is executed, not just on its design" (para. 2), underscoring implementation quality's primacy.

### ***Community readiness and social capital mobilization***

***Historical evidence of community engagement capacity***, Indonesia possesses demonstrated community capacity for participatory nutrition programs. Skinner et al. (2018) documented that during Indonesia's economic crisis, school feeding programs were "sustained through the crisis, in spite of a dramatic escalation in food costs," with "families of schoolchildren, farmers, and those who prepared food" receiving "economic benefits" (p. 7). This historical

evidence demonstrates community resilience and organizational capacity under adverse conditions.

The program's success derived from "involvement of a range of community stakeholders, engagement with existing village administrative structures, scope for local community adaptation and innovation, and the use of local foods that dispersed benefits" (Skinner et al., 2018, p. 7). These community-driven approaches align with social capital theory's emphasis on trust-building and reciprocity norms (Putnam, 2000).

**Community organizational infrastructure**, Indonesia possesses robust community organizational structures. Pacific News (2025) reported that "local governments collaborate with local MSMEs to supply food ingredients, such as vegetables from local farmers or traditional processed food products," creating "community ownership, making the program more sustainable in the long run" (para. 7). Village-owned enterprises (BUMDes), community health workers (posyandu), and religious organizations represent existing social capital mobilizable for program support.

Cultural values emphasizing gotong royong (mutual cooperation) provide foundations for collaborative implementation. Coleman (1988) emphasized that "social capital inheres in the structure of relations between actors and among actors" (p. S98), highlighting how Indonesia's dense community networks constitute valuable implementation resources.

**Demonstrated willingness to participate**, research on parental engagement demonstrates community readiness. Sekiyama et al. (2018) found in Indonesian school feeding research that "90% intended to use school feeding programs, and 30% were willing to pay Rp 15,000 (USD 1.05) or higher per meal" (p. 1). This willingness to participate—even with copayment—signals strong community support and ownership potential.

### ***Local economic opportunities and msme integration***

**Economic multiplier effects through local procurement**, the MBG program's local procurement strategy creates substantial economic opportunities. Ludher and Nasution (2024) emphasized that "MBG will require 12.7 million tons of food annually" with "the majority targeted to be sourced locally," providing "a large, predictable market for local farmers" that "may empower them to invest in climate-resilient and sustainable agricultural practices" (para. 11).

ANTARA News (2025b) reported the program generates "a multiplier effect in the form of labor absorption" with "increasing demand for food orders necessitating hiring of additional cooks, food delivery couriers, and food packaging assistants" (para. 4). Research from the Center of Reform on Economics Indonesia indicated that "MBG can generate a multiplier effect for local communities by enhancing the welfare of producers" (ANTARA News, 2025b, para. 5).

**MSME empowerment and capacity development**, the program creates incentives for MSME formalization. Pacific News (2025) noted that "MSMEs who want to partner in the MBG program must have clear legal status," promoting "transparency and accountability" while encouraging informal sector formalization (para. 6). By January 2025, "at least 937 public kitchens were operating across 26 provinces" with staff "primarily sourced from the local community" utilizing "existing kitchens, such as MSME kitchens or shared kitchens owned by the community" to "save budget and reduce distribution costs" (ANTARA News, 2025b, para. 3).

**Agricultural development linkages**, international experience demonstrates school feeding programs can catalyze agricultural transformation. Ludher and Nasution (2024) cited Taiwan's experience where "organic farming expanded due to preferential procurement for organic foods" with "one county's school meal programme resulting in the area under organic farming increasing 15 times since inception in 2013" (para. 14). Indonesia can emulate this model, using guaranteed

institutional demand to incentivize sustainable practices. [Koalisi Rakyat \(2025\)](#) emphasized the program's potential to "revitalize traditional agricultural knowledge and practices," promoting "local foods like cassava, sago and sweet potatoes" while supporting "farming practices that work in harmony with the environment" (para. 8).

***Climate action and environmental sustainability opportunities: Reduced carbon footprint and food system resilience***

The local sourcing strategy provides climate mitigation opportunities. Ludher and Nasution (2024) argued that "MBG can reduce its carbon footprint through shorter food miles" while providing farmers incentives "to invest in climate-resilient and sustainable agricultural practices if provided with the right incentives" (para. 11). [Koalisi Rakyat \(2025\)](#) emphasized that local sourcing "helps build a more resilient food system that aligns with the principles of food sovereignty," enabling "local communities to take charge of their own food production and distribution" (para. 6). This food system strengthening addresses Indonesia's vulnerability as "a major importer of rice, wheat, soybeans, beef and dairy products" ([Koalisi Rakyat, 2025, para. 4](#)), reducing external dependency while building domestic production capacity.

***Governance innovations and quality assurance***

***Evidence-based targeting and resource allocation***, recent research by Abadi et al. (2025) cautioned that "with Indonesia's fiscal challenges, the need for an evidence-based, well-planned approach arises" as "limited budget countries have discovered that subsidized models are more efficient" (p. 13). They recommend that "Indonesia needs a model that is prepared to address its developmental needs while ensuring fiscal sustainability and maximizing nutritional impact" ([Abadi et al., 2025, p. 13](#)).

***Community social audits and accountability mechanisms***, international evidence demonstrates that "community social audits, where local members check the program's implementation, helped improve accountability" alongside "transparent procurement processes—such as public tender notices, mandatory e-procurement and strict record-keeping" that "reduced opportunities for fraud" (Sumando, 2025, para. 10). Indonesia can implement similar mechanisms, leveraging community social capital for oversight.

***Real-time monitoring and data-driven evaluation***, [ANTARA News \(2025a\)](#) emphasized that "long-term success is crucially determined by sharpened targeting, the quality of locally sourced menus, food safety standards, and budget transparency" requiring "strengthened governance and data-driven evaluation" (para. 8). The program's commitment to "structured and systematic evaluation to assess impact on beneficiaries" ([ANTARA News, 2025b, para. 6](#)) represents recognition of evidence-based management's importance.

***Nutrition education and behavioral change opportunities: School-based nutrition literacy integration***

[Koalisi Rakyat \(2025\)](#) highlighted that "the MBG program has the capacity to play a vital role in increasing awareness about nutrition and healthy eating habits, particularly among children" with schools offering "nutritious meals that educate the younger generation about the importance of healthy food choices" (para. 9). Bappenas (2025) emphasized that "if MBG is to deliver long-term impact on Indonesia's human capital, the integration of nutrition education into the school curriculum and student-centered meal designs should be prioritized" (p. 305). [Sekartini et al. \(2025\)](#)

documented that ProGAS "significantly improved students' dietary diversity, meal frequency, handwashing with soap, and nutrition knowledge" (p. 1), demonstrating that integrated approaches combining feeding with education yield comprehensive benefits.

***Human capital development and demographic dividend: Strategic timing with demographic window***

The program's timing coincides strategically with Indonesia's demographic dividend. Bappenas (2025) emphasized that effective management of the demographic window "could catalyze the realization of the Golden Indonesia Vision 2045 by unlocking the country's full human capital potential" (p. 298). Nutritional investments during this critical period maximize returns through enhanced educational outcomes, workforce productivity, and economic growth. Danira (2025) argued that "with proper implementation, MBG has the potential to be a sustainable investment in Indonesia's future, improving both public health outcomes and economic productivity" (p. 1). Key recommendations include "financial oversight, prioritizing local sourcing of food, phased rollouts, and annual economic assessments" (Danira, 2025, p. 1).

Indonesia's Free Nutritious Meal program, despite implementation challenges, possesses significant prospects and enabling factors that can enhance effectiveness and sustainability. Existing institutional infrastructure—including proven ProGAS program capacity, the National Nutrition Agency, decentralized governance frameworks, and extensive educational networks—provides foundational architecture validated through empirical research (Sekartini et al., 2025). Political commitment at the highest levels, demonstrated through presidential prioritization and substantial fiscal allocations, creates enabling conditions for sustained implementation.

Community readiness, manifested through historical evidence of successful crisis-era programs (Skinner et al., 2018), robust organizational networks, and demonstrated parental engagement (Sekiyama et al., 2018), offers resources for community-driven implementation aligned with Coleman's (1988) and Putnam's (1993, 2000) social capital frameworks. Local economic opportunities through MSME integration, agricultural development linkages, and documented multiplier effects position the program as comprehensive economic development strategy.

Strategic learning from international best practices, particularly India's phased expansion and Finland's nutrition education integration, provides evidence-based pathways for Indonesian adaptation (Bappenas, 2025; Sumando, 2025). Governance innovations including evidence-based targeting (Abadi et al., 2025), community social audits, and real-time monitoring systems can address implementation challenges while strengthening accountability. As ANTARA News (2025a) concluded, "By strengthening governance and data-driven evaluation, the MBG has the potential to become a high-value investment in human capital, not just a short-term expense" (para. 8). However, as Sumando (2025) cautioned, "if the program is rushed or mismanaged, it may become another costly initiative that fails to meet its goals" (para. 13). Realizing this potential requires strategic leveraging of existing enablers—institutional infrastructure, political commitment, community social capital, and local economic opportunities—while learning adaptively from Indonesia's ProGAS experience and international best practices through systematic, evidence-based implementation.

## Evidence-Based Policy Recommendations for Indonesia's Free Nutritious Meal Program: Ensuring Equity, Quality, and Sustainability

Indonesia's Free Nutritious Meal (Makan Bergizi Gratis/MBG) program requires evidence-based policy recommendations to guide refinement, enhance coordination, ensure quality, and establish sustainable models maintaining equity and dignity. Sekartini et al. (2025) demonstrated through empirical research on Indonesia's ProGAS program that "ProGAS significantly improved students' dietary diversity, meal frequency, handwashing with soap, and nutrition knowledge, alongside a positive trend in school attendance" (p. 1), validating that well-designed school feeding programs achieve measurable impacts. This analysis formulates actionable recommendations grounded in implementation science (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005), equity frameworks (Whitehead & Dahlgren, 2006), and recent empirical evidence from Indonesian and international contexts.

Implementation science provides frameworks for translating evidence into practice. Fixsen et al. (2005) identified core implementation components including staff selection and training, performance assessment, decision-support data systems, and systems interventions. Proctor et al. (2011) emphasized implementation outcomes—acceptability, appropriateness, feasibility, fidelity, and sustainability—as distinct from service and client outcomes, requiring specific measurement and optimization strategies.

Whitehead and Dahlgren (2006) conceptualized health equity as requiring interventions addressing social determinants across multiple levels—individual behaviors, community networks, living and working conditions, and socioeconomic contexts. Applied to nutrition programs, equity frameworks mandate that interventions reach most vulnerable populations with culturally appropriate, dignified services maintaining human agency and choice (Sen, 1999).

### *Policy recommendation 1: Establishing legal and institutional foundation*

**Evidence base:** Bappenas (2025) identified that "the MBG program lacks a strong legal foundation in the form of a dedicated law" (p. 299), creating implementation vulnerability. International evidence demonstrates that successful school feeding programs possess robust legal frameworks. Sumando (2025) noted that India's success derived from "legal safeguards" including "the 2013 National Food Security Act" ensuring program continuity (para. 3).

**Recommendation:** Enact comprehensive School Feeding Act establishing MBG as statutory entitlement with:

- Constitutional grounding in children's rights to nutrition and education
- Clear beneficiary eligibility criteria based on vulnerability indices
- Mandatory nutritional standards with regional adaptation provisions
- Multi-year budget guarantees protected from annual political fluctuations
- Independent oversight mechanisms ensuring accountability

**Implementation strategy:** Presidential submission of draft legislation to Parliament by Q1 2026, incorporating multi-stakeholder consultations including civil society, academic institutions, and beneficiary representatives ensuring participatory legislative processes aligned with democratic governance principles (Ansell & Gash, 2008).

*Policy recommendation 2: Implementing evidence-based targeting*

**Evidence base:** Abadi et al. (2025) emphasized that "with Indonesia's fiscal challenges, the need for an evidence-based, well-planned approach arises" as "limited budget countries have discovered that subsidized models are more efficient" (p. 13). *The Jakarta Post Reformist* (2025) criticized current implementation for prioritizing "where it is easiest rather than needed most" (para. 8), undermining equity objectives.

**Recommendation:** Develop sophisticated targeting system integrating:

- **Vulnerability Index:** Composite measure incorporating stunting prevalence, poverty rates, food insecurity indicators, and educational access metrics at sub-district level
- **Differentiated Service Intensity:** Daily meals in high-vulnerability areas; 3-4 times weekly in moderate contexts; targeted individual support in low-vulnerability regions
- **Dynamic Adjustment Mechanisms:** Quarterly updating of vulnerability assessments responding to changing circumstances
- **Community Validation:** Local verification committees ensuring inclusion of marginalized populations invisible to administrative data

**Evidence support:** Whitehead and Dahlgren's (2006) equity framework emphasizes proportionate universalism—services universal in reach but with intensity proportionate to need—maximizing both coverage and impact within resource constraints.

*Policy recommendation 3: Enhancing intersectoral coordination*

**Evidence base:** Bappenas (2025) noted that "lessons from international best practices, including India's Anaemia Mukht Bharat Campaign, underscore the importance of multisectoral coordination—particularly across health and education systems—in achieving significant outcomes" (p. 306). Current fragmentation limits synergies across nutrition, education, health, and social protection sectors.

**Recommendation:** Establish formal intersectoral coordination architecture:

- **National Coordination Council:** Chaired by Coordinating Minister, quarterly meetings with Ministers of Education, Health, Social Affairs, Agriculture, and Finance
- **Provincial Coordination Teams:** Monthly coordination among provincial education, health, and agriculture offices
- **Integrated Service Delivery:** Co-location of MBG with growth monitoring (Posyandu), deworming campaigns, and nutrition education curricula
- **Shared Data Platforms:** Unified beneficiary databases enabling holistic service delivery and preventing duplication

**Implementation mechanism:** Presidential Regulation establishing coordination structures with clear mandates, decision-making protocols, and accountability mechanisms. Drawing from collaborative governance theory, Ansell and Gash (2008) emphasized that successful collaboration requires "face-to-face dialogue, trust building, and commitment to process" (p. 550).

*Policy 4 recommendation 4: Ensuring nutritional quality and cultural appropriateness*

**Evidence base:** Sekartini et al. (2025) documented that ProGAS "significantly improved students' dietary diversity" (p. 1), demonstrating that structured programs can enhance nutritional outcomes. However, standardization risks cultural inappropriateness. *Koalisi Rakyat* (2025)

emphasized that "local foods like cassava, sago and sweet potatoes could be more widely promoted," supporting "culturally appropriate nutrition" and "sustainable agriculture" (para. 8).

**Recommendation:** Develop evidence-based nutrition framework with cultural flexibility:

- **Minimum Nutritional Standards:** Mandatory micronutrient (iron, zinc, vitamin A) and macronutrient (protein, healthy fats, complex carbohydrates) requirements based on WHO guidelines
- **Regional Menu Guidelines:** Province-specific menu planning incorporating locally available, culturally appropriate foods
- **Seasonal Adaptation:** Menu rotation aligned with agricultural seasons maximizing fresh produce availability
- **Dietary Accommodation:** Protocols for religious dietary requirements, food allergies, and vegetarian preferences maintaining inclusivity

**Quality assurance:** Quarterly nutritional assessments of menu adequacy conducted by certified nutritionists, with findings publicly reported and feeding continuous menu improvement (Proctor et al., 2011).

#### *Policy recommendation 5: Strengthening food safety systems*

**Evidence base:** Recurring foodborne illness incidents documented by Bappenas (2025) underscore quality control deficiencies. ANTARA News (2025) reported that BGN "is strengthening the safety aspect of fresh food at the SPPG" (para. 3), requiring systematic operationalization beyond ad-hoc responses.

**Recommendation:** Implement comprehensive food safety management:

- **HACCP Certification:** Mandatory Hazard Analysis and Critical Control Points certification for all SPPGs within 12 months
- **Cold Chain Infrastructure:** Investment in refrigeration and temperature monitoring systems preventing spoilage
- **Training Programs:** Standardized 40-hour food safety training for all food handlers with annual refresher courses
- **Regular Inspections:** Unannounced monthly inspections by district health offices with public posting of results
- **Rapid Response Protocols:** Immediate investigation and corrective action for any foodborne illness reports

**Accountability mechanism:** Public dashboard displaying SPPG food safety ratings incentivizing compliance and enabling community oversight (Sumando, 2025).

#### *Policy recommendation 6: Supporting local economic development*

**Evidence base:** ANTARA News (2025) documented that the program "generates a multiplier effect in the form of labor absorption" with "increasing demand for food orders necessitating hiring of additional cooks, food delivery couriers, and food packaging assistants" (para. 4). Skinner et al. (2018) found that successful Indonesian programs utilized "local foods that dispersed benefits" (p. 7).

**Recommendation:** Maximize local economic impacts through:

- **Preferential Local Sourcing:** Minimum 80% of food procured from within-province suppliers when quality standards met

- **MSME Capacity Development:** Technical assistance programs helping MSMEs meet quality standards, obtain certifications, and access working capital
- **Farmer Cooperative Linkages:** Direct procurement from farmer cooperatives eliminating intermediaries and ensuring fair prices
- **Value Addition Incentives:** Support for local processing (fortified flour, dried fruits) creating higher-value economic activities

*Financing support:* [Observer \(2025\)](#) noted coordination "with state-owned banks (Himbara) to provide bridging finance schemes for MSMEs" (para. 3), requiring expansion with concessional interest rates and technical assistance packages.

### *Policy recommendation 7: Integrating nutrition education*

*Evidence base:* [Bappenas \(2025\)](#) emphasized that "if MBG is to deliver long-term impact on Indonesia's human capital, the integration of nutrition education into the school curriculum and student-centered meal designs should be prioritized" (p. 305). [Sekartini et al. \(2025\)](#) found ProGAS "significantly improved nutrition knowledge" (p. 1), demonstrating educational components' effectiveness.

*Recommendation:* Develop comprehensive nutrition literacy program:

- **Curriculum Integration:** Age-appropriate nutrition education modules embedded in science and health curricula for grades 1-12
- **Experiential Learning:** Students participate in menu planning, school gardens, and meal preparation developing practical skills
- **Family Engagement:** Nutrition information sessions for parents with culturally appropriate materials
- **Behavior Change Communication:** Social marketing campaigns promoting dietary diversity, handwashing, and healthy eating patterns

*Implementation partnership:* Collaboration with Ministry of Education ensuring nutrition education receives adequate curriculum time and teacher training ([Ansell & Gash, 2008](#)).

### *Policy recommendation 8: Establishing robust monitoring and evaluation*

*Evidence base:* [ANTARA News \(2025\)](#) emphasized that "long-term success is crucially determined by sharpened targeting, the quality of locally sourced menus, food safety standards, and budget transparency" requiring "strengthened governance and data-driven evaluation" (para. 8). [Proctor et al. \(2011\)](#) distinguished implementation, service, and client outcomes, each requiring specific measurement.

*Recommendation:* Implementing comprehensive M&E framework:

- **Implementation Metrics:** Budget execution rates, SPPG operational status, food safety compliance, beneficiary enrollment
- **Service Quality Indicators:** Meal nutritional adequacy, dietary diversity scores, menu variety, beneficiary satisfaction
- **Impact Outcomes:** Stunting prevalence changes, school attendance rates, academic performance, anemia reduction
- **Long-term Evaluation:** Rigorous impact evaluations using randomized controlled trials or quasi-experimental designs assessing causal effects

**Data infrastructure:** Real-time digital monitoring systems integrating data from schools, SPPGs, and health facilities enabling rapid problem identification and adaptive management (Fixsen et al., 2005).

***Policy Recommendation 9: Ensuring participatory governance***

**Evidence base:** Sumando (2025) emphasized that "community social audits, where local members check the program's implementation, helped improve accountability" (para. 10). Coleman (1988) theorized that social capital within communities enables collective action for public goods.

**Recommendation:** Institutionalize community participation:

- **School Feeding Committees:** Mandatory committees in every school including parents, teachers, community leaders, and student representatives
- **Social Audits:** Trained community auditors conducting quarterly reviews of food quality, budget utilization, and beneficiary selection
- **Grievance Mechanisms:** Accessible complaint systems (SMS hotlines, web portals) with guaranteed 48-hour response times
- **Public Reporting:** Quarterly public meetings at school and district levels reviewing program performance

**Empowerment approach:** Participation mechanisms should genuinely empower communities rather than tokenistic consultation, maintaining beneficiary dignity and agency (Sen, 1999).

***Policy recommendation 10: Developing sustainable financing***

**Evidence base:** Okada (2025) noted that "reaching the 83 million beneficiary target may require an additional 140 trillion rupiah" beyond initial allocations, with "concerns that the budget may fall short" (para. 3). Fiscal sustainability requires diversified funding sources.

**Recommendation:** Establishing multi-source financing strategy:

- **Statutory Budget Allocation:** Minimum 0.5% GDP guaranteed through legislation
- **Progressive Co-Financing:** District contributions proportional to fiscal capacity with equalization transfers
- **Corporate Engagement:** Tax incentives for private sector contributions to school feeding infrastructure
- **International Partnerships:** Strategic engagement with multilateral development banks for technical assistance and catalytic finance
- **Efficiency Measures:** Performance-based budgeting, overhead caps, and technology-enabled cost reductions

**Long-term sustainability:** Snyder and Muhyiddin (2024) projected the program would "add 0.1 percentage points to GDP growth in 2025 and support 820,000 jobs" (para. 15), suggesting economic returns justifying sustained investment.

These evidence-based recommendations provide actionable pathways for refining Indonesia's MBG program while maintaining core commitments to equity and dignity. Legal foundations ensure institutional stability; evidence-based targeting directs resources to most vulnerable; intersectoral coordination leverages synergies; nutritional quality standards with cultural flexibility ensure appropriateness; food safety systems protect beneficiaries; local economic integration creates multiplier effects; nutrition education enables behavioral change; robust M&E

enables learning; participatory governance ensures accountability; and sustainable financing guarantees longevity. As Sumando (2025) concluded, "if implemented properly, MBG could significantly improve educational and health outcomes across the country. But if the program is rushed or mismanaged, it may become another costly initiative that fails to meet its goals" (para. 13). These recommendations, grounded in implementation science (Fixsen et al., 2005; Proctor et al., 2011), equity frameworks (Whitehead & Dahlgren, 2006), social capital theory (Coleman, 1988), and empirical evidence from Indonesia's own ProGAS program (Sekartini et al., 2025), provide evidence-based pathways ensuring MBG achieves transformative impacts while honoring the dignity and rights of all beneficiaries.

### *Synthesizing implementation challenges and pathways forward*

Indonesia's Free Nutritious Meal (Makan Bergizi Gratis/MBG) program represents an ambitious national commitment to addressing child malnutrition, educational inequality, and human capital development. This comprehensive analysis, grounded in implementation theory (Pressman & Wildavsky, 1973; Lipsky, 1980), multi-level governance frameworks (Hooghe & Marks, 2003), social capital theory (Coleman, 1988; Putnam, 2000), and empirical evidence from Indonesia's ProGAS program (Sekartini et al., 2025) and international school feeding initiatives, reveals both formidable challenges and substantial opportunities for transformative impact.

### *Primary implementation barriers: A multi-level analysis*

The program confronts systematic barriers across Indonesia's multi-tiered governance structure, each level presenting distinct yet interconnected challenges. At the **national level**, fiscal constraints undermining nutritional adequacy—with meal allocations reduced to IDR 10,000 (USD 0.60) that experts argue cannot deliver balanced nutrition (Rizqullah, 2024)—combine with institutional fragility stemming from the absence of dedicated legislation (Bappenas, 2025) and centralized management inefficiencies ill-suited to Indonesia's extraordinary diversity (Islamic Business Review, 2024). These national-level weaknesses cascade throughout lower implementation tiers, establishing unfavorable foundational conditions.

**Provincial and district barriers** intensify these challenges through geographic disparities wherein identical budgetary allocations produce dramatically different nutritional outcomes—from basic rice and vegetables in Jayapura to slightly more varied protein sources in other regions (Rizqullah, 2024). Infrastructure deficits preventing MBG delivery in 3T (frontier, outermost, disadvantaged) regions precisely where nutritional needs are most acute (Wicaksono, 2025), combined with fiscal decentralization tensions created by Rp 50.59 trillion regional budget cuts (Wicaksono, 2025) and variable administrative capacity across districts (Andrestian et al., 2025), create implementation asymmetries undermining equity objectives.

At the **community level**, where policy transforms into tangible services, street-level bureaucrats—teachers, school administrators, local vendors—function as de facto policymakers exercising discretion under conditions of resource scarcity and ambiguous goals (Lipsky, 2010). Food safety vulnerabilities manifested in recurring foodborne illness incidents (Bappenas, 2025), cultural diversity challenges wherein standardized approaches fail to accommodate regional preferences and dietary requirements (Koalisi Rakyat, 2025), and insufficient community participation limiting local ownership (Ludher & Nasution, 2024) constitute critical implementation obstacles.

**Cross-cutting systemic barriers**—corruption vulnerability in goods-based transfer mechanisms, monitoring systems emphasizing inputs over outcomes, fragmented supply chains,

and siloed information systems (Wicaksono, 2025; Bappenas, 2025)—pervade all governance levels, requiring comprehensive rather than piecemeal solutions.

### *Prospects and enabling factors: Capitalizing on existing strengths*

Despite formidable challenges, Indonesia possesses substantial enabling factors that can be strategically leveraged. **Institutional infrastructure** including proven capacity through ProGAS program success—with documented improvements in dietary diversity, nutrition knowledge, and school attendance (Sekartini et al., 2025)—the established National Nutrition Agency operating 5,885 SPPGs serving 20.5 million beneficiaries by August 2025 (ANTARA News, 2025a), and extensive educational networks spanning 400,000 schools (Koalisi Rakyat, 2025) provide foundational architecture many developing nations lack.

**Political commitment** at unprecedented levels, demonstrated through presidential prioritization, substantial fiscal allocations (Rp 171 trillion in 2025, expanding to Rp 300 trillion in 2026) (Indonesia Business Post, 2025a; ANTARA News, 2025c), strategic policy learning from India's PM POSHAN and Finland's mature school feeding models (Sumando, 2025; Bappenas, 2025), and integration with Indonesia's Golden Indonesia 2045 vision ensuring commitment transcends electoral cycles, creates enabling conditions for sustained implementation.

**Community readiness** manifested through robust social capital including organizational networks (BUMDes, posyandu, religious institutions), cultural values emphasizing gotong royong (mutual cooperation), historical evidence of successful crisis-era community-driven feeding programs (Skinner et al., 2018), and demonstrated parental willingness to participate with 90% intending program usage (Sekiyama et al., 2018) represents valuable implementation resources aligned with social capital theory's emphasis on trust, reciprocity, and collective action (Coleman, 1988; Putnam, 2000).

**Local economic opportunities** through guaranteed demand for 12.7 million tons of food annually creating predictable markets for smallholder farmers (Ludher & Nasution, 2024), documented multiplier effects including labor absorption and MSME empowerment (ANTARA News, 2025b), agricultural development linkages demonstrated internationally where school feeding catalyzed 15-fold organic farming expansion (Ludher & Nasution, 2024), and climate action potential through local sourcing and food system resilience building (Koalisi Rakyat, 2025) position MBG as comprehensive development strategy rather than merely nutritional intervention.

### *Optimizing governance, operations, and financing*

Transformation requires systematic optimization across governance structures, operational mechanisms, and financing arrangements. **Governance optimization** demands establishing comprehensive legal frameworks providing institutional stability and protecting against political discontinuities (Sumando, 2025), implementing integrated multi-level coordination architectures enabling vertical and horizontal synergies (Hooghe & Marks, 2003), and developing strategic public-private partnerships leveraging private sector efficiency while maintaining public accountability (Sumando, 2025; Observer, 2025).

**Operational excellence** necessitates evidence-based phased expansion prioritizing high-need regions over administrative convenience (Sumando, 2025; Jakarta Post Reformist, 2025), sophisticated data-driven targeting systems ensuring resources reach most vulnerable populations (Abadi et al., 2025), integrated local procurement infrastructures supporting smallholder farmers while ensuring quality (Skinner et al., 2018; Ludher & Nasution, 2024), and comprehensive quality

management systems implementing HACCP protocols, systematic inspections, and real-time monitoring protecting food safety (ANTARA News, 2025a; Sumando, 2025).

**Financing sustainability** requires diversifying funding sources beyond central budgets through statutory allocations, progressive regional co-financing, corporate social responsibility integration, international development partnerships, and innovative mechanisms including social impact bonds (Sumando, 2025), implementing performance-based budgeting with unit cost analysis and outcome-linked allocations incentivizing efficiency (Observer, 2025), and establishing multi-layered accountability architectures including real-time budget tracking, e-procurement mandates, community social audits, and independent oversight preventing corruption (Sumando, 2025; Bappenas, 2025).

### Evidence-based policy recommendations: Pathways to transformation

Ten evidence-based recommendations provide actionable pathways maintaining core commitments to equity and dignity:

- **Legal Foundation:** Enact comprehensive School Feeding Act establishing MBG as statutory entitlement with constitutional grounding, clear eligibility criteria, mandatory nutritional standards, multi-year budget guarantees, and independent oversight (Bappenas, 2025; Sumando, 2025)
- **Evidence-Based Targeting:** Develop sophisticated vulnerability indices integrating stunting, poverty, and access metrics with differentiated service intensity proportionate to need, implementing Whitehead and Dahlgren's (2006) proportionate universalism maximizing both coverage and impact
- **Intersectoral Coordination:** Establish formal coordination architecture from national councils to integrated service delivery, drawing from collaborative governance theory (Ansell & Gash, 2008) and India's multisectoral coordination successes (Bappenas, 2025)
- **Nutritional Quality with Cultural Flexibility:** Develop evidence-based nutrition frameworks balancing WHO-aligned minimum standards with regional menu guidelines incorporating locally available, culturally appropriate foods (Sekartini et al., 2025; Koalisi Rakyat, 2025)
- **Food Safety Systems:** Implement comprehensive HACCP certification, cold chain infrastructure, standardized training, regular inspections, and rapid response protocols with public accountability dashboards (ANTARA News, 2025a; Sumando, 2025)
- **Local Economic Integration:** Maximize multiplier effects through preferential local sourcing (minimum 80% within-province), MSME capacity development, farmer cooperative linkages, and value addition incentives supported by bridging finance schemes (ANTARA News, 2025b; Observer, 2025)
- **Nutrition Education:** Integrate age-appropriate nutrition literacy into curricula combining experiential learning, family engagement, and behavior change communication, building on ProGAS documented improvements in nutrition knowledge (Sekartini et al., 2025; Bappenas, 2025)
- **Robust M&E:** Implement comprehensive frameworks tracking implementation metrics, service quality, and impact outcomes through real-time digital systems enabling adaptive management aligned with implementation science principles (Proctor et al., 2011; Fixsen et al., 2005)

- **Participatory Governance:** Institutionalize community participation through school feeding committees, social audits, accessible grievance mechanisms, and public reporting sessions genuinely empowering communities rather than tokenistic consultation (Sumando, 2025; Sen, 1999)
- **Sustainable Financing:** Establish multi-source strategies including statutory allocations (minimum 0.5% GDP), progressive co-financing, corporate engagement, international partnerships, and efficiency measures ensuring long-term viability (Okada, 2025; Snyder & Muhyiddin, 2024)

### Final thoughts: From challenge to opportunity

Indonesia's MBG program stands at a critical juncture. As Sumando (2025) cautioned, "the success of a school feeding program depends on how well it is executed, not just on its design" (para. 2), while warning that "if the program is rushed or mismanaged, it may become another costly initiative that fails to meet its goals" (para. 13). Conversely, ANTARA News (2025a) emphasized that "by strengthening governance and data-driven evaluation, the MBG has the potential to become a high-value investment in human capital, not just a short-term expense" (para. 8).

The evidence demonstrates that barriers—while formidable—are not insurmountable. Indonesia's proven institutional capacity through ProGAS success (Sekartini et al., 2025), robust community social capital historically mobilized during crises (Skinner et al., 2018), unprecedented political commitment with substantial fiscal allocations (Snyder & Muhyiddin, 2024), and local economic opportunities creating development multipliers (ANTARA News, 2025b) provide foundations for transformation. Success requires moving beyond current implementation characterized by geographic convenience over developmental need (Jakarta Post Reformist, 2025), inadequate budgets compromising nutritional adequacy (Rizqullah, 2024), and weak accountability enabling corruption vulnerabilities (Sumando, 2025).

The pathway forward demands integrated governance restructuring establishing legal foundations and multi-level coordination; operational excellence prioritizing phased, evidence-based expansion with local procurement and quality assurance; sustainable financing through diversified sources and performance accountability; and evidence-based policies ensuring equity, dignity, nutritional quality, and participatory governance. These recommendations, grounded in implementation theory (Pressman & Wildavsky, 1973; Lipsky, 1980), multi-level governance frameworks (Hooghe & Marks, 2003), social capital theory (Coleman, 1988; Putnam, 2000), and empirical evidence from Indonesian and international contexts, provide actionable pathways for transformation.

Indonesia's demographic window—projected to peak between 2020 and 2030 (Bappenas, 2025)—creates historic opportunity wherein strategic nutritional investments can catalyze human capital development, educational achievement, and economic productivity essential for Golden Indonesia 2045 realization. The MBG program, if implemented with the rigor, accountability, and equity-focus outlined in this analysis, can transform from a politically expedient initiative into a genuinely transformative investment in Indonesia's most valuable resource—its children. The choice between these trajectories depends entirely on whether Indonesia embraces evidence-based implementation over political expediency, systematic capacity-building over rushed expansion, and genuine commitment to equity and dignity over performative universalism. The evidence provides the roadmap; political will and implementation excellence will determine the destination.

### Disclosure statement

No potential conflict of interest was reported by the authors.

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