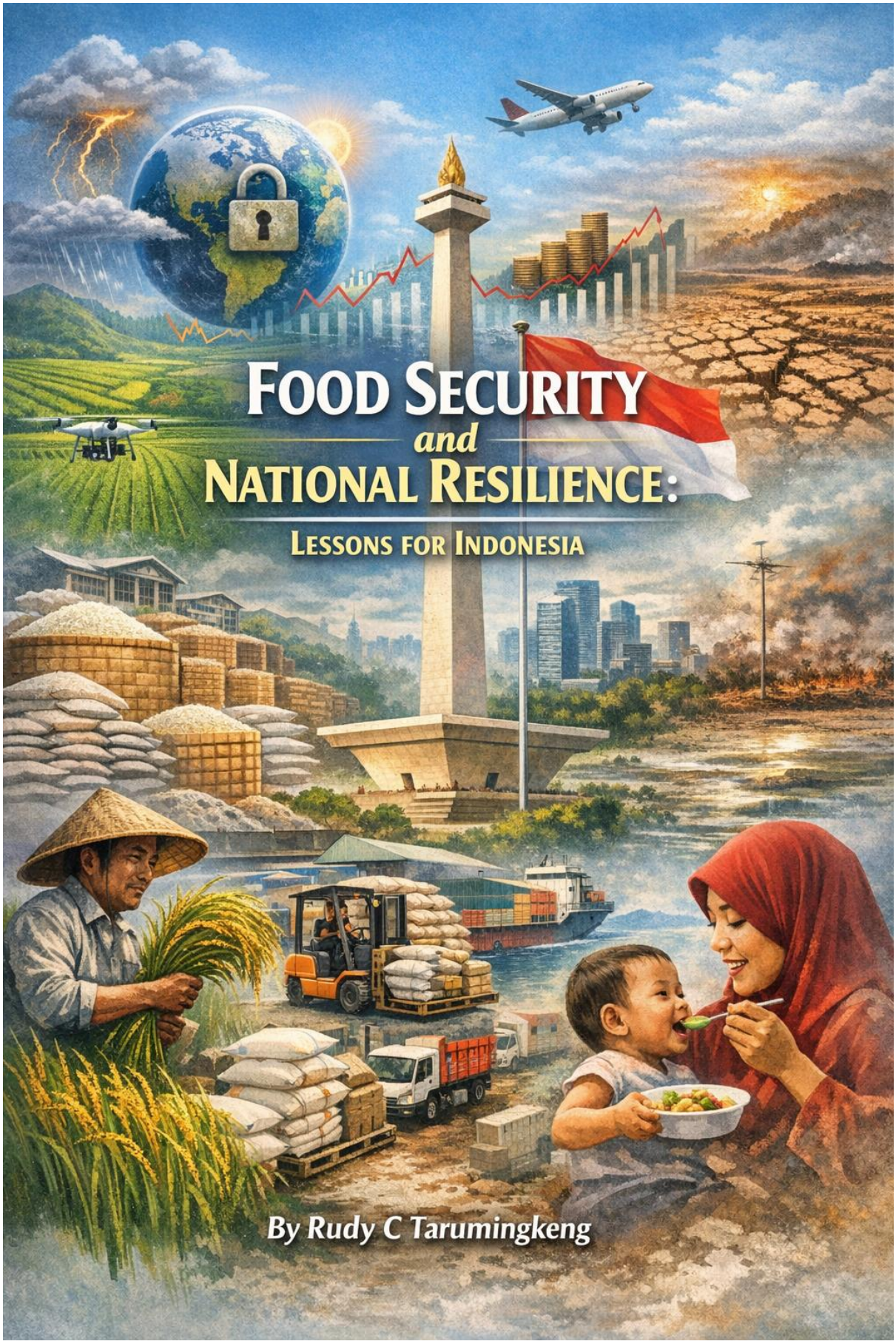
FOOD SECURITY
and
NATIONAL RESILIENCE:
LESSONS FOR INDONESIA
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FOOD SECURITY AND NATIONAL RESILIENCE: LESSONS FOR INDONESIA

Introduction

Food security is no longer a narrowly agricultural concern. It has become a core question of national resilience, because a country's ability to secure food shapes its economic stability, social cohesion, public health, political legitimacy, and strategic autonomy. The World Bank, drawing on the 1996 World Food Summit definition, describes food security as a condition in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs for an active and healthy life. That definition rests on four pillars: availability, access, utilization, and stability. In practice, this means that a nation is not food secure merely because it harvests enough rice or maize. It must also ensure that households can afford food, that diets are nutritionally adequate, and that the system can withstand shocks over time. (World Bank)

This broader understanding matters because the global food environment has become more unstable. The 2025 edition of *The State of Food Security and Nutrition in the World* reports that about 673 million people faced hunger in 2024, around 2.3 billion experienced moderate or severe food insecurity, and high food-price inflation has undermined purchasing power and access to healthy diets, especially among low-income groups. The same year, the World Food Programme reported

that more than 295 million people across 53 countries and territories faced acute hunger, driven by conflict, economic shocks, climate extremes, and forced displacement. These are not isolated humanitarian statistics. They show that food insecurity is increasingly bound up with the world's deepest structural risks. (FAOHome)

For Indonesia, the issue is especially important. Indonesia is a large archipelagic country with significant agricultural capacity, a huge domestic market, marked regional disparities, and persistent vulnerabilities in nutrition and rural welfare. It has reasons for optimism: official statistics show that rice production for food consumption rose significantly in 2025, poverty declined in September 2025, and stunting fell to 19.8 percent in 2024. Yet food insecurity cannot be assessed from production gains alone. Inflation remained elevated in early 2026, rural poverty was still substantially higher than urban poverty, and food policy continued to depend on active stabilization measures. Indonesia thus presents a revealing case: a country with improving agricultural output, but still confronted by the classic challenge of converting production into affordable, nutritious, and stable access for all households. (Badan Pusat Statistik Indonesia)

This essay argues that food security should be understood as a pillar of national resilience, and that Indonesia can draw several lessons from current global and domestic conditions. The core lesson is that food policy must move beyond a narrow emphasis on output toward a systems perspective that integrates production, logistics, climate adaptation, nutrition, social protection, and governance. Indonesia does not need only more food. It needs a more resilient food system. (World Bank)

Food Security as a Dimension of National Resilience

National resilience is often discussed in terms of defense, energy, fiscal stability, and institutional strength. Yet food security belongs at the

center of this concept because food is the most immediate link between macro-level shocks and daily life. A household can postpone the purchase of furniture, electronics, or travel. It cannot postpone eating. When food systems fail, the consequences are transmitted quickly into household welfare, labor productivity, political frustration, and human development. That is why food insecurity is not only a welfare problem. It is a resilience problem. (World Bank)

The connection between food security and resilience can be seen clearly through the four dimensions of food security. Availability relates to whether food physically exists in sufficient quantities through production, imports, and reserves. Access concerns whether people can actually obtain it through income, markets, and distribution. Utilization addresses whether food translates into health and nutrition. Stability requires that all three dimensions remain intact over time, including under conditions of stress. A nation may succeed on one dimension and fail on others. A bumper harvest may coexist with high market prices. Full warehouses may coexist with child malnutrition. A stable year may be followed by severe disruption after one flood, drought, or trade shock. Resilience enters precisely at this point: food security is truly achieved only when systems continue to function under pressure. (World Bank)

This is why food security must be understood as both an outcome and a capacity. It is an outcome in the sense that people must actually eat enough, eat safely, and eat nutritiously. But it is also a capacity because the state, market, and society must be able to absorb shocks, reallocate supply, protect the vulnerable, and prevent temporary stress from turning into structural crisis. In this sense, food security is analogous to financial resilience or energy resilience: the question is not only whether the system works in good times, but whether it continues to work in bad times. (World Bank)

For Indonesia, this framework is especially useful because the country is often evaluated through aggregate indicators such as national rice output or total inflation, while the lived experience of food security is regional, household-based, and uneven. A national average can hide major vulnerability in remote islands, low-income urban neighborhoods, and poorer rural districts. National resilience therefore requires not only national adequacy but territorial and social inclusion. (Badan Pusat Statistik Indonesia)

The Global Food Context: Why the World Is Less Secure Than It Appears

The contemporary global food system is under strain not because the world has stopped producing food, but because it has become more exposed to compound shocks. FAO's 2025 food security report makes this point indirectly by emphasizing not only hunger levels, but also the effect of high food-price inflation on affordability and nutrition. Even where aggregate supply exists, elevated prices can push millions of households out of access to healthy diets. The World Bank's food-price-for-nutrition data reinforces this by estimating that the average global cost of a healthy diet reached $4.46 per person per day in 2024 and that around 2.6 billion people still could not afford such a diet. The challenge, then, is not simply calories. It is the affordability of nutrition. (FAOHome)

This distinction is crucial for understanding resilience. A food system may still provide cheap staples while failing to provide protein, vegetables, fruit, and other nutritionally necessary foods at prices low-income households can manage. In that case, hunger may decline while malnutrition persists. A society may avoid famine yet still experience weakened human capital. Children may eat enough to survive but not enough to thrive. This has long-term implications for learning, labor productivity, and national development. (FAOHome)

The global picture is further worsened by acute crises. The WFP's 2025 *Global Report on Food Crises* found that acute hunger increased again in 2024, affecting more than 295 million people. Conflict remained a major driver, but not the only one. Economic shocks, climate extremes, and forced displacement interacted in fragile settings, pushing populations deeper into insecurity. The significance of this for countries outside active war zones is often underestimated. Even states not directly affected by conflict may feel the consequences through supply chains, commodity markets, shipping routes, fertilizer prices, and geopolitical uncertainty. Global crises today are transmitted through dense interdependence. (World Food Programme)

Climate change adds a deeper layer of structural instability. The World Meteorological Organization confirmed in January 2026 that 2025 was one of the warmest years on record and that high land and ocean temperatures helped drive heatwaves, heavy rainfall, and intense tropical cyclones. This matters for food systems because agriculture remains profoundly climate-sensitive, even when technologically advanced. Weather shocks reduce yields, damage transport infrastructure, affect fish stocks, raise insurance costs, and generate price spikes. Climate change therefore transforms food security from a cyclical issue into a structural one. (World Meteorological Organization)

In sum, the global lesson is sobering. The world does not face only a production problem. It faces a resilience problem rooted in affordability, nutrition, conflict, climate, and system fragility. Countries that continue to think of food security in terms of output alone will remain exposed to crises they cannot fully explain, let alone manage. (FAOHome)

Indonesia's Position: Strengths and Structural Vulnerabilities

Indonesia enters this difficult global landscape with a mixed but significant position. On the positive side, national food production improved meaningfully in 2025. According to BPS, harvested paddy area

reached about 11.32 million hectares and paddy production reached 60.21 million tons of dry unhusked rice, with rice production for population food consumption rising to 34.69 million tons. These are important gains because they strengthen the supply base, support the possibility of larger public reserves, and reduce pressure for emergency imports. They also show that Indonesia still has considerable domestic production capacity when conditions and policies align. (World Bank)

Indonesia has also made progress on social indicators relevant to food resilience. BPS reported that the poverty rate fell to 8.25 percent in September 2025, with the total number of poor people declining to 23.36 million. The Ministry of Health reported that national stunting fell to 19.8 percent in 2024. These are meaningful improvements, and they suggest that broader development and nutrition interventions are producing results. A more resilient food system can build upon these gains. (Badan Pusat Statistik Indonesia)

Yet the vulnerabilities remain substantial. The first is price sensitivity. BPS recorded year-on-year inflation of 4.76 percent in February 2026, while Bank Indonesia emphasized that national inflation rose to 3.55 percent in January 2026, driven especially by volatile food prices. This shows that food remains a central determinant of macroeconomic stability and household welfare. Even when annual production is up, seasonal bottlenecks, distribution issues, and regional supply stress can still translate into price pressure. Food security in Indonesia is therefore not just about how much is harvested, but how smoothly harvests are translated into stable prices across space and time. (Bank Indonesia)

The second vulnerability is rural fragility. While poverty declined overall, rural poverty remained markedly higher than urban poverty in September 2025. This means many of the households producing food are themselves more vulnerable than urban consumers. Such a pattern matters because national resilience depends on the resilience of

producers. A country cannot sustainably build food security on a base of farmers, fishers, and rural workers whose own livelihoods remain precarious. If producers are undercapitalized, underprotected, and poorly connected to markets, then improvements in national output may remain fragile. (Badan Pusat Statistik Indonesia)

The third vulnerability lies in the gap between staple sufficiency and nutritional quality. The stunting decline is encouraging, but a 19.8 percent rate still indicates major deficits in nutrition, maternal and child health, and household diet quality. Food security cannot be considered complete when large shares of children still suffer from chronic undernutrition. Indonesia therefore confronts a dual challenge: preserving macro food stability while also shifting toward healthier, more diverse diets. This is especially important because the world's affordability challenge now centers increasingly on nutritious diets rather than raw calorie sufficiency. (Kementerian Kesehatan Republik Indonesia)

Finally, Indonesia remains vulnerable to climate and logistical asymmetry. As an archipelago with highly varied regional ecologies, it experiences food security not as one system but as many interconnected sub-systems. A national surplus can coexist with local scarcity; a good harvest in one region does not automatically lower prices elsewhere. That is why Indonesia's food security problem is not only a production problem. It is a systems coordination problem. (Bank Indonesia)

Food Security and Economic Resilience

One of the clearest lessons for Indonesia is that food security is indispensable to economic resilience. The first reason is inflation. Food prices exert disproportionate influence on household expenditure, especially for the poor. When food inflation rises, it compresses real incomes, weakens demand for non-food essentials such as education and health, and complicates monetary stabilization. Bank Indonesia's emphasis on volatile-food inflation and its launch of GPIPS in February

2026 are clear acknowledgments that food inflation is not a sectoral issue but a macroeconomic one. (Bank Indonesia)

The second reason is productivity. Poor nutrition reduces cognitive performance, labor productivity, and health outcomes. A food-insecure population is not only less well-fed; it is less able to sustain high-quality human capital. This matters profoundly for Indonesia, which aspires to accelerate development through demographic advantage and rising labor-force capability. If food systems fail to deliver affordable nutrition, the costs are paid not only in hardship today but in lower national productivity tomorrow. The significance of stunting data in this context is obvious: nutrition is part of economic resilience. (Kementerian Kesehatan Republik Indonesia)

The third reason is fiscal and external resilience. Countries with stronger domestic food systems have more policy space when global markets become volatile. They are less likely to resort to emergency imports at unfavorable prices, less vulnerable to sudden trade disruptions, and better able to use public reserves strategically rather than desperately. Indonesia's stronger rice production in 2025 and the policy focus on public food reserves provide useful evidence that domestic capacity matters. But capacity must be sustained and institutionally managed; otherwise production improvements offer only temporary protection. (World Bank)

A final economic lesson is that food resilience should be seen as part of industrial and infrastructure policy, not apart from it. Storage, transport, irrigation, weather services, data systems, and market integration all have clear economic returns because they reduce volatility and improve allocative efficiency. Indonesia's policy discourse has increasingly recognized this. Bappenas has framed food security in the RPJMN 2025–2029 as linked to human resource quality, poverty reduction, and nutrition. This is the correct direction: food policy should be embedded

in development strategy, not treated as a residual agricultural matter. (Bappenas)

Food Security and Social Resilience

Food security matters just as deeply for social resilience. A society's cohesion is difficult to sustain when large numbers of households feel insecure about basic necessities. Food insecurity amplifies anxiety, weakens trust in institutions, and heightens the sensitivity of politics. This is especially true when prices rise sharply and governments appear unable to respond. In such circumstances, food is not perceived merely as an economic variable; it becomes a symbol of fairness, competence, and state presence. (World Food Programme)

Social resilience also depends on the protection of vulnerable groups. The burden of food insecurity falls unevenly: poor households, women, children, and rural communities often suffer first and longest. FAO's recent reporting emphasizes that food insecurity remains higher in rural areas and among women globally. Indonesia's own rural poverty pattern is consistent with that broader lesson. This means that national food security must be judged not only by averages but by how the system treats those most exposed to shocks. Averages can improve even while vulnerable populations remain trapped. (The World Bank Docs)

Nutrition is a central link between food security and social resilience. Stunting is not simply a health outcome. It reflects deeper questions of inequality, maternal care, sanitation, education, and household purchasing power. The reduction of Indonesia's stunting rate below 20 percent is historically important, but it should not be read as a signal to relax. Rather, it shows that coordinated interventions can work and that resilience improves when food, health, and social policy are linked. The social lesson here is straightforward: food policy that ignores nutrition is incomplete. (Kementerian Kesehatan Republik Indonesia)

There is also a territorial dimension to social resilience. In a large archipelago, food disparities across provinces and islands can reinforce broader perceptions of exclusion. If some areas face chronic price instability or weaker access to nutritious foods, the effect is not only economic but political and social. Food systems therefore contribute to national integration. The ability to connect surplus regions to deficit regions and maintain reasonable price parity across space is part of building a coherent national community. (Bank Indonesia)

Lessons for Indonesia

Lesson One: Move from Commodity Thinking to System Thinking

The first lesson is that Indonesia must continue moving from commodity thinking to system thinking. Commodity thinking asks whether rice output is sufficient. System thinking asks whether the full chain from production to nutrition is functioning effectively. It examines transport, storage, reserve management, digital data, public communication, regional equity, and affordability of healthy diets. Bappenas's recent framing of food security in the RPJMN and its call to strengthen strategy through collaboration already points in this direction. The challenge is implementation. (Bappenas)

System thinking matters because single-point solutions rarely work in compound crises. Increasing output helps, but not if distribution fails. Releasing public stocks helps, but not if data are poor and targeting is slow. Nutrition campaigns help, but not if healthy foods remain unaffordable. Food resilience emerges when these parts reinforce one another. Indonesia's policy evolution suggests growing awareness of this, but the transformation needs to deepen across ministries and regions. (World Bank)

Lesson Two: Strengthen Distribution and Regional Connectivity

The second lesson is that national production gains must be matched by strong regional distribution systems. In an archipelagic country, logistics is not a supporting issue; it is a core food-security issue. Bank Indonesia's GPIPS explicitly emphasizes distribution and regional connectivity because inflation often arises not from national scarcity but from local bottlenecks and geographic asymmetry. This is an important policy insight. It means roads, ports, warehousing, cold chains, digital tracking, and interregional coordination are food-security infrastructure. (Bank Indonesia)

Indonesia's food strategy would become more resilient if regional food balance data were updated more rapidly and linked to logistics decision-making. Surplus regions should not merely produce; they should be institutionally connected to deficit regions through predictable mechanisms. This is especially important for perishables and nutritious foods, not only rice. If healthy diets remain geographically uneven, nutrition inequality will persist even when staple supply improves. (World Bank)

Lesson Three: Treat Nutrition as a Core Security Goal

The third lesson is that food security should be measured not only through staple availability but through nutritional adequacy. The world's food challenge is increasingly the affordability of healthy diets. Indonesia cannot define success solely as rice stability. It must also improve access to proteins, vegetables, fruits, and diversified local foods. The decline in stunting is encouraging precisely because it suggests nutrition-sensitive policy works. But it also underscores how much remains to be done. (World Bank)

This has practical implications. School feeding, maternal nutrition, food fortification, rural market integration, and nutrition education should not be treated as parallel social programs detached from food policy. They are part of food security itself. Bappenas's emphasis on the Makan

Bergizi Gratis program in the RPJMN is significant in this respect. It reflects a shift toward seeing food policy as an input into national human capital rather than a narrow commodity problem. (Bappenas)

Lesson Four: Build Climate-Resilient Food Systems

The fourth lesson is that Indonesia must embed climate adaptation inside food strategy, not alongside it. The evidence from WMO and the broader climate literature is clear: temperature trends and extreme weather are already altering the conditions of food production and distribution. For Indonesia, with its exposure to floods, droughts, and changing rainfall patterns, climate resilience must become part of routine food policy. (World Meteorological Organization)

This means more than general awareness. It requires better seed systems, more resilient irrigation, stronger extension services, more localized climate information, insurance and risk-sharing instruments, and public investment in adaptation. The World Bank's climate-smart agriculture framework for Indonesia provides a useful policy direction by linking productivity, resilience, and mitigation. The lesson is not that Indonesia should pursue climate policy separately from food policy. Rather, food policy itself must become climate policy in operational form. (World Bank)

Lesson Five: Protect Producers as Well as Consumers

The fifth lesson is that national resilience depends on the resilience of producers. Much food debate focuses, understandably, on consumer prices. But a system cannot remain strong if those who produce food remain economically insecure. Indonesia's rural poverty rates make this point sharply. A food strategy that lowers prices but leaves farmers vulnerable may offer short-term political relief while undermining long-term supply resilience. (Badan Pusat Statistik Indonesia)

The policy implication is balance. Indonesia needs mechanisms that stabilize consumer markets without crushing farm incentives. This involves productivity gains, lower logistics costs, better market access, public procurement that does not distort excessively, and targeted support that reaches smallholders. Food resilience is not built by choosing between farmers and consumers. It is built by improving the system so that the tension between them is reduced. (World Bank)

Lesson Six: Use Public Reserves Strategically, Not Reactively

The sixth lesson is that public food reserves matter, but their value depends on governance. Reserves are not simply piles of grain. They are instruments of confidence, timing, and stabilization. Indonesia's stronger production base improves the credibility of reserve policy, but reserves are effective only when supported by good information, release mechanisms, logistics, and communication. (World Bank)

A reactive reserve policy waits for panic and then intervenes. A strategic reserve policy monitors seasonal risk, regional disparity, and consumption patterns and acts before instability becomes self-reinforcing. The latter approach fits the logic of resilience. It is less dramatic, but more effective. Indonesia's policy architecture is moving in this direction, but the lesson is that reserve management must become more predictive and data-driven over time. (Bank Indonesia)

Lesson Seven: Integrate Food Security with Social Protection

The seventh lesson is that social protection should be seen as part of food security, not as an emergency add-on. When food inflation rises, poor households cannot wait for production cycles to improve. They need immediate support to preserve consumption, nutrition, and household stability. The global evidence on food affordability, and Indonesia's ongoing poverty burden, both point to the importance of automatic stabilizers. (World Bank)

This implies that food assistance, nutrition transfers, targeted subsidies, and related measures should be designed as built-in resilience instruments. When linked to up-to-date poverty and nutrition data, they can prevent temporary food shocks from causing long-term damage in child development, schooling, and asset depletion. This is one of the clearest ways to convert food policy from reactive management to resilience architecture. (Badan Pusat Statistik Indonesia)

Conclusion

Food security is best understood as a foundation of national resilience because it sits at the intersection of economics, health, social order, and state capacity. The global picture is clear: hunger remains widespread, acute food crises are intensifying in fragile regions, healthy diets remain unaffordable for billions, and climate volatility is increasing. These are not temporary disturbances around an otherwise stable system. They are signals that food systems everywhere are being tested. (FAOHome)

Indonesia enters this era with meaningful strengths, including improved rice production, lower poverty than before, and reduced stunting. But these gains should not produce complacency. Inflation remains sensitive to food pressures, rural producers remain vulnerable, and nutrition still lags behind staple stability. Indonesia's challenge, therefore, is not merely to produce more food, but to build a system able to absorb shocks, distribute food fairly, keep prices reasonably stable, and improve diet quality. (World Bank)

The central lesson is that food policy must become system policy. Production matters, but so do logistics, reserves, healthy diets, rural welfare, climate adaptation, and social protection. If Indonesia can integrate these elements more effectively, food security can become one of its strongest pillars of resilience. If it cannot, then future crises—whether climatic, geopolitical, or economic—will continue to expose the

country's vulnerabilities in the most immediate and politically sensitive way possible: through the food on people's tables. (World Bank)

JOURNAL-STYLE PAPER

FOOD SECURITY AND NATIONAL RESILIENCE: LESSONS FOR INDONESIA

Abstract

This paper examines food security as a core pillar of national resilience and draws policy lessons for Indonesia from recent global and domestic developments. The argument begins from the widely used definition of food security as a condition in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food, and from the four-dimensional framework of availability, access, utilization, and stability. Building on that framework, the paper argues that food security should not be treated merely as an agricultural production issue, but as a systems question involving inflation, logistics, nutrition, climate risk, public reserves, social protection, and institutional coordination. (World Bank)

The paper uses a qualitative, policy-analytical approach based on secondary data and official reports from the World Bank, FAO, WFP, WMO, BPS, Bank Indonesia, Kementerian Kesehatan, and Bappenas.

Recent global evidence shows that about 673 million people experienced hunger in 2024, roughly 2.3 billion faced moderate or severe food insecurity, and around 2.6 billion could not afford a healthy diet. At the same time, the 2025 Global Report on Food Crises reported acute food insecurity affecting more than 295 million people across 53 countries and territories, while WMO confirmed that 2025 was among the warmest years on record. Together, these developments show that the global food problem is not only about aggregate supply, but about affordability, conflict, climate, and system fragility. (FAOHome)

For Indonesia, the evidence is mixed but instructive. BPS reported that rice production for food consumption rose to 34.69 million tons in 2025, poverty declined to 8.25 percent in September 2025, and the Ministry of Health reported stunting at 19.8 percent in 2024. Yet inflation remained elevated at 4.76 percent year-on-year in February 2026, rural poverty stayed significantly above urban poverty, and Bank Indonesia still treated food-price management as a core macroeconomic priority through GPIPS. These conditions suggest that Indonesia has strengthened the supply side, but still faces structural challenges in distribution, affordability, nutritional quality, and resilience to shocks. (Badan Pusat Statistik Indonesia)

The paper concludes that Indonesia should move from commodity-centered food policy toward a resilience-centered food-systems approach. The main lessons are to strengthen regional food logistics, integrate nutrition into food policy, protect producers as well as consumers, embed climate adaptation into food strategy, use public reserves strategically, and treat social protection as part of food security architecture. In that sense, food security is not peripheral to national resilience; it is one of its most concrete foundations. (Bank Indonesia)

Keywords: food security, national resilience, food inflation, nutrition, climate risk, Indonesia, food systems

1. Introduction

Food security has become one of the most important dimensions of national resilience because it links state capacity, household welfare, public health, and macroeconomic stability in unusually direct ways. A country may absorb financial shocks for some time, but disruptions in food supply or food affordability are transmitted rapidly into daily life. This is why food insecurity often becomes politically sensitive and socially destabilizing more quickly than other forms of economic stress. The World Bank's definition of food security, grounded in the 1996 World Food Summit, remains useful because it captures both the material and systemic aspects of the issue: food must be available, accessible, properly utilized, and stable through time. (World Bank)

The current global environment makes this broader framing unavoidable. FAO's 2025 food security report emphasizes that elevated food-price inflation has weakened purchasing power and reduced access to healthy diets, especially among low-income populations. The same broad reporting cycle indicates that hunger declined only modestly and unevenly in 2024, with worsening outcomes in Africa and Western Asia. This means that even when global food production does not collapse, food systems can still fail large numbers of people through affordability and instability. (FAOHome)

The acute-crisis perspective reinforces the same point. The World Food Programme's 2025 Global Report on Food Crises documents a rise in acute food insecurity to more than 295 million people across 53 countries and territories, driven mainly by conflict, economic shocks, weather extremes, and displacement. In parallel, WMO reported that 2025 ranked among the warmest years on record. These developments matter not only for fragile states but also for middle-income countries such as Indonesia, because climate volatility, trade uncertainty, and

food-price transmission operate across borders. (World Food Programme)

Indonesia offers a particularly important case for examining these issues. It has considerable agricultural potential and a large domestic market, yet it also has major regional disparities, persistent nutritional challenges, and high food-price sensitivity among poorer households. The country improved rice production in 2025 and reduced poverty and stunting, yet food-price stability still required active policy intervention. This combination of progress and vulnerability makes Indonesia a useful case for understanding what food security means when national resilience is the main analytical lens. (Badan Pusat Statistik Indonesia)

This paper therefore asks a practical and strategic question: what lessons does food security offer for strengthening Indonesia's national resilience? It answers that question by combining conceptual discussion with recent empirical evidence and then deriving policy implications relevant to Indonesia's current development agenda. (Bappenas)

2. Method and Analytical Approach

This paper is written as a formal policy-oriented review article. It uses qualitative analysis based on secondary sources rather than original survey or experimental data. The purpose is not to estimate a single causal coefficient, but to synthesize evidence and construct a policy argument about how food security relates to national resilience in the Indonesian context. This is appropriate because the subject is multidimensional and spans economics, nutrition, logistics, climate, and governance. (World Bank)

The source base consists primarily of official and multilateral materials. At the global level, the paper draws on the World Bank's food-security framework and updates, FAO's *State of Food Security and Nutrition in the World 2025*, the World Food Programme's *Global Report on Food Crises*

2025, and WMO's 2025 temperature assessment. At the national level, it relies on BPS releases on rice production, poverty, and inflation; Bank Indonesia's February 2026 release on GPIPS; Kementerian Kesehatan's release on 2024 stunting; and Bappenas statements relating food security to the RPJMN 2025–2029. (World Bank)

The analysis proceeds in three stages. First, it clarifies why food security should be understood as a resilience issue rather than a narrow sectoral issue. Second, it assesses the main global and Indonesian developments relevant to food security. Third, it distills lessons for Indonesian policy. The paper is therefore interpretive and strategic, but it remains anchored in current factual evidence. (World Bank)

3. Food Security as National Resilience

Food security belongs inside the concept of national resilience because food systems connect macro shocks to micro welfare faster than most other systems. A rise in shipping costs, an extreme weather event, or a regional supply disruption can become a household crisis in a matter of days if the food system lacks buffers. This is different from some other development issues where adjustment is slower or more mediated. Food security therefore acts as both a welfare indicator and a stress test of state capability. (World Bank)

The four-dimensional framework helps clarify this. Availability refers to whether food physically exists through production, reserves, and trade. Access refers to whether households can obtain it through income and functioning markets. Utilization concerns whether food translates into nutrition and health. Stability means these three dimensions endure over time, including under crisis conditions. A country may succeed in one dimension but fail in others. Large harvests may coexist with unaffordable diets, and public stocks may coexist with local scarcity. National resilience requires success across all four dimensions, not only in aggregate output. (World Bank)

This framework also explains why food security has direct economic, social, and political implications. Economically, high food prices weaken real incomes and complicate inflation management. Socially, poor food access worsens vulnerability and malnutrition. Politically, food instability can erode public trust in institutions, especially when governments appear unable to manage it. That is why food security should be treated as a strategic capability of the state rather than only as a development outcome. (The World Bank Docs)

For Indonesia, the resilience perspective is especially relevant because the national food question is not only about how much food the country grows, but about how that food moves across islands, how its price behaves in local markets, and whether it supports healthier diets. A resilience-based food policy therefore has to connect agricultural output with logistics, nutrition, and social protection. (Badan Pusat Statistik Indonesia)

4. The Global Food Environment and Why It Matters to Indonesia

The global food environment remains fragile despite modest improvement in some headline indicators. FAO reported that about 673 million people experienced hunger in 2024 and that roughly 2.3 billion faced moderate or severe food insecurity. It also reported that about 2.6 billion people still could not afford a healthy diet in 2024. These figures matter because they show that the central problem is not only production shortfall; it is also the affordability of nutrition. (FAOHome)

The World Bank's nutrition-affordability data sharpen this point further. It estimated that the average cost of a healthy diet reached $4.46 per person per day in purchasing-power-parity terms in 2024 and that affordability improved only unevenly across regions. This means that a world capable of producing enough basic food can still fail to provide economically feasible healthy diets to billions. The policy consequence is

profound: national food resilience must now include not only staples but also diversified diets. (World Bank)

Acute crises remain severe. The WFP's 2025 crisis report documents how conflict, economic shocks, weather extremes, and displacement pushed acute food insecurity upward again. This demonstrates that food systems are vulnerable not only to slow-moving structural factors but also to sudden shocks. Indonesia is not among the most extreme crisis cases, but it lives within the same global market and climate system, meaning that disruptions elsewhere can still raise costs or alter supply conditions domestically. (World Food Programme)

Climate change makes this global context even more relevant for Indonesia. WMO's January 2026 statement confirms that 2025 was one of the warmest years on record and that the recent period has been exceptionally hot. For a tropical, climate-exposed, archipelagic country, this raises the stakes of adaptation in farming, water management, fisheries, and logistics. Food resilience cannot be built as though climate remains historically stable. (World Meteorological Organization)

5. Indonesia's Current Food Security Profile

Indonesia's recent performance presents a dual picture of improvement and fragility. On the production side, BPS reported that harvested paddy area reached about 11.32 million hectares in 2025, with paddy output of 60.21 million tons and rice production for food consumption of 34.69 million tons. Rice production increased by 13.29 percent compared with 2024. These are significant improvements and they strengthen the domestic supply base. (Badan Pusat Statistik Indonesia)

On the welfare side, BPS reported that the poverty rate fell to 8.25 percent in September 2025, equivalent to 23.36 million people. Yet rural poverty remained much higher than urban poverty. This is highly relevant for food resilience because many food producers live in rural

areas. In effect, the food system depends on producers who remain more economically exposed than average urban households. That weakens long-term resilience, even when aggregate production improves. (Badan Pusat Statistik Indonesia)

Indonesia also made progress on nutrition. The Ministry of Health reported that national stunting declined to 19.8 percent in 2024. This is an important achievement because it suggests that public-health and nutrition interventions are gaining traction. At the same time, the figure remains high enough to show that dietary quality, maternal-child health, and food access still require sustained policy attention. Food security, in other words, has improved but remains incomplete. (Kementerian Kesehatan Republik Indonesia)

Price stability remains one of the clearest weaknesses. BPS reported year-on-year inflation of 4.76 percent in February 2026, while Bank Indonesia highlighted food-price management as a strategic priority and launched GPIPS to strengthen inflation control through market stabilization, regional supply connectivity, and risk management. The fact that food remained central to macroeconomic management even after better production numbers shows how incomplete a purely output-based reading of food security would be. (Badan Pusat Statistik Indonesia)

6. Lessons for Indonesia

6.1 Food security must be treated as system resilience, not just output

The first lesson is conceptual but decisive: Indonesia should continue shifting from commodity-based food policy to systems-based food policy. Production remains necessary, but not sufficient. Food security is more accurately measured by the system's ability to convert output into stable, affordable, and nutritious access under changing conditions. This

shift is already visible in Bappenas's treatment of food security in the RPJMN 2025–2029, including its emphasis on nutrition and strategic collaboration. The next challenge is institutional follow-through. (Bappenas)

A systems lens changes priorities. It places logistics, storage, market information, and social protection closer to the center of policy. It also requires more serious attention to healthy-diet affordability rather than staple sufficiency alone. This is not a rejection of production policy; it is a widening of the policy frame so that production gains generate broader resilience. (World Bank)

6.2 Regional connectivity is essential in an archipelagic state

The second lesson is logistical. In Indonesia, national supply does not automatically translate into local access. Because of geography, food resilience depends heavily on regional connectivity and inter-island coordination. Bank Indonesia's GPIPS makes this explicit by prioritizing distribution and regional supply connectivity as part of inflation control. That is a sound recognition of Indonesia's structural reality. (Bank Indonesia)

This implies that food logistics should be treated as part of resilience infrastructure. Roads, ports, storage facilities, cold chains, and real-time stock monitoring are not peripheral investments. They are part of ensuring that surplus regions support deficit regions before prices spike. A country with Indonesia's geography cannot rely on production gains alone; it must build a more integrated domestic food market. (Bank Indonesia)

6.3 Food policy should include nutrition as a core objective

The third lesson is that food security should be linked more explicitly to nutritional outcomes. Global evidence increasingly emphasizes the affordability of healthy diets, and Indonesia's own stunting figures show

why this matters. A food policy centered too narrowly on rice stability may deliver calorie security while still leaving major nutritional deficits unresolved. (World Bank)

The practical implication is that Indonesia should keep expanding the nutrition-sensitive dimension of food policy. That includes maternal and child nutrition, food diversification, school feeding and related programs, and stronger links between agriculture, health, and social policy. Bappenas's framing of nutrition in the RPJMN is therefore highly relevant to long-term resilience rather than merely a social add-on. (Bappenas)

6.4 Climate adaptation should be embedded in food strategy

The fourth lesson is that climate adaptation must be internal to food strategy. The warming trend documented by WMO means Indonesia's food system will increasingly face disruption through rainfall variability, flooding, drought, and extreme events. A food system that performs well only in normal years is not resilient. (World Meteorological Organization)

For Indonesia, this means more investment in adaptive seed systems, irrigation management, climate information services, producer risk protection, and region-specific planning. The logic is preventive rather than reactive. It is cheaper and more effective to strengthen the system before the shock than to compensate after the shock. National resilience requires that climate policy and food policy become operationally inseparable. (World Meteorological Organization)

6.5 Producers must be protected alongside consumers

The fifth lesson is that food security depends on producer resilience as much as consumer affordability. Indonesia's rural poverty data make this clear. If food producers remain more vulnerable than urban consumers, then supply gains may prove fragile. Public policy often faces pressure to focus on consumer prices, but this cannot come at the cost of

undermining producers' viability over time. (Badan Pusat Statistik Indonesia)

The strategic response is not to choose between farmers and consumers, but to improve productivity, reduce logistics costs, and use policy instruments in ways that narrow the trade-off. A resilient food system is one in which producers receive enough incentive to remain productive while consumers are protected from destabilizing price spikes. This balance is difficult, but it is central to durable resilience. (Bank Indonesia)

6.6 Public reserves and social protection should be used strategically

The sixth lesson concerns buffers. Food reserves and social protection are not emergency leftovers; they are central resilience instruments. The logic is straightforward. Reserves help stabilize expectations and supply, while social protection preserves access for vulnerable households when markets become stressed. Without such buffers, small disruptions can quickly become welfare crises. (World Bank)

Indonesia's policy direction points toward this logic, especially in its active attention to food-price stability and targeted support. The lesson now is to make these mechanisms more data-driven, better timed, and more strongly integrated into early-warning systems. Strategic use of reserves and social assistance strengthens resilience more than panic-driven intervention after prices have already surged. (Bank Indonesia)

7. Policy Implications

A resilience-oriented food strategy for Indonesia should prioritize six linked areas. First, it should strengthen regional logistics and market integration so that domestic supply moves more efficiently across the archipelago. Second, it should continue treating food inflation as a macroeconomic issue rather than a purely agricultural one. Third, it should expand nutrition-sensitive food policy so that healthier diets

become more attainable, not just staple calories. Fourth, it should integrate climate adaptation directly into food planning, especially in seed, water, and risk management. Fifth, it should improve the economic resilience of producers, particularly in poorer rural areas. Sixth, it should connect reserves, data systems, and social protection into a more anticipatory resilience architecture. (Bank Indonesia)

These priorities are mutually reinforcing. Better logistics help stabilize prices. Better nutrition policy improves human capital. Stronger producer support strengthens supply. Better data improve the timing of interventions. A resilience strategy therefore gains power not from a single reform, but from integration. That is the main policy lesson of the food-security lens. (World Bank)

8. Conclusion

Food security should be treated as a core pillar of national resilience because it joins together economic stability, social welfare, public health, and institutional legitimacy. Global evidence shows that hunger, food insecurity, climate stress, and diet unaffordability remain serious and interconnected problems. Indonesia has made measurable progress in production, poverty reduction, and stunting reduction, but still faces structural weaknesses in inflation sensitivity, rural vulnerability, logistics, and nutritional quality. (FAOHome)

The core lesson is not simply that Indonesia needs more food. It is that Indonesia needs a more resilient food system. That means moving from output-centered thinking to systems-centered thinking, linking food policy to nutrition and social protection, treating logistics as strategic infrastructure, and embedding climate adaptation into the heart of food governance. In an era of compound crises, food security is not merely a development topic. It is one of the clearest expressions of whether a nation can remain stable, adaptive, and humane under pressure. (World Bank)

Glossary

Food security
A condition in which all people, at all times, have physical and economic access to sufficient, safe, and nutritious food for an active and healthy life. (World Bank)

Availability
The physical presence of food through production, reserves, trade, and distribution. (World Bank)

Access
The ability of households or individuals to obtain food economically and physically. (World Bank)

Utilization
The nutritional and health dimension of food use, including dietary quality, safety, and the body's ability to benefit from food. (World Bank)

Stability
The ability of availability, access, and utilization to endure over time, including during shocks or crises. (World Bank)

Moderate or severe food insecurity
A condition in which people face uncertain or insufficient access to food, ranging from compromised diet quality to serious reductions in food intake. (FAOHome)

Healthy diet affordability
The extent to which households can financially obtain a diet that is nutritionally adequate and diverse. (World Bank)

Acute food insecurity
A severe short-term condition in which people's inability to access food poses immediate threats to lives or livelihoods. (World Food Programme)

Stunting
Impaired growth and development in children caused mainly by chronic undernutrition and related deprivations. (Kementerian Kesehatan Republik Indonesia)

Volatile food inflation
Price increases in food commodities that fluctuate strongly because of supply, seasonality, logistics, or weather. (Bank Indonesia)

National resilience
The capacity of a country to absorb shocks, adapt to stress, and sustain core social, economic, and institutional functions. This paper applies the concept specifically to food systems. Supported by the food-security framework and policy evidence used throughout the article. (World Bank)

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