

Toward Zero Hunger: National Strategies for Food Security in Indonesia

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Abstract

Indonesia's commitment to achieving Sustainable Development Goal 2 (Zero Hunger) is demonstrated through its evolving food security strategies and alignment with international development agendas. This study examines the extent to which national policies reflect SDG principles and identifies both enabling factors and persistent barriers to building sustainable food systems. Using qualitative document analysis of official policy documents, institutional reports, and academic literature, the research employs entitlement theory, the Sustainable Livelihoods Framework, and a rights-based approach to evaluate Indonesia's strategic direction. The findings suggest that while Indonesia's policy frameworks broadly align with global Zero Hunger commitments, challenges remain in implementation, coordination, and decentralization. Key enablers identified include fiscal decentralization mechanisms, the emergence of community-based food initiatives, and the promotion of climate-smart agricultural practices. Nevertheless, structural issues such as fragmented governance, uneven development of rural infrastructure, and insufficient capacity at local levels continue to obstruct progress. This study contributes to the discourse on SDG localization by offering a multidimensional analysis of food security policy in a complex governance setting. It also provides relevant insights for policymakers, development agencies, and practitioners aiming to strengthen food security in decentralized contexts and support the achievement of Zero Hunger by 2030.

Keywords

food security; zero hunger; SDGs; governance strategy

Introduction

Food security remains a critical global concern, especially for developing nations such as Indonesia, which faces a paradox as an agrarian country still grappling with food-related vulnerabilities. According to the Food and Agriculture Organization (FAO), food security exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food to meet dietary needs for an active and healthy

life (FAO, 2015). Indonesia, with its expansive agricultural land and significant population engaged in farming, continues to encounter recurring food insecurity driven by demographic pressures, land degradation, and economic inequality (World Bank, 2015). This incongruity underscores the urgency of strengthening food policies to align with Sustainable Development Goal 2 (Zero Hunger), a global commitment aimed at ending hunger and ensuring access to nutritious food by 2030 (UNDP, 2016).

From a theoretical standpoint, food security extends beyond production to encompass access, utilization, and stability, influenced by socio-economic and environmental dynamics (Maxwell & Smith, 1992, p. 15). Empirically, Indonesia's policies have often prioritized rice self-sufficiency over diversified nutrition or sustainability (Suryana, 2014, p. 48). These tendencies expose a policy gap that needs to be addressed through integrative, rights-based strategies. The Food Law No. 18/2012 marks a pivotal framework that emphasizes food sovereignty, but implementation remains fragmented due to coordination challenges and institutional inconsistencies (Badan Ketahanan Pangan, 2016).

At the intersection of agriculture, nutrition, and governance, Indonesia's path to food security is complex. Disparities across regions, particularly in eastern Indonesia, underscore the unevenness of policy impact. Rural infrastructure, logistical inefficiencies, and climate change vulnerabilities further complicate sustainable food access (BPS-Statistics Indonesia, 2016). Addressing these structural constraints requires coherent national strategies informed by evidence-based practices and inclusive governance mechanisms (OECD, 2015). Cross-sector collaboration, spanning agriculture, health, education, and environment, is essential to achieving long-term food security and Zero Hunger.

Globally, strategies promoting climate-resilient agriculture, local empowerment, and sustainable consumption are gaining traction (IFPRI, 2016). In Indonesia, similar efforts exist but are often underfunded or poorly integrated into national planning. For instance, food diversification programs and nutrition-sensitive agriculture have yet to achieve scale and equity (Rachman, 2016, p. 97). Lessons from comparative international experiences can serve as benchmarks for Indonesia's contextual adaptation. The urgency of these reforms is further amplified by increasing urbanization, shifting consumption patterns, and recurring food price volatility.

Given this context, the present study aims to assess Indonesia's early strategic steps toward food security and alignment with the Zero Hunger goal. Specifically, it investigates how national frameworks, institutional arrangements, and programmatic interventions interact to address hunger and malnutrition. This research is guided by three main questions: (1) How are Indonesia's national food security strategies aligned with the SDGs, particularly Zero Hunger? (2) What institutional and systemic barriers hinder effective implementation? (3) What are the critical success factors for achieving

sustainable food security in Indonesia? By addressing these questions, the study contributes to the policy discourse and offers recommendations for strengthening Indonesia's approach to food governance and sustainable development.

Literature Review

The concept of food security has evolved from a focus on availability to encompass accessibility, utilization, and stability, as outlined by the FAO (2015). Scholars have highlighted that these four dimensions are interdependent and collectively determine a country's resilience against food crises (Maxwell & Smith, 1992, p. 22). In the Indonesian context, literature has pointed to persistent challenges in achieving food security due to demographic diversity, geographic dispersion, and economic inequality (Suryana, 2014, p. 35).

The foundational works of Amartya Sen emphasized the role of entitlements in food access, arguing that hunger often results from lack of purchasing power rather than food shortages per se (Sen, 1981, p. 45). This theoretical lens remains vital in understanding Indonesia's complex food security dynamics, especially among rural and marginalized populations.

Empirical studies have examined how national policies impact food systems in Indonesia. Research indicates that Indonesia's rice-centric agricultural policy has skewed investments and neglected more nutritious and ecologically resilient crops (Badan Ketahanan Pangan, 2016). Others have critiqued the overemphasis on food self-sufficiency at the expense of food sovereignty and diversity (OECD, 2015).

Comparative analyses with countries such as Brazil and India show that social protection programs like conditional cash transfers and school feeding have been effective in enhancing food access and reducing malnutrition (IFPRI, 2016). However, Indonesia's decentralized governance structure poses implementation challenges, leading to fragmentation in food programs across regions (World Bank, 2015).

In addition to policy analysis, recent literature explores the role of innovation and community-based strategies in strengthening food systems. The adoption of climate-smart agriculture and sustainable intensification practices are gaining attention as key pathways to enhance productivity while preserving ecological balance (UNDP, 2016).

However, studies caution that without institutional capacity-building and equitable access to resources, such technologies may widen existing inequalities (Rachman, 2016, p. 102). This literature review reveals a need for integrated approaches that harmonize production, nutrition, and environmental goals. It also highlights a critical

gap in understanding how Indonesia's national strategies are operationalized at the local level to support Zero Hunger.

Theoretical Framework

The theoretical grounding of this study is informed primarily by the multidimensional concept of food security articulated by the FAO (2015), which includes availability, accessibility, utilization, and stability. These four pillars frame the analysis of national strategies by providing a comprehensive lens through which food systems can be evaluated. Availability addresses the sufficient supply of food through domestic production or imports; accessibility emphasizes both economic and physical access to food; utilization refers to the biological use of food through adequate diet, clean water, and healthcare; and stability captures the reliability of food access over time. This framework enables a nuanced exploration of Indonesia's policies across multiple domains (FAO, 2015).

Additionally, Amartya Sen's entitlement theory is essential in this analysis. Sen (1981, p. 45) postulates that hunger often results not from a lack of food supply but from individuals' inability to access it due to economic or social constraints. This theory is particularly relevant in the Indonesian context, where rural poverty and market failures restrict food access even when food is available. Entitlement failure, whether through lack of employment, land rights, or access to subsidies, serves as a conceptual foundation for evaluating equity and justice within national food policies (Sen, 1981, p. 47).

Another theoretical approach incorporated in this study is the Sustainable Livelihoods Framework (SLF), which considers how households use various assets, natural, financial, human, social, and physical, to construct livelihood strategies (Chambers & Conway, 1992, p. 21). The SLF is particularly useful for understanding the interaction between food security and rural development. It emphasizes the importance of institutional context and policy coherence in enabling or constraining food-secure livelihoods. In the Indonesian case, this framework supports the analysis of how policies interact with local capacities and vulnerabilities.

The rights-based approach to food, grounded in international human rights law, offers another relevant theoretical lens. This approach posits that access to adequate food is a fundamental human right, requiring states to respect, protect, and fulfill this right through appropriate legislation, governance, and accountability mechanisms (UN Committee on Economic, Social and Cultural Rights, 1999). For Indonesia, which has ratified key international agreements and embedded food rights in national law (e.g.,

Food Law No. 18/2012), this framework enables an evaluative analysis of state obligations and citizen entitlements.

Finally, policy implementation theory, particularly the top-down and bottom-up dichotomy, offers insights into how food security strategies unfold in practice. The top-down approach emphasizes centralized planning and directive governance, often evident in national policy frameworks, while the bottom-up perspective underscores the role of local actors, contextual adaptation, and participatory mechanisms (Sabatier & Mazmanian, 1980, p. 15). Given Indonesia's decentralized governance, this duality is crucial for understanding the divergence between policy formulation and on-ground execution. These theoretical foundations collectively inform the analytical lens of this research.

Previous Research

Early studies on food security in Indonesia by Timmer (2004) highlighted the country's focus on rice self-sufficiency as a central pillar of national food strategy. Using macroeconomic modeling, Timmer examined the impact of agricultural price stabilization on poverty and food access, concluding that stable rice prices were critical for both rural livelihoods and urban consumption. However, his analysis also cautioned against overdependence on rice to the neglect of other nutritional and agricultural needs. This work remains relevant in shaping national discourse on balancing food availability and diversification.

Suryana (2006, p. 33) expanded the conversation by analyzing institutional reforms in Indonesia's food policy landscape. He argued that food security could not be achieved through sectoral approaches alone but required inter-ministerial coordination and inclusive governance structures. His study, based on policy document reviews and expert interviews, emphasized the need for stronger horizontal integration across the agriculture, health, and trade ministries. This perspective helped shift attention toward systemic constraints rather than purely technical solutions.

In 2009, Nasution conducted a regional analysis of food insecurity in eastern Indonesia. Utilizing GIS-based vulnerability mapping and socioeconomic indicators, the study found stark disparities in food access between Java and the outer islands, largely due to logistical barriers and infrastructure deficits. The research underscored the geographic inequality in food distribution and the urgent need for targeted regional policies (Nasution, 2009, p. 56). This empirical evidence helped justify decentralization and area-specific interventions in national planning.

The World Bank (2012) examined food price volatility and its impact on poverty in Indonesia. Through econometric modeling of consumer price indices and household surveys, the study revealed that low-income households are disproportionately affected by spikes in staple food prices, especially rice. It recommended the strengthening of social safety nets and diversification of food sources as key strategies. This research informed subsequent government programs like the Raskin (rice for the poor) initiative, although critiques about its targeting efficiency persisted.

Rachman (2014, p. 101) analyzed the effectiveness of food diversification campaigns aimed at reducing dependency on rice. His mixed-methods study showed limited behavioral change among consumers despite awareness programs, pointing to cultural preferences, price differentials, and inconsistent messaging. His findings demonstrated the complexity of shifting dietary patterns and the importance of aligning consumer incentives with national policy goals. The study contributed to discussions on nutrition-sensitive agriculture and demand-side interventions.

In 2016, the Indonesian Ministry of National Development Planning (Bappenas) published a comprehensive review of its SDG implementation, including progress on food security. The report highlighted gains in child nutrition, school feeding programs, and agricultural extension but also identified challenges such as weak local governance and fragmented data systems (Bappenas, 2016). This institutional review served as a benchmark for evaluating progress and recalibrating strategies toward achieving Zero Hunger.

Despite these valuable contributions, a clear gap remains in synthesizing Indonesia's food security strategies through an integrated framework that combines policy coherence, rights-based analysis, and implementation dynamics. Most studies focus on singular aspects, availability, nutrition, or governance, but fail to capture their interdependence. Furthermore, few link national strategies explicitly to the SDGs or evaluate their readiness for future climate and demographic pressures. This study addresses that gap by offering a holistic assessment of Indonesia's national strategies, their systemic barriers, and the conditions for sustainable success.

Research Methods

This study employs a qualitative research design utilizing textual and document-based data. The primary type of data includes policy texts, scholarly publications, institutional reports, and thematic studies related to food security and the SDGs. Textual data allows for an in-depth interpretative analysis of policy narratives, legal frameworks, and academic discourse, which is essential for understanding the multifaceted nature of food security strategies (Creswell, 2013, p. 45). Qualitative textual data is appropriate

for analyzing how national-level commitments are translated into operational actions and how they interact with global frameworks such as the SDGs (Patton, 2002, p. 34).

Data were sourced from a combination of international and Indonesian academic publications, government reports, and official institutional documents. Sources include reputable international journals, books, and publications from institutions such as the World Bank, United Nations agencies, and Indonesia's BPS-Statistics Indonesia and Bappenas.

These were selected based on their credibility, relevance to the research questions, and publication date (no later than 2016). Government reports such as the Bappenas SDG review and the Ministry of Agriculture's food resilience documentation provided critical insights into Indonesia's strategic orientation and implementation gaps (Bappenas, 2016; Badan Ketahanan Pangan, 2016).

The data collection technique primarily involved a systematic literature review and document analysis. Sources were identified using keyword searches related to "food security," "Zero Hunger," "Indonesia," and "SDGs" in academic databases and institutional repositories. Selected documents were assessed for reliability, conceptual relevance, and thematic resonance with the research objectives (Bowen, 2009). This approach ensured a comprehensive collection of secondary data reflecting multiple stakeholder perspectives, including government bodies, NGOs, and academia (Yin, 2014, p. 89).

The data analysis technique utilized in this study was thematic analysis, focusing on identifying patterns, narratives, and contradictions across the documents. Thematic analysis is effective for synthesizing qualitative data from diverse sources and allows the researcher to construct categories aligned with theoretical constructs such as food availability, accessibility, and governance (Braun & Clarke, 2006). Themes were developed deductively based on the research questions and theoretical framework, then refined inductively through iterative reading of the texts. This method supports the integration of theory and evidence, leading to richer interpretation.

Conclusion drawing was achieved through triangulation and synthesis of findings across themes. After categorizing the data into thematic groups, such as policy formulation, institutional roles, and regional disparities, each was analyzed for its contribution to the central research questions. Findings were cross-validated with theoretical assumptions and insights from previous research to ensure coherence and rigor. The analytical process culminated in identifying key success factors and challenges in Indonesia's food security strategy, highlighting implications for both theory and practice (Miles & Huberman, 1994, p. 278).

Results and Discussion

This study finds that Indonesia's strategic efforts toward achieving food security and Zero Hunger are deeply influenced by both structural challenges and policy innovations. The multidimensional food security framework (FAO, 2015), entitlement theory (Sen, 1981, p. 44), and sustainable livelihoods approach (Chambers & Conway, 1992, p. 21) all provide critical lenses for evaluating national strategies. However, the operationalization of these frameworks reveals fragmented implementation, especially at sub-national levels. Theoretical alignment is strong at the national policy level, but implementation inconsistencies hinder progress toward Zero Hunger.

The previous research highlights the dominance of rice in food policy (Timmer, 2004; Rachman, 2014, p. 101), regional disparities in infrastructure and access (Nasution, 2009, p. 56), and inadequate integration across sectors (Suryana, 2006, p. 33). This study builds on these findings by revealing how policy documents articulate inter-sectoral coordination, but empirical practices demonstrate weak institutional synergy. The dialogue between theoretical ideals and field realities underlines a persistent gap in operational effectiveness, confirming the need for decentralization with accountability.

This study also contributes new insights by synthesizing national strategies through a rights-based and systems-oriented lens. Notably, it introduces an integrated framework that identifies critical leverage points such as fiscal decentralization, community empowerment, and climate-adaptive practices. By doing so, it extends the policy implementation literature and offers a grounded perspective on Indonesia's readiness to meet the Zero Hunger goal. The following thematic subsections elaborate on these findings by addressing each research question in turn.

1. Institutional Coherence and SDG Alignment

This section addresses how Indonesia's national strategies align with the Sustainable Development Goals, particularly Zero Hunger. The Food Law No. 18/2012 explicitly commits to the realization of food sovereignty, food safety, and nutrition for all Indonesians, reflecting SDG principles (Badan Ketahanan Pangan, 2016). National development plans by Bappenas incorporate food and nutrition goals within broader poverty and inequality frameworks, showing strategic coherence with global targets (Bappenas, 2016). Yet alignment remains largely rhetorical unless backed by structured implementation and financing mechanisms.

Indonesia's strategy demonstrates partial alignment with SDG 2 indicators, particularly through programs targeting child stunting, food distribution, and agricultural productivity. However, gaps remain in dietary diversity, social inclusion, and sustainable consumption practices (World Bank, 2015). Programs such as the Special Effort for Increasing Paddy Production (UPSUS) show intent but are narrow in focus, missing broader food system transitions (Rachman, 2014, p. 100). The SDG mandate for inclusive, sustainable agriculture is only partially addressed.

Furthermore, SDG alignment requires multidimensional metrics beyond calorie availability. Indonesia's BPS data emphasize staple availability but underreport micro-nutrient adequacy or food stability across seasons (BPS-Statistics Indonesia, 2016). This study confirms that Indonesia's strategic documents are conceptually aligned with SDG 2 but require refinement in execution and monitoring. The lack of cross-sectoral budget coordination and standardized indicators inhibits full alignment.

The integrated analysis shows that while institutional planning documents, such as RPJMN 2015–2019, include food security as a cross-cutting issue, implementation tends to be siloed (OECD, 2015). This affects the comprehensiveness of SDG 2 responses. Moreover, rural and urban disparities in food access remain underaddressed, revealing institutional blind spots that contradict the universal aspirations of the SDGs (Nasution, 2009, p. 57). Indonesia's strategy must shift from policy alignment to performance alignment.

The findings suggest that an SDG-aligned strategy must be underpinned by political will, financial devolution, and institutional accountability. Alignment is not merely the presence of targets in national planning, but the integration of rights-based, inclusive principles into practice. The transition from aspirational to operational SDG integration remains Indonesia's central challenge.

2. Structural Barriers to Food Security Implementation

This section analyzes the systemic and institutional barriers that constrain the realization of food security in Indonesia. Despite having an elaborate policy framework, implementation is hindered by governance fragmentation and logistical inefficiencies (Suryana, 2006, p. 35). The decentralized political system, while promoting local autonomy, often leads to policy misalignment and duplication of roles between central and local governments (World Bank, 2012). Coordination deficits reduce the effectiveness of national food strategies.

The entitlements theory by Sen (1981, p. 47) highlights economic access as critical to food security. In Indonesia, food insecurity often stems not from scarcity but from lack of purchasing power and weak safety nets. Rural populations in remote areas face elevated food prices due to poor infrastructure, increasing economic vulnerability (Nasution, 2009, p. 58). This spatial inequality reflects a deeper structural imbalance in national development priorities.

Another key barrier is the over-centralization of food subsidies and logistics. Programs like Raskin, designed to support poor households, have been critiqued for leakage, misidentification, and inefficiency (Bappenas, 2016). Additionally, Indonesia's food logistics agency, BULOG, struggles to balance market stabilization with equitable food access, particularly during price shocks or climatic disruptions (Timmer, 2004).

Technocratic planning often neglects local knowledge and community participation. The Sustainable Livelihoods Framework emphasizes context-driven adaptation, yet Indonesia's agricultural extension services are not uniformly distributed, leaving marginalized farmers with limited access to innovation or credit (Chambers & Conway, 1992, p. 23). This asymmetry limits local resilience.

Moreover, environmental stressors like deforestation, water scarcity, and climate variability undermine long-term productivity (IFPRI, 2016). National plans acknowledge climate risks but operational readiness, such as early warning systems and disaster-responsive food storage, remains inadequate. These vulnerabilities demonstrate that food security cannot be achieved without integrating climate governance.

Addressing these structural challenges demands institutional strengthening, investment in infrastructure, and capacity-building at the local level. The findings stress that systemic reform, rather than isolated projects, is key to overcoming entrenched implementation barriers in Indonesia's food security landscape.

3. Enablers for Sustainable Food Security

This final subsection explores the critical success factors enabling Indonesia to advance its food security agenda sustainably. Among these, policy integration and inter-ministerial collaboration are vital. The existence of a cross-sectoral Food Security Council (DKP) provides a potential platform for harmonizing

agricultural, health, and trade policies, but its effectiveness varies across administrations (Badan Ketahanan Pangan, 2016). Ensuring consistent coordination mechanisms is foundational to success.

Community-based initiatives represent another enabler. Village-level food barns (*lumbung pangan*) and local food diversification efforts have shown promise when supported by capacity-building and funding (Rachman, 2014, p. 104). These localized solutions align with the Sustainable Livelihoods Framework and underscore the value of indigenous knowledge in promoting resilient food systems (Chambers & Conway, 1992, p. 26).

The study also identifies fiscal decentralization as a key determinant. Regions that allocate greater budgetary support to food security, particularly in eastern Indonesia, demonstrate better outcomes in stunting reduction and food access (Nasution, 2009, p. 59). Performance-based grants and incentives for local innovation can amplify this impact, creating virtuous cycles of accountability and results.

Capacity-building for agricultural extension agents and nutrition counselors enhances program quality. Indonesia's experience shows that when frontline workers are trained and incentivized, food and nutrition programs are more effectively delivered (World Bank, 2015). Continued investment in human capital development remains a critical enabler.

Lastly, climate-smart agriculture emerges as a forward-looking strategy that integrates sustainability and productivity. Programs promoting agroforestry, conservation agriculture, and water-saving technologies are still nascent but carry high transformative potential (IFPRI, 2016). Scaling these initiatives requires institutional support, private sector engagement, and research-based adaptation strategies.

In summary, enablers of sustainable food security in Indonesia include coherent governance, local empowerment, fiscal support, human capital investment, and ecological adaptation. These elements must be nurtured simultaneously to achieve Zero Hunger by 2030.

This study has undertaken a comprehensive and integrated analysis of Indonesia's national strategies in pursuit of food security and the realization of the Zero Hunger objective as outlined in the Sustainable Development Goals (SDGs). The research offers a detailed assessment of how national policies, legal frameworks, and institutional

mechanisms are positioned within the broader context of SDG 2, and how effectively they are being translated into measurable outcomes.

In addressing the first research question, the findings reveal that while Indonesia has formulated strategic frameworks, such as the Food Law No. 18/2012 and the National Medium-Term Development Plan (RPJMN), that demonstrate a conceptual alignment with the targets and ethos of SDG 2, the practical implementation of these strategies is often hindered by fragmented institutional arrangements, inconsistent policy execution across levels of government, and the absence of robust monitoring and evaluation mechanisms. The application of entitlement theory and the rights-based paradigm makes it clear that alignment in principle is insufficient; genuine progress requires systemic reforms that guarantee equitable access, inclusiveness, and institutional accountability to ensure no segment of the population is left behind.

In response to the second research question, the analysis highlights a set of entrenched structural impediments that continue to undermine Indonesia's food security agenda. These include the uneven outcomes of political and fiscal decentralization, which often result in policy disintegration and capacity gaps at the regional level, particularly in remote and underdeveloped provinces. Inadequate rural infrastructure, such as roads, storage facilities, and irrigation networks, exacerbates disparities in food distribution and market integration. Moreover, the study identifies weak intersectoral coordination between ministries, agencies, and local authorities as a persistent bottleneck that leads to overlapping mandates and inefficient resource utilization.

The absence of effective social safety nets further limits the ability of vulnerable communities to access sufficient, nutritious food. These systemic challenges are further intensified by environmental vulnerabilities, including climate change, land degradation, and biodiversity loss, which pose long-term risks to agricultural sustainability. Additionally, excessive centralization in food logistics and decision-making often stifles local innovation and responsiveness. By applying the Sustainable Livelihoods Framework, the study demonstrates how national-level policy deficits translate into livelihood insecurities at the grassroots level, thereby perpetuating cycles of vulnerability and exclusion.

With regard to the third research question, the study identifies a range of enabling conditions and success factors that could serve as viable pathways toward sustainable food security. Chief among these are effective inter-ministerial coordination mechanisms that facilitate policy coherence, harmonization of goals, and resource optimization. Empowering local communities through participatory planning, decentralized budgeting, and institutional support has also emerged as a critical factor for ensuring context-sensitive solutions and greater resilience. Fiscal decentralization,

when implemented with appropriate accountability structures, can enhance local ownership and innovation in food governance.

The promotion of agricultural innovation, particularly through the adoption of climate-smart technologies, sustainable farming methods, and value chain improvements, can significantly improve productivity and environmental outcomes. Furthermore, community-based success stories, such as village-level food barns and nutrition-sensitive farming initiatives, demonstrate the power of localized interventions and bottom-up engagement in reinforcing top-down strategic directions. These findings contribute substantively to global and regional discussions on food governance by positioning Indonesia as a revealing case study of a lower-middle-income nation navigating the complex interplay between global commitments and local realities within a decentralized and socio-economically diverse policy environment.

From a theoretical standpoint, this research enhances the scholarly literature on food security by weaving together frameworks rooted in human rights, entitlement theory, and systems thinking. It introduces an analytical model that not only interprets state intentions but also evaluates the functional capacity of institutions to deliver on those intentions effectively. This approach bridges the gap between normative policy objectives and operational dynamics. On a practical level, the study generates actionable insights and offers a set of informed recommendations tailored to policymakers, practitioners, and civil society actors.

These include the development of SDG-aligned performance indicators that are sensitive to local conditions, the strengthening of vertical and horizontal coordination across sectors and governance levels, and the prioritization of long-term capacity-building initiatives to support policy continuity and program sustainability.

For development agencies, multilateral organizations, and international donors, the study provides a valuable, evidence-based foundation for designing interventions and investment strategies that are aligned with both national priorities and global objectives. In essence, this research offers a nuanced and timely contribution to the endeavor of achieving Zero Hunger in Indonesia by combining empirical depth, theoretical rigor, and policy relevance.

Conclusion

In conclusion, this study has examined Indonesia's national strategies for food security through the lens of the Sustainable Development Goals, particularly the Zero Hunger target. It finds that while Indonesia's policy frameworks show strong alignment with global food security principles, significant gaps remain in implementation,

coordination, and inclusivity. The answers to the three research questions affirm that formal alignment with SDG 2 exists; however, systemic institutional barriers and uneven capacity across regions obstruct effective realization. Nevertheless, the study also identifies enabling conditions, such as decentralization, community empowerment, and climate-adaptive strategies, that can drive progress.

The theoretical contribution of this research lies in integrating entitlement theory, the Sustainable Livelihoods Framework, and the rights-based approach to assess both policy coherence and implementation dynamics. This multidimensional framework provides a deeper understanding of how national strategies can be evaluated and improved. The practical recommendations derived from the findings suggest that Indonesia must enhance governance coordination, invest in localized innovation, and build resilient food systems that prioritize equity and sustainability.

Future research should explore longitudinal assessments of food security outcomes across provinces and examine the role of digital and financial innovations in improving access and participation. As Indonesia continues its commitment to the 2030 Agenda, translating policy into equitable, resilient, and measurable outcomes will remain its most critical challenge and opportunity.

References

- Badan Ketahanan Pangan. (2016). *Strategi Ketahanan Pangan Nasional*. Jakarta: Kementerian Pertanian Republik Indonesia.
- Bappenas. (2016). *Roadmap SDGs Indonesia: National Action Plan 2016–2030*. Jakarta: Ministry of National Development Planning.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. <https://doi.org/10.3316/QRJ0902027>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- BPS-Statistics Indonesia. (2016). *Indikator Ketahanan Pangan*. Jakarta: BPS.
- Chambers, R., & Conway, G. (1992). *Sustainable rural livelihoods: Practical concepts for the 21st century* (IDS Discussion Paper No. 296, p. 21–26). Brighton: Institute of Development Studies.

- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- FAO. (2015). *The State of Food Insecurity in the World: Meeting the 2015 international hunger targets: taking stock of uneven progress*. Rome: FAO.
<https://doi.org/10.18356/32d02733-en>
- IFPRI. (2016). *Global Food Policy Report 2016*. Washington, DC: International Food Policy Research Institute. <https://doi.org/10.2499/9780896295827>
- Maxwell, S., & Smith, M. (1992). Household food security: A conceptual review. *IDS Working Paper No. 19*. Brighton: Institute of Development Studies.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Nasution, R. (2009). *Regional vulnerability and food security mapping in eastern Indonesia* (Master's thesis, Universitas Gadjah Mada, p. 56–59).
- OECD. (2015). *OECD Review of Agricultural Policies: Indonesia 2015*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264233874-en>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed., p. 34). Thousand Oaks, CA: Sage Publications.
- Rachman, B. (2014). *Kebijakan Diversifikasi Pangan dan Tantangan Perubahan Pola Konsumsi Masyarakat Indonesia* (p. 97–104). Bogor: IPB Press.
- Sabatier, P. A., & Mazmanian, D. A. (1980). The implementation of public policy: A framework of analysis. *Policy Studies Journal*, 8(4), 538–560.
<https://doi.org/10.1111/j.1541-0072.1980.tb01266.x>
- Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford: Clarendon Press.
- Suryana, A. (2006). *Pembangunan Ketahanan Pangan Berkelanjutan: Tantangan dan Strategi*. Jakarta: IPB Press.
- Suryana, A. (2014). *Kebijakan Pangan Indonesia: Menjawab Tantangan Ketahanan dan Kedaulatan Pangan*. Bogor: IPB Press.
- Timmer, C. P. (2004). Food security in Indonesia: Current challenges and the long-run outlook. *Center for Global Development Working Paper No. 48*.
<https://doi.org/10.2139/ssrn.880282>

UN Committee on Economic, Social and Cultural Rights. (1999). *General Comment No. 12: The Right to Adequate Food (Article 11)*. Geneva: United Nations.

UNDP. (2016). *Human Development Report 2016: Human Development for Everyone*. New York: United Nations Development Programme.

World Bank. (2012). *Indonesia: Food price volatility and poverty reduction*. Washington, DC: World Bank. <https://doi.org/10.1596/9780821389432>

World Bank. (2015). *Indonesia Economic Quarterly: Reforming amid uncertainty*. Washington, DC: World Bank.

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications.