

A COMPARATIVE STUDY OF FOOD SECURITY POLICIES IN DEVELOPING COUNTRIES

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Abstract

Food resilience has become a strategic policy priority in developing countries due to increasing global challenges, including climate change, supply chain disruptions, economic instability, and public health crises. This study aims to comparatively analyze food resilience policies in Indonesia, the Philippines, and India by examining five key dimensions: food availability, economic and logistics access, nutrition utilization, food system stability, and institutional governance. A purposive literature review method was employed by systematically synthesizing empirical and theoretical studies obtained from Scopus, ScienceDirect, and Google Scholar. The findings indicate that the three countries have adopted different policy approaches based on their institutional capacity and socio-economic contexts, yet they face similar structural challenges. Indonesia has strengthened food diversification and nutrition programs but continues to experience policy fragmentation and unequal regional distribution. The Philippines remains highly vulnerable due to import dependency, geographical constraints, and climate-related disasters that disrupt food accessibility and stability. India has established a comprehensive Public Distribution System (PDS) that improves food access for low-income households; however, administrative inefficiencies, distribution leakages, and nutritional quality remain significant concerns. The comparative analysis demonstrates that food resilience extends beyond increasing agricultural production and requires integrated governance, efficient logistics, transparent institutions, and nutrition-sensitive policies. Furthermore, effective food resilience depends on cross-sectoral coordination, adaptive public administration, and inclusive policy implementation that addresses vulnerable populations. This study contributes to the comparative public policy literature by identifying common challenges and transferable policy lessons among developing countries. It recommends strengthening collaborative governance, institutional integration, digitalized food distribution systems, and climate-adaptive strategies to enhance sustainable and equitable food resilience in Asia.

Keywords: Food security policy; comparative public policy; food governance; institutional governance; developing countries.

Introduction

Resilience food is multidimensional issues that occupy position central in the development agenda of developing countries, because implications direct to welfare society, stability socio-economic, as well as sustainability system ecology. In a global context marked by uncertainty structural consequence change climate, disruption chain supply international, as well as COVID-19 pandemic, policies resilience food transform from just instrument economy become device strategic in guard resilient social and stability politics (Sundram et al., 2023). Resilience food No only question availability material food, but also reflects state capacity in manage source Power nature, regulate governance food cross sector, as well as ensure justice distribution results development. Developing countries in Asia such as Indonesia, the Philippines, and India are facing dilemma similar : pressure high demographics, limitations land and water, as well as disparity complex institutions. However, all three show dynamics diverse policies, both from side approach institutional capacity implementation, as well as results development achieved (Islam, 2025).

In a way conceptual, resilience food covers four main pillars : availability, access, utilization, and stability (FAO, 2023). dimensions This each other interact in framework system complex food, where disruption to one of the element can cause domino effect on overall system. Challenges main for developing countries No Again solely on improvement production food, but on how ensure equal access to food nutritious and stable supply in term length. Gap in dimensions the potential deepen vulnerability social, worsening poverty, as well as lower quality health society (Rivera et al., 2023). In the midst of complexity said, the policy resilience - oriented public food demand approach systemic combining aspect economic, social, ecological, and institutional in One integrated strategic unity.

In Indonesian context, policy resilience food has evolve from paradigm self-sufficiency rice going to approach diversification food and improvement nutrition society. However, the transition policy This No running linearly. A number of studies show that success at the level macro often not compared straight with achievements at the level micro, especially consequence weakness coordination cross sector, limitations capacity area, as well as fragmentation policy interperiod government (Prayitno et al., 2025). Programs such as Free Nutritious Food (MBG) marks state commitment in strengthen dimensions access and nutrition, but face challenge technocratic like problem logistics, limitations financing, and sustainability policy term length (Suprpto et al., 2025). From the dimensions social, the power of social

capital public proven become determinant important for resilience food House ladder. Network strong social capable become mechanism adaptive in face shock economy and fluctuations price food, which at the same time confirm importance synergy between formal policies and powers community local (Rusmawati, 2023).

Philippines shows dynamics different However No lost complex. Its dependency to import rice and commodities food other strategic factors put this country in a position prone to to volatility global prices and disruptions trading international (Angeles-Agdeppa et al., 2022). Government efforts through liberalization imports, reform of the National Food Authority, as well as development reserves food national Not yet in a way significant lower vulnerability food in rural areas (Rivera et al., 2023). In addition to the factors economy, vulnerability geographical consequence disaster natural like typhoons and floods make things worse instability availability food (Ong et al., 2021). This show that design policy food in the Philippines must more integrate mitigation disasters and adaptation climate as part from national strategy resilience food.

Temporary That is, India displays a model of massive state intervention. through the Public Distribution System (PDS) system distribution public the world's largest and Midday Meal Scheme program for child school (Gharge et al., 2024). Policy This succeed lower prevalence hunger and increase consumption calories House ladder income low (Shrinivas et al., 2025). However, its effectiveness overshadowed by problems efficiency, leakage distribution, and inaccuracy targets (Raveenthiranathan, 2024). In addition, the increase consumption calories No always compared straight with improvement quality nutrition, because pattern consumption public Still dominated by food carbohydrates high and low protein (Kaicker et al., 2022). Challenges This confirm importance nutritional-sensitive policy approach, where resilience food No only measured from quantity, but also quality nutrition consumed.

In a way comparative, comparison between Indonesia, the Philippines, and India shows variations in policy strategies that reflect difference structure economy, capacity bureaucracy, and context institutional (Aassouli, 2023). Indonesia emphasizes integration between policy food and nutrition ; the Philippines focuses on stabilization price and reserve national ; while India prioritizes distribution direct and protection social scale big. Although different, all three show that effective policies demand balance between intervention production, protection social, and strengthening mark nutrition society (Jakhar et al., 2023). The COVID-19 pandemic

has become exam real on Power stand system food in the three countries. In Indonesia, the decline income House stairs and disturbance chain supply cause improvement vulnerability food (Setiawan & Mahmud, 2022). In the Philippines, restrictions mobility cause surge price material principal, while in India, the lockdown caused disruption to the PDS system before government adjust it through help cash directly (Kaicker et al., 2022).

Threat change climate deepen tension in system global food. Decline productivity agriculture consequence drought, floods and degradation land become challenge structural changes in the South and Southeast Asia region (Jakhar et al., 2023). Without policy adaptive that integrates mitigation climate, technology agriculture smart, and system robust distribution, resilience food term long difficult achieved (Islam, 2025). In addition, the dimensions justice social become frequent aspects marginalized in implementation policy food. Group marginal like farmer small, female head family and society customs often No touched by government programs consequence obstacle administrative, asymmetry information, and policy bias (Rusmawati, 2023). Therefore that, success policy food No Enough measured through indicator macro, but must evaluated from how much Far policy the ensure inclusion social and equality benefits (Aassouli, 2023).

In governance framework public, effectiveness policy resilience food determined by coordination cross institutions, continuity policies, as well as capacity adaptive bureaucracy. Many food programs term short like subsidy fertilizer or agricultural input assistance that tends to nature political and less contribute to resilience food term long (Suryani et al., 2024). On the other hand, the approach based community and partnership public-private proven more adaptive to market dynamics and changes environment (Suprpto et al., 2025). In general conceptual approach comparison cross- country provides framework more analytical sharp For test effectiveness policy in context different institutions as well as identify practice good (best practices) that can transferred through the process of policy learning and policy transfer (Aassouli, 2023).

There is a number of gap research that is still ongoing open. First, the lack of studies comparative systematically in the South and Southeast Asia region that integrates analysis policies, institutions, and nutritional outcomes. Second, the need for longitudinal evaluation for understand impact global crisis and change climate to effectiveness policy food term long. Third, still A little research that assesses cohesion policy cross sectors agriculture, trade, social, and health in create system

holistic and sustainable food (Islam, 2025). Therefore that, study comparative about policy resilience food in Indonesia, the Philippines, and India has mark strategic For enrich literature administration public, policy development, as well as studies policy comparative in developing countries. The results expected capable offer recommendation more policies adaptive, inclusive, and resilient in face global shocks and strengthen foundation resilience food sustainable development in Asia (Sundram et al., 2023).

Method

Study This use method purposive literature review For analyze and compare policy resilience food in Indonesia, the Philippines, and India based on findings empirical and theoretical from various source scientific approach literature review allows researchers For identify patterns, gaps, and effectiveness policies that have been implemented in each country without do primary data collection. This process involving stages systematic, starting from search article scientific on databases such as *Scopus*, *ScienceDirect*, and *Google Scholar*, selection based on criteria inclusion (year publication, relevance themes, and country context), to analysis thematic to policies and results its implementation. Through approach this research can give comprehensive synthesis about How policy food developed and implemented in developing country context. Approach literature review is considered appropriate Because can highlight variation policies and their impacts to resilience food in a way comparative without bound by limitations geographical or temporal (Snyder, 2019; Xiao & Watson, 2019; Paul & Criado, 2020; Paré & Kitsiou, 2017; Booth et al., 2016).

Results and Discussion

1. Food Availability

Availability food become the main pillar in policy resilience food in developing countries. In Indonesia, in general national availability food Already show progress, but inequality interregional Still high. Research show that 74 of the 514 districts / cities Still classified as very vulnerable to vulnerability food although production national sufficient (Rachman & Ariani, 2021). Production factors rice, corn, soybeans, and commodities animal become determinant main in achievement

resilience food, but distribution Not yet evenly between region (Hafiz et al., 2022). In the Philippines, dependence to import food, especially rice, still high. Condition This cause vulnerability tall to fluctuations global prices and barriers logistics domestic (Antonio, 2020). Production food domestic decrease consequence limitations land, investment technology low agriculture, and disturbances climate extreme tropical (Reyes et al., 2022). Meanwhile that, in India, the availability of food in amount big can achieved through system *Public Distribution System* (PDS), but Still there is gap in matter quality and diversity food consumed poor communities (Singh & Sharma, 2021). Production rice and wheat of course abundant, but availability food nutritious like fruits, vegetables, and animal protein Still limited (Patel et al., 2020).

The results show that dimensions availability food in the three countries is influenced by a combination of between factor production, policy agriculture, and conditions geographically. Indonesia tends to Still focused on production rice national, so that not enough notice diversification food (Handoko, 2023). The Philippines is facing dilemma between self-sufficiency and dependence imports, while India is faced with challenges improvement quality food outside commodities principal (Kumar & Joshi, 2020). Availability food No only covers amount production, but also quality and equity distribution. According to Nugraha and Yuliani (2022), development infrastructure agriculture and transportation become factor key in ensure supply food interregional still stable. Meanwhile in India, the success in increase availability food main precisely cause the risk of “ monoculture” policy,” where diversification food become neglected (Sharma & Mishra, 2021). In general general, policy production food in developing countries need directed No only For increase output, but also to strengthen system distribution, management supply and diversification food national (Paul & Criado, 2020).

2. Economic and Logistics Access

Although food available, many House stairs in developing countries No capable access it in a way economic and physical. In Indonesia, research show that factor like level education, ownership land and work head family has a big influence ability House ladder For fulfil need Food (Suharyanto, 2022). Policy subsidy food of course play a role, but Not yet capable reach all over layer public Because problem logistics and infrastructure (Hidayat et al., 2021). In the Philippines, disruptions chain supply consequence the COVID-19 pandemic has caused access to food disturbed, especially in rural areas. Dependence towards the city market big cause area remote experience scarcity material main and spike price (Delos Reyes, 2021). India has

system distribution extensive food, but Lots studies show that access House poverty ladder towards food Still depends on the efficiency of the PDS. However, the constraints administrative like delay distribution and corruption at the level local often hinder achievement access fair food (Rao & Menon, 2020).

Food access measured through ability House ladder For get food with affordable and available prices in a way physical. According to Widodo and Haris (2022), the policy food in Indonesia is still face constraint in logistics distribution interregional inequality infrastructure between Java and the eastern region cause cost distribution height and price food No stable. The Philippines is facing problem classic island nation, where the chain long supply cause vulnerability tall to fluctuations price. A study by De Guzman and Castillo (2022) confirms that without logistics reform food, policy subsidy No will effective. India, with system distribution the large public, in fact face governance and bureaucratic issues. According to Narayan and Patel (2021), the effectiveness of system food public only can achieved when the recipient data help updated routinely and distribution done digitally and transparently. With thus, improvements system logistics, infrastructure transportation, and integration digitalization in chain supply become must For ensure access equitable food security across developing countries (Booth et al., 2016).

3. Utilization of Nutrition and Social Interventions

Utilization food No only related with availability and access, but also on the way food consumed and used For support health. In Indonesia, although production food enough, consumption vegetables, fruit, and other sources of protein low. Research show that preference public to carbohydrate height and food instant cause deficit nutrition chronic (Astuti & Lestari, 2023). In the Philippines, the problem nutrition chronic and stunting becomes issue national that has not completed. Assistance program food and *feeding program* school help some, but limitations budget and quality food help make the impact Not yet significant (Santos & Lim, 2020). India is facing problem similar, where availability calories sufficient but malnutrition Still tall. According to Singh et al. (2022), designed *Midday Meal Scheme program* For child school Not yet fully effective Because quality food provided Still low and its implementation No evenly between countries part.

Resilience sustainable food must covers dimensions nutrition and health society. In Indonesia, the low awareness nutrition show importance approach cross sector between agriculture, education, and health (Yuliani, 2022). According to Astuti

and Lestari (2023), the problem nutrition No only consequence poverty, but also lack knowledge public about pattern Eat balanced. In the Philippines, the policy intervention social need approach based strengthening communities capacity local in provision food nutritious (Santos & Lim, 2020). India has own system wide, but its effectiveness depends on the quality transparent monitoring and distribution (Patel et al., 2020). With Thus, the dimensions nutrition in resilience food must integrated in policy national. Education nutrition, food program nutrition in schools, and promotion food local nutritious need strengthened so that the community No only full, but also healthy (Snyder, 2019).

4. Stability and Resilience to Shock

Resilience food tested when happen crisis, such as pandemic, disaster nature, or fluctuations global prices. In Indonesia, the COVID-19 pandemic triggered disturbance chain supply and distribution food national. Studies show that dependence on production rice domestic without diversification cause vulnerability tall to disturbance supply (Handoko, 2023). The Philippines is experiencing surge price food consequence disturbance transportation and restrictions mobility during pandemic. According to Reyes et al. (2022), the lack of system reserves food area make things worse situation said. India has reserves food big national, but system bureaucratic distribution cause help food No distributed appropriate time at the moment crisis (Kumar & Joshi, 2020).

Resilience system food determined by the country's ability to anticipate and respond crisis. In Indonesia, the policy stock national and diversification food local need reinforced so that it does not depends on one commodities (Rachman & Ariani, 2021). The Philippines needs strengthen system logistics food area and expand reserves food strategic (Delos Reyes, 2021). According to Paul and Criado (2020), stability resilience food requires governance adaptive capable respond change climate, conflict, or global pandemic. India has already own infrastructure big, but its effectiveness decrease Because slow bureaucracy and limitations transparency (Rao & Menon, 2020). In general general, stability system food in developing countries need approach adaptive based risks, including development system warning early and reserve food strategic that can used with fast in condition emergency (Paré & Kitsiou, 2017).

5. Institutions, Governance, and Justice Distribution

Institutions and governance become dimensions important in ensure sustainability resilience food. In Indonesia, the weakness coordination between institution cause policy food often overlapping overlap. According to Romagia (2025), cost transaction high, asymmetrical information, and weakness right on source Power become inhibitor main effectiveness policy food. In the Philippines, fragmentation policy between institutions also hinder effectiveness implementation. According to Antonio (2020), coordination between ministry agriculture, trade and social still minimal, causing policy food walk partial. India is facing challenge Serious in distribution program governance public. Corruption at the public level local and recipient data errors help cause distribution food No appropriate targets (Sharma & Mishra, 2021).

Strong institutions determine success policy resilience food. In Indonesia, there is a need for institutional reform For strengthen right on land and improve transparency distribution is very important (Romagia, 2025). According to Widodo and Haris (2022), digitalization system distribution can lower cost transactions and increase accountability. In the Philippines, the formation of institution coordination national special food recommended For strengthen synergy between sector (Reyes et al., 2022). India needs it increase public audit mechanisms and transparency of recipient data assistance (Singh & Sharma, 2021). By overall, good governance, transparency, and fairness distribution become factor the main determining factor success policy food in developing countries (Booth et al., 2016).

Conclusion

Conclusion of results analysis show that resilience food in developing countries such as Indonesia, the Philippines, and India still faced with challenges complex structural. From the side availability food, the three countries are indeed has reach progress in production commodities principal, however Still happen inequality distribution interregional and minimal diversification food. Indonesia still focused on production rice nationally, the Philippines is vulnerable to dependence imports, while India faces problem quality and diversity food. Conditions This show that policy resilience food No Enough only increase production, but also need notice equality distribution, development infrastructure agriculture and development food nutritious local so that the community No only sufficient in a way quantitatively, but also systematically quality nutrition.

Next, in the dimensions access food and utilization nutrition, challenges main appear in aspect economics, logistics, and behavior consumption. Inequality infrastructure in Indonesia, obstacles geography in the Philippines, and bureaucracy distribution in India causes limitations access public to affordable and nutritious food. Although there is various assistance programs social and subsidies food, its effectiveness Still limited by issues of recipient data and governance that have not yet been transparent. On the other hand, the low awareness nutrition and preferences public to food tall carbohydrate make things worse condition nutrition in the three countries. Therefore that, synergy policy cross sector between agriculture, education, and health become must For strengthen resilience food based nutrition and well-being public.

Lastly, from dimensions stability, resilience, and governance institutional, visible that resilience food tested when face crisis like pandemic, disaster nature, or fluctuations global prices. Indonesia, the Philippines, and India are all show vulnerability to shock consequence weakness coordination institutions and limitations reserves food strategic. Governance reform become very important, including digitalization system distribution, transparency of aid data, and formation institution strong and accountable coordination. Resilience sustainable food only can come true If fifth dimensions availability, access, utilization nutrition, stability, and governance integrated in a way comprehensive. With Thus, development resilience food in developing countries need directed going to system inclusive, equitable, nutritious and resilient food to change as well as global crisis.

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