

Commentary

Evaluating Acceleration of Stunting Prevention in Indonesia (2018-2024): A Roadmap-Based Program Analysis

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Indonesia's 2018-2024 National Roadmap for Stunting Prevention aims to reduce stunting prevalence to 14% by 2024 through multisectoral interventions. This commentary evaluates the program's acceleration, identifying systemic gaps in implementation despite robust policy frameworks. Using qualitative analysis of government reports, field studies, and secondary data, we assess progress against key roadmap indicators, including nutrition-specific interventions, community empowerment, and interagency coordination. Findings reveal persistent challenges: fragmented coordination between national and local agencies, uneven funding distribution favoring urban centers, and inadequate real-time monitoring systems. Case studies from regions like Lombok (successful integrated nutrition campaigns) and Papua (persistent access barriers to clean water and healthcare) illustrate disparities in program effectiveness. Additionally, socio-cultural factors, such as low parental awareness of nutrition, further hinder progress. We argue that accelerating stunting reduction requires strengthening decentralized governance, prioritizing budget equity for rural areas, and leveraging digital tools for data integration. Community-driven education initiatives, supported by local leaders, are critical to shifting health behaviors. Without addressing these structural and operational bottlenecks, Indonesia risks missing its 2024 target, undermining broader Sustainable Development Goals (SDGs) linked to child health and equity. This analysis urges policymakers to adopt adaptive, evidence-based strategies to transform roadmap commitments into actionable outcomes.

Keywords: Growth disorders; health policy; diet therapy; program evaluation; stunting prevention

1. INTRODUCTION

Stunting, a manifestation of chronic growth failure in children due to malnutrition and unhealthy environments, remains a serious threat to Indonesia's health and development. In 2018, the prevalence of stunting reached 30.8%, but thanks to integrated interventions through the "Roadmap for Accelerating Stunting Prevention 2018-2024", this figure has dropped to 21.6% in 2022.^(1,2) However, the national target of 14% in 2024 requires more massive program acceleration.⁽²⁾ The impact of stunting not only burdens the health system, but also hampers the cognitive potential of the younger generation and deepens socio-economic inequality. This national policy framework is designed to integrate specific-sensitive nutrition interventions, strengthen cross-sector coordination, and optimize services in 260 priority

districts.^(2,3) The implementation of the roadmap faces complex challenges, ranging from fragmented coordination between institutions to disparities in resource allocation between the center and regions.⁽⁴⁾ For example, programs such as Non-Cash Food Assistance and health service convergence face logistical constraints in remote areas, such as Papua and East Nusa Tenggara.^(4,5) In addition, socio-cultural factors, such as low family awareness of nutrition-based parenting patterns, also slow down the decline in stunting. On the other hand, partial success in areas such as Central Lombok shows that an integrated approach based on community participation can be a model for replication.^(4,6,7)

This article aims to evaluate the progress of accelerating stunting prevention based on the performance indicators of the 2018-2024 roadmap, while identifying structural challenges and opportunities for innovation. Through policy analysis and case studies, we highlight the urgency of strengthening decentralized governance, budget equity, and the use of technology for real-time monitoring. These findings are expected to form the basis for policy recommendations to ensure the achievement of the 2024 target and the sustainability of the program after the deadline.

2. THE 2018-2024 STUNTING PREVENTION ROADMAP: AN OVERVIEW

The 2018-2024 Stunting Prevention Acceleration Roadmap is designed as a comprehensive framework to systematically reduce stunting prevalence.⁽¹⁾ Its main components include two types of interventions: specific nutrition (direct health-related interventions, such as iron supplementation for pregnant women, exclusive breastfeeding, and immunization) and sensitive nutrition (indirect interventions, such as access to clean water, proper sanitation, and food security programs).⁽⁸⁾ In addition, this roadmap emphasizes cross-sectoral coordination, involving 23 ministries/agencies, to ensure program integration at the central and regional levels. The main target of this roadmap is to reduce stunting prevalence from 30.8% (2018) to 14% in 2024, with a focus on 260 priority districts/cities with the highest stunting rates.⁽⁹⁾ The implementation of this roadmap is supported by the strategic role of ministries and supporting programs.⁽⁹⁾ National Development Planning

Agency of Indonesia, Bappenas or Badan Perencanaan Pembangunan Nasional, is tasked with coordinating policy planning and evaluation, while the Ministry of Health leads specific nutrition interventions through the Healthy Indonesia Program, including revitalized integrated health posts and distribution of iron tablets.^(1,8) The Ministry of Villages, Disadvantaged Regions and Transmigration focuses on nutrition-sensitive interventions by strengthening basic village infrastructure, such as the provision of clean water and sanitation through the sanitation Program.⁽¹⁰⁾ Supporting programs such as Non-Cash Food Assistance (“Bantuan Pangan Non Tunai” or BPNT) and the Family Hope Program (“Program Keluarga Harapan” or PKH) play a role in increasing access to nutritious food for poor families. This collaboration is expected to create synergy between health services, economic development, and infrastructure development to achieve the 2024 target.^(1,8,10)

3. CHALLENGES IN ACCELERATING PROGRAM IMPLEMENTATION

3.1 Policy Coordination and Fragmentation

The implementation of stunting prevention programs is hampered by overlapping roles and a lack of synergy between institutions. Although involving 23 ministries/institutions, coordination between Bappenas, the Ministry of Health, and the Ministry of Villages, Disadvantaged Regions and Transmigration is often not integrated, resulting in program duplication.⁽⁵⁾ For example, the distribution of food assistance by the Ministry of Social Affairs is not always in line with the Ministry of Health's nutrition education program, reducing the effectiveness of interventions. In addition, data fragmentation between the Integrated Nutrition Information System (“Sistem Informasi Gizi Terpadu” or SIGIZI) and the Village Development Information System (“Sistem Informasi Desa” or SID) hinders accurate target mapping. The lack of uniformity in the definition of stunting indicators between institutions also exacerbates this problem, making comprehensive evaluation difficult.^(5,6)

3.2 Budget and Logistics Constraints

Disparities in budget allocation between the central and regional governments are the main obstacles.

Data from 2023 shows that 60% of stunting funds are still concentrated at the central level, while regions with high prevalence such as East Nusa Tenggara (Nusa Tenggara Timur or NTT) and Papua only receive 10-15% of the allocation. Dependence on the State budget (“Anggaran Pendapatan Belanja Negara” or APBN) makes it difficult for poor regions to develop contextual programs.^(11,12) On the logistics side, the distribution of nutritional supplements and medical devices to remote areas is often late due to poor infrastructure. For example, in Asmat Regency, iron tablet assistance often expires before being distributed. These limitations are exacerbated by food price inflation which reduces the purchasing power of assistance programs such as BPNT.^(13,14)

3.3 Socio-Cultural Factors

Community perceptions of nutrition and parenting are complex challenges. In many areas, the practice of providing complementary foods (“Makanan Pendamping ASI” or MPASI) too early or not nutritious is still born because of hereditary myths, such as the assumption that rice porridge is more filling than animal protein.⁽⁶⁾ In addition, unequal gender roles cause nutrition education to only focus on mothers, even though the involvement of fathers and extended families is crucial. In Central Sulawesi, for example, nutritional supplementation programs are often rejected because they are considered to be “interfering with local traditions”. The lack of health literacy also makes people reluctant to use integrated health posts, especially in areas with limited access to education.⁽¹⁵⁻¹⁷⁾

3.4 Monitoring and Evaluation

Weak real-time monitoring and accountability systems erode program achievements. Only 40% of priority areas have an integrated digital platform to track stunting progress, while the rest rely on manual reports that are prone to manipulation.^(17,18) For example, in East Java, stunting case data at community health centers is not integrated with the Social Service, resulting in duplication of aid recipients.⁽¹⁸⁾ In addition, program evaluations tend to be administrative, not outcome-based, thus failing to identify root causes. The lack of sanctions for areas that do not meet targets also reduces incentives for acceleration. Without a transparent and participatory system, the program risks losing direction and relevance.^(19,20)

4. CASE STUDIES: PROGRESS AND BOTTLENECKS

4.1 Success of Integrated Interventions in Central Lombok

Central Lombok Regency, West Nusa Tenggara, is a successful example of stunting reduction through an integrated approach. In 2018, the prevalence of stunting in this area reached 33%, but was successfully reduced to 18% in 2022. The key to its success lies in cross-sector collaboration led by the local Health Office, involving integrated health post cadres, religious leaders, and women's groups. Flagship programs such as the First Thousand Days of Life (HPK) Movement combine specific nutritional interventions (supplementation for pregnant women, monitoring growth and development) and sensitive (construction of village wells, organic farming training for food security). In addition, the use of the e-PPGBM (Sistem Informasi Elektronik Pencatatan Pelaporan Gizi Berbasis Masyarakat) information system allows real-time monitoring of toddler nutritional status. Active community participation through village forums also strengthens the sustainability of the program.^(7,21)

4.2 Challenges of Access to Clean Water and Sanitation in Papua

In the Pegunungan Bintang region of Papua, the prevalence of stunting is still stuck at 40% (2023), one of the highest in Indonesia. One of the main causes is limited access to clean water and sanitation—only 15% of households have a clean water source. Government programs such as Community Based Total Sanitation (“Sanitasi Total Berbasis Masyarakat” or STBM) often fail due to poor infrastructure and geographical barriers. For example, the distribution of water filters to Oksibil District was hampered by hilly terrain, so only 20% arrived on time. In addition, the culture of open defecation is still practiced by 70% of the community due to a lack of understanding of the relationship between sanitation and stunting.⁽¹⁶⁾ Specific nutritional intervention efforts such as providing fortified biscuits are also ineffective due to the high prevalence of chronic diarrhea due to contaminated water. This case underscores the need for a holistic approach that combines basic infrastructure development with education based on local wisdom.⁽²²⁾

5. POLICY RECOMMENDATIONS

To accelerate the achievement of the 14% stunting prevalence target by 2024, innovative and sustainable policy transformation is needed. First, strengthening cross-sector coordination must be optimized through an integrated digital platform, such as an integrative dashboard that connects data from Bappenas, the Ministry of Health, the Ministry of Villages, Disadvantaged Regions and Transmigration, and local governments. This platform can facilitate program synchronization, avoid duplication, and ensure that resource allocation is right on target. For example, the integration of the SIGIZI with the Village Information System (SID) will facilitate monitoring of intervention targets in remote areas. Second, budget allocation needs to be based on regional needs using a formula that considers the level of stunting prevalence, food vulnerability, and geographical barriers. Regions with high stunting rates such as Papua and NTT must receive a larger portion of the budget, accompanied by flexibility in using funds for contextual programs, such as the development of clean water infrastructure or training of village nutrition cadres. Third, nutrition education campaigns must involve community leaders—such as clerics, traditional leaders, or local influencers—to change perceptions and parenting practices. Culture-based approaches, such as using folklore or traditional media, can increase community acceptance. Fourth, technology-based real-time monitoring systems such as mobile applications for posyandu cadres and IoT sensors for water quality need to be adopted. These systems must be integrated with a national data center to enable rapid response and transparent accountability.

According to the 2024 Indonesian Nutritional Status Survey (SSGI), the national prevalence of stunting fell to 19.8% or equivalent to 4,482,340 toddlers. This figure shows a decrease of 1.7% compared to 2023, which was 21.5%. Since 2018, the prevalence of stunting has been reduced from 30.8% to 21.5% in 2023, showing a decrease of 9.3% in the last five years.^(8,10)

6. CONCLUSION

Stunting prevention in Indonesia is not only a health agenda, but a critical commitment to achieving the Sustainable Development Goals (SDGs), especially hunger eradication (SDG 2) and inequality reduction (SDG 10). Although the prevalence of stunting has

decreased from 30.8% (2018) to 21.6% (2022), acceleration efforts are still needed to meet the target of 14% in 2024. This analysis reveals that success depends not only on technical interventions, but also on inclusive and evidence-based policy transformation. Cross-sector collaboration must be strengthened through digital platforms, budget allocation must be responsive to regional needs, and nutrition education needs to involve local actors to reach grassroots communities. Without these steps, the risk of failing to take advantage of the critical window of opportunity in the first 1,000 days of a child's life will deepen social disparities and hinder sustainable development. Therefore, the call for collective action, data transparency, and evidence-based leadership are key to realizing a stunting-free Indonesia.

Ethical Approval

Not required.

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Competing Interests

All the authors declare that there are no conflicts of interest.

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