

Free School Meals Policy as a Learning Framework for MBG in Indonesia: A Systematic Literature Review

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ABSTRACT

Free school meal programs have become a critical component of social protection policies worldwide, addressing child malnutrition, food insecurity, and educational inequality. In Indonesia, the newly launched Makan Bergizi Gratis (MBG) program represents an ambitious national initiative that requires evidence-based implementation strategies. This article aims to systematically map existing literature on the implementation of free school meals policy using a Systematic Literature Review (SLR) approach. A total of 140 articles were initially identified and screened through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method, resulting in 33 articles selected for in-depth analysis. The selected publications were further examined using VOSviewer to identify thematic patterns and keyword relationships. The analysis reveals three main clusters of research focus: (1) the impact of free school meals on health and nutrition policy; (2) the technical implementation and governance of school meal provision; and (3) organizational dimensions, management structures, and the role of beneficiaries. The findings indicate that the success of free school meal programs depends on multiple factors, including policy stability, multi-level collaboration among actors, effective food management mechanisms, and regular program evaluation. This study recommends that Indonesia's Makan Bergizi Gratis (MBG) program integrate these dimensions holistically—ensuring quality assurance, food safety, and an inclusive social dining experience for all students as beneficiaries.

KEYWORDS

Free school meals policy; Health and nutrition; Makan Bergizi Gratis; Systematic literature review



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INTRODUCTION

The latest trends regarding the free nutritious meals (MBG) policy program in Indonesia have prompted various researchers to further analyze best practices of free school meal policies in different countries around the world. This policy is increasingly important, given that MBG is one of the strategic programs introduced by the Prabowo Subianto–Gibran Rakabuming administration after being elected as President and Vice President of the Republic of Indonesia in 2024 (Putri et al., 2024; Sutrisno & Tunaerah, 2024). The MBG program is a strategic initiative of the Indonesian Government, launched in 2024, to accelerate the reduction of stunting rates while strengthening the resilience of the basic education system. This policy is an integral component of the 2025–2045 National Medium-Term Development Plan and directly contributes to the achievement of the Sustainable Development Goals (SDGs)—particularly target 2.2 on ending malnutrition and target 4.1 on ensuring equitable access to primary education. The MBG is not merely a nutrition program but also reflects the state's fiscal commitment to protect school children from low-income and vulnerable families (Abadi et al., 2025).

Prior to the launch of MBG in 2024, Indonesia had already implemented several similar programs focused on improving child nutrition and eradicating stunting (Intan Rohma Nurmallasari et al., 2025). The Ministry of Health's Supplementary Feeding Program (PMT) has long targeted toddlers, pregnant women, and school children to improve their nutritional status (Mauludi et al., 2021; Nur, 2025). Meanwhile, the School Children Supplementary Feeding Program (PMT-AS), active from 1996 to 2010, aimed at primary school students in disadvantaged areas to improve attendance and learning outcomes (Novi Safitri & Ayu Fitriana, 2022). However, it was later discontinued due to budget sustainability issues. In addition, cross-sector programs such as the *School Health Program (UKS)* and the *National Balanced Nutrition Movement "Isi Piringku" (Fill My Plate)* have also contributed to nutrition education and healthy living behaviors in schools (Kementerian Kesehatan RI, 2024). Thus, MBG can be seen as the consolidation and enhancement of previous initiatives.

The implementation of MBG involves several key actors with complementary roles. The National Nutrition Agency (BGN) serves as the primary coordinator, setting nutritional standards, technical guidelines, and overseeing implementation. The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) acts as the main implementing agency in schools. At the same time, the Ministry of Health (Kemenkes)—through the Directorate of Community Nutrition and community health centers—is responsible for monitoring food quality and student health. At the regional level, Bappeda integrates the program into regional planning and budgeting while coordinating with local Education and Health Offices as operational implementers. Local MSMEs and food providers serve as regional economic partners, whereas schools and parents act as beneficiaries and social supervisors (Ghonyah et al., 2019).

As a new policy, it is essential to examine how implementation can continue to be interpreted, refined, and evaluated (Bullock et al., 2021). The Government has executed the first phase of the MBG program, allocating Rp 13 trillion out of a total budget of Rp 71 trillion. The program targets 82.9 million Indonesians, with more than 7,000 One Nutrition Fulfillment Services (SPPG) currently operating to serve over 25 million beneficiaries (BGN RI, 2025).

Various studies have analyzed multiple aspects of MBG implementation. Some scholars interpret the MBG as a form of political populism by Prabowo Subianto to garner support from citizens who still face the risk of malnutrition (Abadi et al., 2025; Fatimah et al., 2024). Others argue that the MBG is an ambitious policy, as state intervention in meeting population-wide nutritional needs may significantly strain public finances (Merlinda & Yusmar Yusuf, 2025; Soma et al., 2024). Nevertheless, the MBG program offers benefits for various stakeholders, including local farmers, small and medium-sized enterprises (SMEs) in the food sector, and logistics providers. Directly, it is expected to positively affect the nutritional quality of Indonesian children, aligning with President Prabowo's central campaign message, which emphasized his concern about the country's high stunting and malnutrition rates.

According to the Indonesian Nutrition Status Survey (SSGI) of 2024, the national prevalence of stunting reached 19.8%, a decline from 21.5% in 2023 (Kemenkes RI, 2025). This serves as part of the Government's justification for the MBG initiative, claiming it will reduce stunting and enhance the health, intelligence, and competitiveness of future generations (BGN RI, 2025). However, critics argue that reductions in stunting cannot be attributed solely

to food distribution programs but also depend on improved sanitation, better primary healthcare, and ongoing nutrition education. Concerns likewise persist about the efficiency and equity of a universal MBG model, whose focus extends beyond early-life nutrition interventions (Abadi et al., 2025). Nonetheless, the MBG program has become the hallmark of Prabowo Subianto's new administration—a cornerstone of a social and economic policy framework prioritizing students from low-income households in 3T (underdeveloped, frontier, and outermost) regions (Abadi et al., 2025).

The MBG represents a form of government intervention that ensures access to nutritious food, similar to initiatives found in other nations (Yesi & Annur, 2025). For instance, free school lunch programs exist in Japan, Brazil, South Korea, the United Kingdom, and New Zealand. South Korea has operated its free school lunch program (SMP) since 1953, supported by international organizations such as UNICEF and USAID. It took 66 years to refine the program amid evolving practices, political challenges, and fiscal pressures (Baek et al., 2019). In Brazil, the *National School Feeding Program (Programa Nacional de Alimentação Escolar, PNAE)* stands as one of the largest free nutrition programs globally. Its primary focus is to provide fresh, minimally processed food to ensure healthy meals (Borlizzi et al., 2017; Martinez et al., 2023). Approximately 30% of the PNAE's budget is mandated for food sourced from local family farmers, promoting agricultural sustainability (Bandoni et al., 2024; de Amorim et al., 2022).

Meanwhile, India's Mid-Day Meal (MDM) program covers more than 100 million children and has successfully improved nutritional status, academic performance, and school enrollment, especially among marginalized groups (Jayaraman & Simroth, 2015). These experiences underscore the need for a deep understanding of the success factors behind free school meal programs. Such programs are complex undertakings requiring sustained implementation, robust design, and consideration of nutritional requirements, organic ingredients, local farm integration, MSME participation, and social goals such as reducing inequality, supporting agriculture, and alleviating hunger.

Drawing on global experiences with free school meal policies and Indonesia's current challenges, this article applies a systematic literature review (SLR) approach to analyze the implementation of free nutritious meal programs worldwide. The study's primary objectives are threefold: first, to identify and map dominant keywords and thematic clusters within the global free school meals policy discourse through bibliometric analysis using VOSviewer; second, to explore the learning mechanisms within policy implementation by examining motivations, processes, and outcomes across national contexts; and third, to synthesize best practices, success factors, and recurring challenges to guide Indonesia's MBG design, implementation, and sustainability.

This study contributes both academically and practically. Academically, it offers a comprehensive synthesis of global literature on free school meals, tracing the evolution of research from biomedical nutrition outcomes toward considerations of governance, social equity, and multi-sectoral coordination. It addresses a vital gap in understanding how free meal initiatives operate as multifaceted public policies intersecting health, education, and social protection. Methodologically, the integration of PRISMA guidelines and VOSviewer analysis presents a replicable framework for policy learning across nations.

For policymakers and practitioners, the research offers evidence-based recommendations for Indonesia's MBG implementation. By identifying success patterns from countries such as South Korea and Brazil, the study provides actionable insights into policy design, governance mechanisms, quality assurance, and stakeholder engagement. The findings directly address issues related to nutritional standards, procurement systems, multilevel coordination, program evaluation, and community involvement in sustaining program viability.

Furthermore, the study contributes to broader discourses on social protection in developing economies, where national nutrition programs must reconcile coverage goals with fiscal, administrative, and contextual constraints. The comparative analysis reveals how countries have confronted challenges such as food quality assurance, stigma reduction, budget stability, and integration with existing social services—all highly relevant to Indonesia's current policy trajectory.

To systematically pursue these aims, the study poses two main research questions: (1) What keywords and thematic clusters dominate the scholarly discourse on free school meals policy, and how do these interconnect to shape the field's conceptual structure? Using VOSviewer network analysis, this question explores relationships among health outcomes, policy implementation, governance structures, and stakeholder roles. (2) How do learning mechanisms function in implementing free school meals policies across differing national contexts? This question examines political motivations, policy development processes, implementation strategies, outcomes, and evaluation mechanisms.

By addressing these questions through selected high-quality studies, this research highlights essential lessons for Indonesia's MBG program—specifically, how free school meal policies are interpreted, implemented, and adapted. The analysis emphasizes not only program design but also dynamic learning and institutional capacity building as critical factors for long-term success and sustainability.

METHOD

To further implement the SLR research scheme, this paper uses the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) method as a guideline to ensure a systematic review of the journals found. The journals are then reported transparently and comprehensively. In using PRISMA, the primary step is to identify all literature relevant to the research topic. In this phase, keywords are found and searches are conducted through academic databases. In the second phase, initial screening is conducted to remove duplicates and irrelevant literature. Next, in terms of feasibility, the Author will apply inclusion and exclusion criteria.

Meanwhile, in the final stage, the final literature used in data synthesis and analysis is selected and confirmed. The PRISMA framework offers a comprehensive reporting format that allows authors to assess the nature of the findings (urgency of the issue) and the novelty of the ideas in the collected papers. This article presents the PRISMA method as a visual flowchart so that others can more easily interpret, replicate, and evaluate the literature review.

Tabel 1. Search Strings

Database	Search String
Scopus	TITLE-ABS-KEY(Free School Meals Policy) AND (LIMIT-TO (SUBJAREA,"SOCI")) AND (LIMIT-TO (DOCTYPE,"ar"))

The search for articles used the Scopus database to find quality articles with a Quartile 1-4 rating. Through this database, the keyword used was "Free School Meals Policy." In addition, the search was filtered by selecting only journal articles on the theme of social sciences. A total of 140 articles were collected from this screening. Next, from these 140 articles, a selection was made to determine whether the journal discussed case studies on the experiences, processes, and implementation of the free school meals policy. This selection method found a total of 33 articles. The number of articles illustrates the diverse discussions on the free school meals policy from various practices in different countries. The article selection process in the Scopus database did not use a time limit to explore the discussion further.

Tabel 2. The Inclusion and the exclusion criteria for data screening

Inclusion	Criteria
Only subject area in social science	Any other subject area
Only Articles (journal)	Book Chapter, Conference-paper, theses
Only articles that use free school meals policy	All articles about free school meals

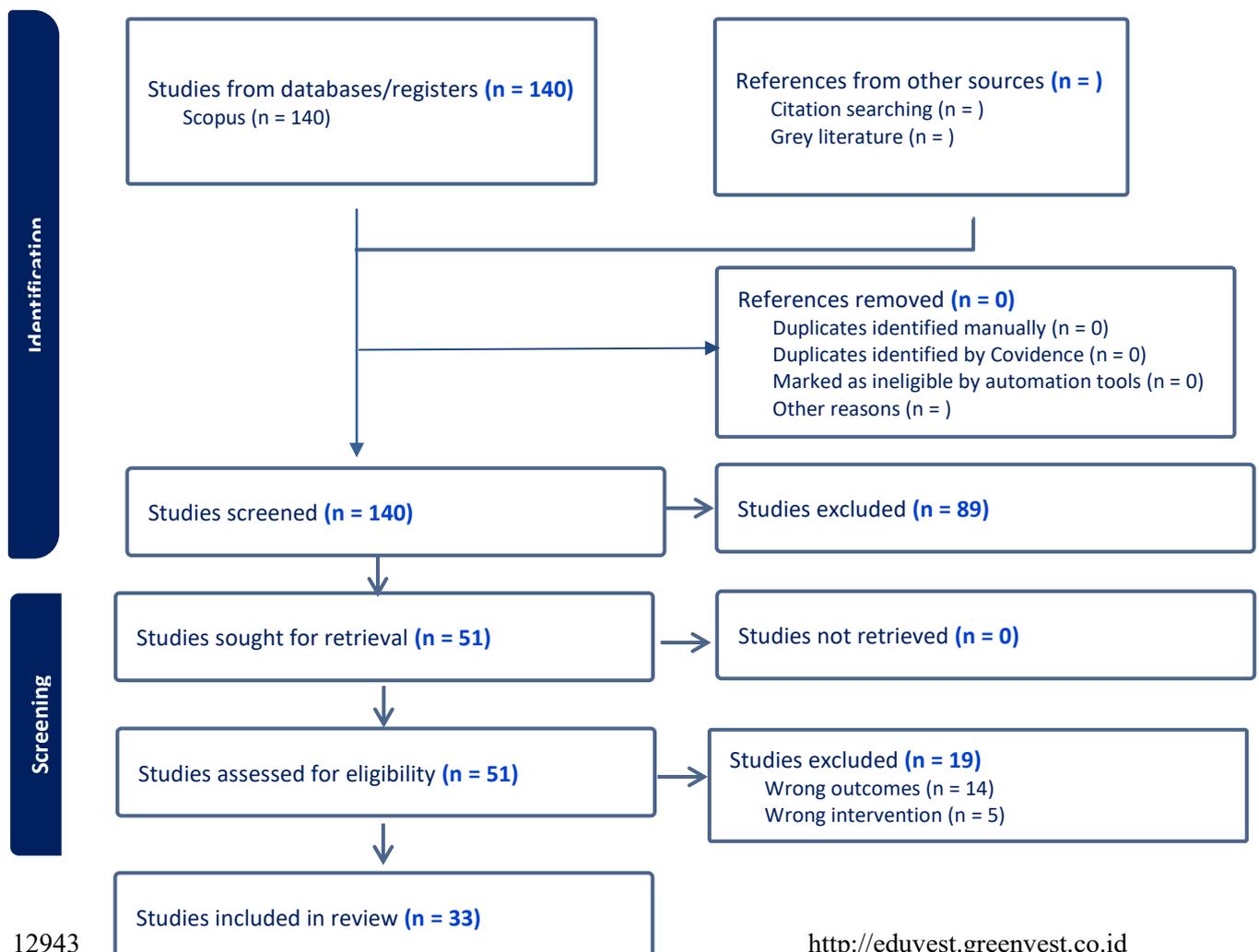


Figure 1: Systematic review process using the PRISMA statement template

This study provides a detailed analysis through selected journal materials after conducting an article selection. This selection ultimately illustrates the dynamics of the implementation of the free school meals policy. The selection of case studies itself is intended to understand how the practice of free school meals is interpreted, processed, implemented, and evaluated. As a policy, free school meals are a state intervention mechanism to ensure the nutritional needs of students. This policy also emphasizes the economic impact felt by various stakeholders in order to ensure the success of the free meals program. However, the large scale of the project has the potential to create new problems, such as low budget absorption, food quality that does not meet nutritional standards, the tendency to use ultra-processed foods as ingredients, and other fatal impacts, such as poisoning and food waste.

The key analysis of this study is to examine the experiences of implementing free school meals policies in various countries, which will serve as lessons for the implementation of MBG in Indonesia. This identification will further examine the aspects and challenges of implementing free school meals policies. In addition, this article will identify the conditions that can make a policy successful or unsuccessful, especially in the case of free meals policies. Furthermore, the research will first map the keywords that are often used by researchers when analyzing the free school meals policy. This effort is carried out to open a space for discussion on the research gap on the specified topic. It offers valuable insights into the implementation of the free school meals policy and will later become valuable input related to the implementation of MBG in Indonesia.

RESULTS AND DISCUSSION

Thirty-three articles were selected for discussion. The selected articles come from a wide variety of fields of study, even though the search was limited to articles categorized as social science studies. These articles were published over a wide range of years. Data on the year of publication of the articles can be seen in the graph below:

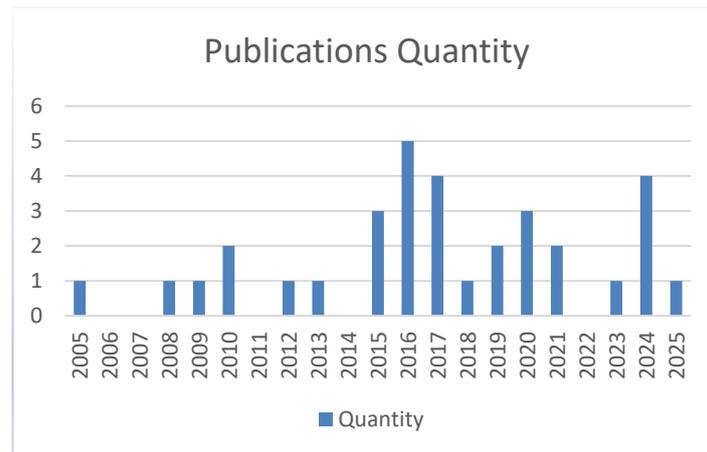


Figure 2: Quantity of Publications from 2005-2025

Based on the graph of journal publications with the keyword "free school meals policy" for the period 2005–2025, it can be seen that academic interest in this topic fluctuated but showed a significant increase after 2014. The period 2015–2017 recorded the highest surge, peaking in 2016 with five publications, which marked an increase in researchers' interest in school food policy as part of child welfare and nutrition strategies. After a decline in 2018–2020, the trend rose again in 2021 and 2024, reflecting a resurgence of academic interest in line with the emergence of new post-pandemic policies that highlight food security and access to nutrition in schools. Overall, this trend indicates that the topic of *free school meals policy* remains relevant, particularly in a global context emphasizing the interconnection between nutrition, education, and inclusive social policies.

Network Visualization on Keyword “Free School Meals Policy”

The results of the review using VOSviewer categorized several keywords into clusters. Figure 3 shows various clusters that represent the concepts found in the analysis of the 33 articles related to the free school meals policy. The available clusters can be seen with different colored lines. The red cluster explains the relationship between health and nutrition policy. Meanwhile, the green cluster focuses on technical implementation and school meal provision. Furthermore, the blue cluster tends to discuss organization, management, and students. A further analysis of keyword clustering can be seen in the image below:

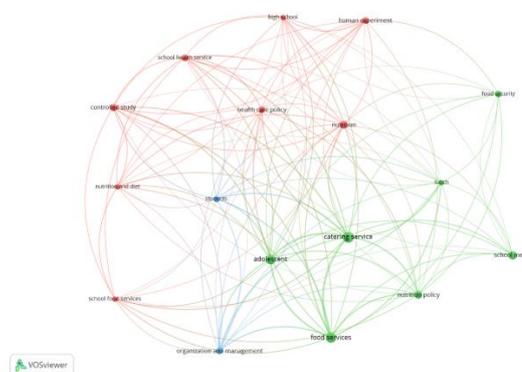


Figure 3: VOSviewer analysis results

In cluster 1, there are several keywords such as controlled study, health care policy, high school, human experiment, nutrition, nutrition and diet, school food services, and school health services. The literature in this group is oriented towards a medical and evaluative approach, in which school food programs are examined primarily as public health interventions to improve nutritional status, reduce malnutrition, and improve growth indicators in children and adolescents (Huang & Barnidge, 2016; Lyson, 2016). Studies in this cluster often use quantitative and experimental designs, such as controlled trials or human experiments, to assess the direct impact on student health (Abizari et al., 2021; Fernandes et al., 2017; Taylor et al., 2020). However, the biomedical-focused nature of these studies also indicates limitations, as aspects of policy governance, social participation, and program sustainability have been relatively under-discussed. Thus, the red cluster represents a strong empirical basis for the health benefits of school feeding programs, but further research is needed on more integrative and contextual policy approaches.

Meanwhile, in cluster 2, research focuses on technical implementation, school meal provision governance, and its relationship with food security. Keywords such as school meals, food services, catering service, lunch, nutrition policy, and food security indicate that studies in this group highlight how school meal programs are regulated, provided, and implemented on an institutional and community scale (Berggren et al., 2024; Hecht et al., 2021). Research in this cluster generally discusses food supply chain mechanisms, food procurement systems, and the role of local service providers, such as catering or MSMEs, in supporting school meal programs (Baek et al., 2019; Lyson, 2016; Morris, 2024). In addition, the dimensions of nutrition policy and food security indicate that the research focus also includes the contribution of these policies to food self-sufficiency and local economic development.

Next, cluster 3 highlights keywords such as students, organization, management, and school food services. It can be seen that these keywords represent the dimensions of organization, school management, and the role of students in the implementation of free school meals policies. In addition, this topic shows that research in this group focuses on how schools manage free meal programs as part of institutional activities, including logistical planning, quality control, and coordination between staff and service providers (Baek et al., 2019; Berggren et al., 2024; Chambers et al., 2020; Lyson, 2016). Several studies also highlight students' perceptions of school meals, their impact on learning motivation, and the involvement of teachers and the school community in maintaining the sustainability of the program (Borbely et al., 2024; Chambers et al., 2020; Chauhan, 2015). Thus, the blue cluster describes the micro-governance dimension that is oriented towards daily practices and participatory management at the school level. However, findings from this cluster also show that the literature on the role of schools as policy learning actors is still minimal.

Through the results of the VOSviewer analysis above, this cluster division shows the direction of free school meals policies in the areas of health and nutrition, technical implementation and food security, as well as management and governance. Most of the literature focuses on short-term biomedical and nutritional impacts. Meanwhile, the dimensions of policy governance, social participation, and cross-sector learning have received less attention. This indicates a knowledge gap in understanding how free meal policies can be managed through the integration of nutrition policies, education systems, and institutional

structures. In addition, issue-oriented research in developing countries is still very limited. This is because learning from MBG programs is fraught with the ideal implementation of programs when carried out in developing countries. Most studies originate from developed countries such as the United Kingdom, the United States, Japan, and South Korea. In addition, the programs implemented are long-term programs that have been tested. Therefore, research leaves room for case studies where free school meal programs are new or have been implemented for a relatively short period of time.

The Impact of Free School Meals on Health and Nutrition Policy

Various free school meal policies have varying correlations with health and nutrition policies in different countries, especially in the context of efforts to overcome malnutrition, improve diet quality, and reduce socio-economic inequalities related to health. Based on the literature reviewed, this sub-chapter explains the impact of free school meal policies on health and nutrition. The first impact is an improvement in diet quality and nutritional status. One of the main objectives of free school meal programs is to improve children's nutrition and overall health and reduce the risk of overweight and obesity, especially since the implementation of nutritional standards (Chambers et al., 2020; Moreland-Russell et al., 2025).

In addition, the goal of free school meals is to promote healthier eating habits among children, especially those who may not have access to healthy food (Borbely et al., 2024). Another important benefit of free meals is that they ensure adequate nutritional intake. With the right free meal policy, there is a significant impact on children's daily nutrition. In the United States, for example, the National School Lunch Program (NSLP) and School Breakfast Program (SBP) provide 47% of students' daily energy intake, 58% of fruits, 41% of vegetables, and 52% of grains. In the United States, there is also a program called the Healthy, Hunger-Free Kids Act (HHFKA) to encourage healthier choices and increase the intake of whole grains, fruits, and vegetables (Cornish et al., 2016; GREEN et al., 2015; Taylor et al., 2020). Second, some literature also shows the impact of free school meals policies on weight and obesity. For example, research from Schwartz and Rothbart (2020) shows improved weight results from students who received free school meals interventions. In the UK, the Universal Infant Free School Meals (UIFSM) policy has been linked to a decrease in obesity rates, especially among younger children (Chambers et al., 2020; Han & Rothbart, 2025; Woodward et al., 2015).

In addition to creating positive results, the free school meals policy can also have challenges and impacts that may be intentional or unintentional. One of the main problems is food quality and large-scale implementation. Several studies explore the potential problems of mass school food procurement due to several aspects. These aspects include food quality, food ingredients that are not fresh, food content that may be harmful if consumed in excess by students (e.g., foods with high sugar content), and uncertainty about nutritional content, which may vary from kitchen to kitchen (Elliott & Hore, 2016; Farris et al., 2021; Vericker et al., 2019).

One of the best practices of the free school meals program is South Korea. South Korea has a program called the Eco-Friendly Free School Meal program (FSMP). Initially, FSMP was only provided to students who were proven to come from poor families (Baek et al., 2019; Chon & Ahn, 2015). However, in 2011, FSMP became universal and ensured that all students

received free lunch, regardless of their household income. The program's participation rate reached 99% with 6.09 million elementary and junior high school students (Chon & Ahn, 2015). One aspect that makes this program work well is the certainty of food quality because it follows a set of rules called the Korean Dietary Reference Intakes (DRIs) (Baek et al., 2019). Food is always prepared on site to ensure high quality.

In addition to South Korea, experiences in establishing quality standards/nutrition policies for free school meals can also be seen in Scotland and England. In Scotland, school nutrition standards are formalized by law (Schools Health Promotion and Nutrition Scotland Act 2007 and Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008), which aim to align school meals with Government dietary goals (Chambers et al., 2020). Meanwhile, in England, the School Food Plan integrates nutrition education into the school curriculum, instilling social and moral values through healthy eating and cooking habits.

Technical Implementation and Governance of School Meal Provision under the Free School Meals Policy

Discussions regarding the technical implementation of food provision were one of the important aspects emphasized in the previous VOSviewer analysis. The technical aspects of implementing free school meals focused on food quality, methods of provision, and the physical environment in which food is served. The first point that can be seen is clear nutritional regulations. In various literature, countries such as Scotland and South Korea have formalized school nutritional standards to align with Government policy objectives. Next is monitoring quality improvement. For example, free food programs such as the Healthy, Hunger-Free Kids Act in the United States require an increase in the portions of fruits, vegetables, and whole grains, as well as a reduction in unhealthy fats and sodium (Asada et al., 2017; Payán et al., 2017; Vericker et al., 2019). In addition, the best food provision is when food is processed and prepared directly at school. South Korea and Brazil carry out this practice through their PNAE programs. This practice ensures that food is always fresh and limits ultra-processed foods.

The certainty of food freshness is closely related to the next aspect, namely the method of preparation and provision. Food preparation at school is the most common method of food delivery. Meanwhile, studies in Indonesia show that schools equipped with on-site kitchens and nutritionists produce food with better nutritional quality, hygiene, and portion control than schools that rely on outside catering (Martinelli et al., 2020). Even in Ireland, the focus of food provision is on hot meals. Hot meals are lunches that are cooked and fully funded by the state (Morris, 2024). Therefore, the best food processing comes from school kitchens. In addition to food quality, the issue of raw materials needs to be regulated separately. Countries such as South Korea and Brazil use local food ingredients. The Government ensures that food ingredients are purchased from local farmers where free food processing facilities are established. It reinforces the importance of strengthening local supply chains and economic sustainability as a result of the free school meals program.

After focusing on all aspects of food, another thing to consider is the food environment. The physical and social aspects of the dining experience greatly influence participation and the success of the *free school meals* policy. The *universal free school meals* policy is designed to reduce stigma against recipients by creating an inclusive dining experience, such as eating

together without any difference in treatment or special identification for recipient students (Borbely et al., 2024). In addition, facility conditions are also a determining factor in participation; cramped or overcrowded dining rooms can reduce students' interest in participating, especially when the number of recipients increases without an increase in facility capacity.

Furthermore, the cultural dimension of eating also influences the success of the program. Simple changes in the context of serving, such as using proper tableware, such as not using plastic trays, can instill social values, respect for food, and togetherness among students (Elliott & Hore, 2016). Thus, the success of free meal policies depends not only on nutritional quality and administrative policies, but also on how the physical environment and food culture in schools are managed to create a dignified and inclusive experience.

In addition to technical implementation, another important issue that can be discussed is the governance and administration of free school meals policies. Funding models for free school meals in various countries show a variety of approaches in determining eligibility and financing mechanisms. In the UK, the means-tested FSM system determines eligibility based on welfare benefits such as Income Support or Income-based Job Seekers Allowance (Gorard, 2022; Morris, 2024). In contrast, the universal provision (UFSM) approach implemented in Scotland for P1–P3 students is fully funded by the Government, with £70.5 million allocated to local authorities to ensure that all children can obtain free meals without discrimination (Borbely et al., 2024). In the United States, the Community Eligibility Provision (CEP) is an example of a universal funding model based on social data, whereby schools with at least 40% low-income students can provide free meals to all students without individual applications (Kashyap & Jablonski, 2025; Taylor et al., 2020).

Another aspect that needs to be discussed is governance structure and partnerships. The successful implementation of free school meals depends on coordination between various levels of Government and school staff. For example, overly centralized policies are not recommended. Experience in Scotland, for example, shows that the success of free school meals involves local authorities and school staff (Chambers et al., 2020; Morris, 2024). Local authorities are responsible for administration, while schools are responsible for implementation and support at the operational level. In addition, the role of the principal is also considered very important. Experience in Sweden, for example, shows that principals have overall responsibility for the social, physical, and pedagogical environment. However, in reality, principals do not see the free school meals policy as a comprehensive policy, but only as a means to ensure that students are full and energized (Berggren et al., 2024). Therefore, intersectoral coordination is the solution to address the different interests in providing free school meals. The lack of clarity regarding the long-term goals and benefits of free school meals reduces the willingness of education stakeholders to get involved.

Organizational Dimensions, Organizational Management, and the Role of Beneficiaries

In terms of organizational dimensions, the implementation of the free school meals policy involves a multilevel governance structure and budget management that requires political adjustments and cross-sector coordination. Coordination can be seen in the experience of the Eco-Friendly FSMP in South Korea. The Eco-Friendly FSMP is a form of political

compromise and mutual adjustment between interested parties (Chon & Ahn, 2015). The state plays a significant role as the leading actor. However, its implementation involves not only the central Government, but also local governments, education agencies, and non-governmental organizations as performance monitoring institutions (Abizari et al., 2021; Cornish et al., 2016; Fernandes et al., 2017; Lyson, 2016; Muktarbek kyzy, 2019). The Ministry of Education is the next primary sector that plays an important role in creating and spending the free school meals policy budget. It is different from the implementation in Indonesia, where the policy is fully implemented through the BGN budget. In addition, the quality of the policy is also evident in the presence of a consultation mechanism. Practices in South Korea show that the Education Administration Council is needed to discuss the implementation of free school meals, including the budget funding ratio and the quality of environmentally friendly food. Therefore, the implementation of the MBG policy must be multilevel and requires collaboration not only through a single actor but also with other actors who work together synergistically.

In addition to the interaction of actors at the state elite level, the role of schools is vital in the implementation of free meal policies. As leaders, school principals bear a great deal of responsibility for the impact that free meal policies have on students (Berggren et al., 2024). This impact is not only internal (academic achievement, nutritional quality, class participation), but also external (responsibility to students' parents and the resulting impact). It is important to encourage the direct role of schools in the MBG program, mainly to ensure that the food provided meets the needs of each student. General policies often pose problems in certain circumstances, creating new problems such as mass poisoning, students refusing to eat the food provided, and parents complaining about the food provided (which hurts their children). Schools must be aware of and check the quality of food prepared by catering companies or institutions responsible for food processing (Abizari et al., 2021; Hecht et al., 2021; Huang et al., 2016).

In terms of the cooking process, catering plays an important role in the successful implementation of the free school meals policy. It is because they are responsible for the planning, preparation, and serving of meals every day. This program provides direct benefits for their work, but also requires capacity building, including additional recruitment and training to meet the surge in demand, and assessment of the quality of their kitchens (Chambers et al., 2020). Technical support from local authority catering representatives is usually provided through audits of facilities, equipment, and labor before the program is implemented. Therefore, reflecting on the implementation of MBG, SPPG must be equipped with the ability to audit the kitchens that provide MBG so that problems arising from food provision can be minimized.

CONCLUSION

Indonesia's Free Nutritious Meals (MBG) program, as a relatively new national initiative, has attracted growing scholarly attention as part of broader free school meal policy research. A Systematic Literature Review (SLR) supported by VOSviewer analysis identifies three key dimensions of global best practices: health and nutrition outcomes, technical implementation and governance, and organizational and management effectiveness. Evidence from successful programs in countries such as the United States, the United Kingdom, South

Korea, Brazil, and Scotland demonstrate that free school meal initiatives enhance dietary quality, nutritional status, and equity in food access when supported by fresh, locally sourced ingredients, integrated nutrition education, and coordinated multi-level governance. For Indonesia's MBG program to achieve sustainability and long-term impact, it should emphasize inter-agency collaboration, transparent management, local stakeholder engagement, and robust quality assurance mechanisms. Future research should focus on evaluating the MBG's long-term effects on child development, educational performance, and local economic resilience to inform evidence-based policy refinement.

REFERENCES

- Abadi, M. N. P., Basrowi, R. W., Gunawan, W. Ben, Arasy, M. P., Nurjihana, F., Sundjaya, T., Pratiwi, D., Hardinsyah, H., Astuti Taslim, N., & Nurkolis, F. (2025). *Unraveling future trends in free school lunch and nutrition: Global insights for Indonesia from bibliometric approach and critical review*. *Nutrients*, *17*(17), 1–25. <https://doi.org/10.3390/nu17172777>
- Asada, Y., Ziemann, M., Zatz, L., & Chriqui, J. (2017). Successes and challenges in school meal reform: Qualitative insights from food service directors. *Journal of School Health*, *87*(8), 608–615. <https://doi.org/10.1111/josh.12534>
- Baek, D., Choi, Y., & Lee, H. (2019). Universal welfare may be costly: Evidence from school meal programs and student fitness in South Korea. *Sustainability (Switzerland)*, *11*(5). <https://doi.org/10.3390/su11051290>
- Bandoni, D. H., Ottoni, I. C., Amorim, A. L. B., & Canella, D. S. (2024). It is time: Free meals at schools for all. *British Journal of Nutrition*, *131*(8), 1447–1451. <https://doi.org/10.1017/S0007114523002660>
- Bullock, H. L., Lavis, J. N., Wilson, M. G., Mulvale, G., & Miatello, A. (2021). Understanding the implementation of evidence-informed policies and practices from a policy perspective: a critical interpretive synthesis. *Implementation Science*, *16*(1), 18.
- Berggren, L., Waling, M., & Olsson, C. (2024). Head teacher perspectives on school lunch: At variance with national policy. *Health Education Journal*, *83*(1), 29–39. <https://doi.org/10.1177/00178969231215718>
- BGN RI. (2025). *Manfaat program MBG menekan angka stunting RI yang masih tinggi*. Badan Gizi Nasional. <https://www.bgn.go.id/news/berita/manfaat-program-mbg-menekan-angka-stunting-ri-yang-masih-tinggi>
- Borbely, D., Gehrsitz, M., McIntyre, S., & Rossi, G. (2024). Does the provision of universal free school meals improve school attendance? *Economics of Education Review*, *103*. <https://doi.org/10.1016/j.econedurev.2024.102597>
- Borlizzi, A., Delgrossi, M. E., & Cafiero, C. (2017). National food security assessment through the analysis of food consumption data from household consumption and expenditure surveys: The case of Brazil's Pesquisa de Orçamento Familiares 2008/09. *Food Policy*, *72*, 20–26. <https://doi.org/10.1016/j.foodpol.2017.08.009>
- Chambers, S., Boydell, N., Ford, A., & Eadie, D. (2020). Learning from the implementation of universal free school meals in Scotland using normalisation process theory: Lessons for policymakers to engage multiple stakeholders. *Food Policy*, *95*. <https://doi.org/10.1016/j.foodpol.2020.101936>
- Chauhan, A. (2015). Plates for slates: The impact of a school feeding programme on community representations of schools. *International Journal of Educational Development*, *41*, 292–300. <https://doi.org/10.1016/j.ijedudev.2014.07.013>

- Chon, Y. O., & Ahn, K. C. (2015). Applying the incrementalism model to the free school meals policy in Korea. *International Review of Public Administration*, 20(2), 194–207. <https://doi.org/10.1080/12294659.2015.1013519>
- Cornish, D., Askelson, N., & Golembiewski, E. (2016). “Reforms looked really good on paper”: Rural food service responses to the Healthy, Hunger-Free Kids Act of 2010. *Journal of School Health*, 86(2), 113–120. <https://doi.org/10.1111/josh.12356>
- de Amorim, A. L. B., Dalio dos Santos, R., Ribeiro Junior, J. R. S., Canella, D. S., & Bandoni, D. H. (2022). The contribution of school meals to food security among households with children and adolescents in Brazil. *Nutrition*, 93. <https://doi.org/10.1016/j.nut.2021.111502>
- Elliott, V., & Hore, B. (2016). ‘Right nutrition, right values’: The construction of food, youth and morality in the UK government 2010–2014. *Cambridge Journal of Education*, 46(2), 177–193. <https://doi.org/10.1080/0305764X.2016.1158785>
- Farris, A. R., Mann, G., Parks, J., Arrowood, J., Roy, M., & Misyak, S. (2021). School nutrition director perceptions of flexible regulations for school nutrition programs in one southeastern state. *Journal of School Health*, 91(4), 298–306. <https://doi.org/10.1111/josh.13002>
- Fatimah, S., Rasyid, A., & Arwakon, H. O. (2024). Kebijakan makan bergizi gratis di Indonesia Timur: Tantangan, implementasi, dan solusi untuk ketahanan pangan. *Kebijakan Makan Bergizi Gratis di Indonesia Timur*, 4(1), 14–21.
- Fernandes, M., Folson, G., Aurino, E., & Gelli, A. (2017). A free lunch or a walk back home? The school food environment and dietary behaviours among children and adolescents in Ghana. *Food Security*, 9(5), 1073–1090. <https://doi.org/10.1007/s12571-017-0712-0>
- Gorard, S. (2022). What is the evidence on the impact of pupil premium funding on school intakes and attainment by age 16 in England? *British Educational Research Journal*, 48(3), 446–468. <https://doi.org/10.1002/berj.3775>
- Ghonyiah, N., Hartono, S., & Sobari, A. (2019). The role OF CSR and SCM patterned partnership IN promoting the role OF SMES as beneficiaries OF CSR to local economy. *International Journal of Organizational Innovation (Online)*, 12(2), 240–254.
- Green, F., Allen, R., & Jenkins, A. (2015). Are English free schools socially selective? A quantitative analysis. *British Educational Research Journal*, 41(6), 907–924. <https://doi.org/10.1002/berj.3190>
- Han, J., & Rothbart, M. W. (2025). Administrative burden in the cafeteria: Evidence from school meal participation in shared buildings. *American Review of Public Administration*, 55(2), 128–153. <https://doi.org/10.1177/02750740241292073>
- Hecht, A. A., Neff, R. A., Kelley, T. L., & Porter, K. M. P. (2021). Universal free school meals through the community eligibility provision: Maryland food service provider perspectives. *Journal of Agriculture, Food Systems, and Community Development*, 10(2), 529–550. <https://doi.org/10.5304/jafscd.2021.102.033>
- Huang, J., & Barnidge, E. (2016). Low-income children’s participation in the national school lunch program and household food insufficiency. *Social Science and Medicine*, 150, 8–14. <https://doi.org/10.1016/j.socscimed.2015.12.020>
- Huang, J., Kim, Y., & Barnidge, E. (2016). Seasonal difference in national school lunch program participation and its impacts on household food security. *Health and Social Work*, 41(4), 235–243. <https://doi.org/10.1093/hsw/hlw043>
- Intan Rohma Nurmalasari, I. R. N., A Miftakhurohmat, A. M., Syarifa Ramadhani Nurbaya, S. R. N., Siti Halijah, S. H., & Fauziah Lamaya, F. L. (2025). Quality and Halal Urban Farming Assistance as an Effort to Make the MBG (Free Nutritious Meals) Program and Food Security a Success for the Aisyiyah Regional Leadership of East Nusa Tenggara Achieving Goals 2 of SDGs 2030 Indonesia. *Quality and Halal Urban*

- Farming Assistance as an Effort to Make the MBG (Free Nutritious Meals) Program and Food Security a Success for the Aisyiyah Regional Leadership of East Nusa Tenggara Achieving Goals 2 of SDGs 2030 Indonesia*, 2(03), 211–225.
- Jayaraman, R., & Simroth, D. (2015). The impact of school lunches on primary school enrollment: Evidence from India's midday meal scheme. *Scandinavian Journal of Economics*, 117(4), 1176–1203. <https://doi.org/10.1111/sjoe.12116>
- Kashyap, P., & Jablonski, B. B. R. (2025). Universal free school meals: Examining factors influencing adoption of the community eligibility provision. *Applied Economic Perspectives and Policy*, 47(1), 199–216. <https://doi.org/10.1002/aep.13460>
- Kemendes RI. (2025). *SSGI 2024: Prevalensi stunting nasional turun menjadi 19,8%*. Kemkes.Go.Id. <https://kemkes.go.id/id/ssgi-2024-prevalensi-stunting-nasional-turun-menjadi-198>
- Kementerian Kesehatan RI. (2024). *Perkembangan transformasi kebijakan kesehatan di Indonesia: Dari reformasi hingga pasca COVID, 1999–2023*. Badan Kebijakan Pembangunan Kesehatan Kementerian Kesehatan RI.
- Lyson, H. C. (2016). National policy and state dynamics: A state-level analysis of the factors influencing the prevalence of farm to school programs in the United States. *Food Policy*, 63, 23–35. <https://doi.org/10.1016/j.foodpol.2016.06.008>
- Mauludi, M., Alwi, A., & Alfiady, T. (2021). Evaluation Of Supplementary Feeding (Pmt) Program For Treatment Of Poor Nutrition To Children In North Aceh District. *International Journal Of Public Administration Studies*, 1(1), 30–37.
- Martinelli, S., Acciai, F., Au, L. E., Yedidia, M. J., & Ohri-Vachaspati, P. (2020). Parental perceptions of the nutritional quality of school meals and student meal participation: Before and after the Healthy Hunger-Free Kids Act. *Journal of Nutrition Education and Behavior*, 52(11), 1018–1025. <https://doi.org/10.1016/j.jneb.2020.05.003>
- Martinez, P., de Lourdes Saturnino Gomes, M., & Marini, F. S. (2023). Public policies strengthen the relationship between family farming and food security in Brazilian schools – A case study of Paraíba state. *Heliyon*, 9(10). <https://doi.org/10.1016/j.heliyon.2023.e20482>
- Merlinda, A. A., & Yusmar, Y. (2025). Analisis program makan gratis Prabowo Subianto terhadap strategi peningkatan motivasi belajar siswa di sekolah tinjauan dari perspektif sosiologi pendidikan. *Ranah Research: Journal of Multidisciplinary Research and Development*, 7(2), 1364–1373. <https://doi.org/10.38035/rj.v7i2.1360>
- Moreland-Russell, S., Zimmermann, N., Gannon, J., Ferris, D., Alba, C., & Jacob, R. R. (2025). “Salt and eat it or no salt and trash it?” Shifts in support for school meal program flexibilities in public comments. *Nutrients*, 17(5). <https://doi.org/10.3390/nu17050839>
- Morris, K. (2024). Young and hungry: School meal policies and children's right to food in the UK and Ireland. *International Journal of Children's Rights*, 32(2), 354–379. <https://doi.org/10.1163/15718182-32020003>
- Muktarbek kyzy, A. (2019). School attendance: Demographic differences and the effect of a primary school meal programme in Kyrgyzstan. *Educational Research and Evaluation*, 25(7–8), 381–411. <https://doi.org/10.1080/13803611.2020.1862677>
- Nur, A. (2025). Effectiveness of Providing Local Food-Based Supplementary Food on Toddler Nutritional Status: A Review. *Journal of Health Science and Pharmacy*, 2(2), 245–251.
- Novi Safitri, R., & Ayu Fitriana, D. (2022). *Peran penyediaan makanan tambahan anak sekolah (PMT-AS) terhadap status gizi anak*. <http://pps.unnes.ac.id/prodi/prosiding-pascasarjana-unnes/>
- Payán, D. D., Sloane, D. C., Illum, J., Farris, T., & Lewis, L. B. (2017). Perceived barriers and facilitators to healthy eating and school lunch meals among adolescents: A qualitative study. *American Journal of Health Behavior*, 41(5), 661–669.

<https://doi.org/10.5993/AJHB.41.5.15>

- Putri, K. Y. S., Fazli, L., Iskandar, I., Gumelar, G., & Pandjaitan, R. H. (2024). Analysis of the Agenda Setting Strategy Applied by Narasi TV's Creative Team towards the 2024 Presidential and Vice-Presidential Election Issue through Musyawarah Program. *Studies in Media and Communication*, 12(3), 115.
- Sutrisno, S., & Tunaerah, L. (2024). Jokowi's Political Communication: Utilizing Social Media in Winning Gibran as Vice President of Indonesia. *Communicatus: Jurnal Ilmu Komunikasi*, 8(2), 39–57.
- Soma, R. I., Azhar, A., & Uchiyama, T. (2024). Food preferences in Indonesian schoolchildren and the parents' perspectives on the upcoming nutritious free meal program. *E3S Web of Conferences*, 577, 1–12. <https://doi.org/10.1051/e3sconf/202457702004>
- Taylor, J., Garnett, B., Horton, M. A., & Farineau, G. (2020). Universal free school meal programs in Vermont show multi-domain benefits. *Journal of Hunger and Environmental Nutrition*, 15(6), 753–766. <https://doi.org/10.1080/19320248.2020.1727807>
- Vericker, T. C., Gearing, M. E., & Kim, S. D. (2019). Updated nutrition standards for school meals associated with improved weight outcomes for boys in elementary school. *Journal of School Health*, 89(11), 907–915. <https://doi.org/10.1111/josh.12828>
- Woodward, J., Sahota, P., Pike, J., & Molinari, R. (2015). Interventions to increase free school meal take-up. *Health Education*, 115(2), 197–213. <https://doi.org/10.1108/HE-08-2014-0083>
- Yesi, E., & Annur, M. F. (2025). The Influence of Nutritious Food Consumption Patterns in the Free Nutritional Meal Program (MBG) on the Mathematics Learning Achievement of Students at SDS Maniamas Ngabang. *Riemann: Research of Mathematics and Mathematics Education*, 7(2), 160–167.