

Local government strategies to achieve SDGs social development: governance policy of stunting mitigation in Bantaeng regency, Indonesia

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Abstract

Stunting has become a global and national issue in recent years, nationally the government in the 2020-2024 National Medium Term Development Plan targets the stunting prevalence rate in Indonesia to decrease to 14% while Bantaena Regency sets 14.5 percent where the previous year was 22.1%. Stunting is one of the indicators in the Sustainable Development Goals (SDGs), namely the second goal of ending hunger, achieving food security and good nutrition, and promoting sustainable agriculture. The purpose of this research is to look at the implementation of stunting prevention policies using the SDGs approach, local government strategies, and the challenges of implementing stunting prevention policies using Edwards' theory. This research uses descriptive qualitative research methods through direct interviews with all stakeholders who play a role in stunting prevention, documentation, and direct observation or observation. While the data analysis uses an approach according to (Miles et al., 1994), including data collection, data reduction, data presentation, and drawing conclusions. Based on the researcher's findings that the implementation of stunting prevention policies with the SDGs approach from the economic, social, and environmental aspects, while the local government strategy in overcoming stunting is cooperation between regional apparatus, specific and sensitive interventions, while the challenges of implementing stunting prevention policies include communication, resources, disposition, and bureaucratic structure have been implemented, but are still facing various challenges in all aspects of policy implementation.

Keywords: SDGs, policy implementation, stunting

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Introduction

The Sustainable Development Goals (SDGs) is a sustainable development program that aims to prosper the global community and preserve nature, as well as a reference in the development framework of countries around the world. The SDGs have several goals that need to be achieved, one of which is to end hunger, achieve food security and good nutrition, and improve sustainable agriculture. However, the nutrition problem in Indonesia is currently very serious. According to the 2018 Basic Health Survey, the prevalence of stunting among children under five in Indonesia reached 30.8% and decreased to 24.4% in 2021 (Ministry of Health, 2021). Although this figure is still higher than the WHO threshold of 20%. The Indonesian government aims to

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reduce the prevalence of stunting to 14% by 2024 through various national efforts and programs. The Government's attention is also seriously demonstrated by prioritizing to address stunting in children. This is following the goals of the SDGs attached to the Presidential Decree Number 59 of 2017 on the Implementation of Achieving the Sustainable Development Goals, as a follow-up to the agreement in Transforming Our World: The 2030 Agenda for Sustainable Development. In addition, the central government has also established national policies and strategies to reduce the prevalence of stunting, as stated in Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction. The policy emphasizes a multisectoral approach that includes improving nutrition, sanitation, clean water, and access to health services. However, implementation at the local level requires the active role of local governments to adapt the program to local needs and conditions (Firman, 2024).

Stunting is a chronic condition that affects growth and development. If not treated in the long term, it can affect the growth and development of children (Ginting & Pandiangan, 2019). The problem of stunting begins in the womb. It does not become apparent until the child is two years old (Ministry of Health, 2019). The causes of stunting can be seen from several dimensions, namely the mother and the child. Stunting is a condition of stunted growth in children under the age of five years due to chronic malnutrition, particularly in the first 1,000 days of life (HPK). Stunting affects how the brain grows and develops, so there is a higher risk of suffering from chronic diseases in adulthood (Ministry of Villages, Development of Disadvantaged Regions, and Transmigration, 2017).

According to the Global Nutrition Report 2020, about 149 million young children, or about 21.9 percent of the world's young children, are stunted, and most of them are in the Asian region, 81.7 million young children, or 54.8 percentThe World Health Organization (WHO) has set a goal of reducing stunting by 40 percent by 2025. Calculations by the World Bank show that the per capita income of the population is 7 percent lower than it would be if there were no interventions to reduce stunting in a country. African and Southeast Asian countries tend to be even higher, at around 9-10 percent of gross domestic product (GDP) per capita (Galasso et al., 2016). The government in the 2020-2024 National Medium Term Development Plan has also set a target to reduce the stunting prevalence rate in Indonesia to 14 percent. This goal can be achieved by involving multi-sectoral roles and ensuring synchronization of programs from the national level to the village level. The step that will be taken to accelerate the achievement of these goals is to identify specific districts/cities and/or villages as focus districts/cities. The number of focus districts/cities will be gradually expanded to cover all districts/cities in Indonesia (Siswati et al., 2022).

On the other hand, local governments face a major challenge in trying to reduce stunting in their region. The study by (Azizah, 2023) highlights the important role of villages and *Posyandu* in reducing stunting at the local level. *Posyandu* plays a role in providing health services, especially in monitoring the growth of toddler and providing supplementary feeding. However, limited infrastructure, budget, and health workers are the main challenges in implementing the program. Meanwhile, research by (Sianipar et al., 2021) in Asmat, Papua, highlighted the need to increase the capacity of human resources as local food processors to accelerate stunting prevention.

By detailing and implementing related SDG targets, addressing stunting is closely linked to achieving the SDGs globally, while specifically addressing stunting and improving child well-being at the local level. Stunting is one of the major health issues that has become a global and national concern. The Indonesian government, through

the National Medium-Term Development Plan (RPJMN) 2020-2024, targets a reduction in stunting prevalence to 14%. Bantaeng Regency is the focus of this research due to its stunting prevalence, which was previously at 22.1% in 2021, although it successfully decreased to 21% in 2022. This reduction demonstrates a strong local commitment to addressing stunting. This regency is relevant for further study as it has a unique local context, including innovative policies such as Regent Regulation Number 71 of 2019 on the Convergence of Stunting Reduction Acceleration, which serves as an essential foundation in tackling this issue.

The Sustainable Development Goals (SDGs) play a pivotal role in addressing stunting, a chronic malnutrition issue that has far-reaching effects on health, education, and economic productivity worldwide. As a significant public health challenge, stunting affects millions of children, impeding their physical and cognitive development. Mitigating this issue demands a comprehensive strategy aligned with SDG objectives, especially those focusing on health, nutrition, and education.

Early childhood development (ECD) interventions are essential in combating stunting. According to Prabhakar et al., strategies such as nutritional supplementation and proper feeding practices can drastically enhance growth outcomes in children under five, particularly in low- and middle-income countries (LMICs) (Ryan McWay et al., 2022). Supporting this, Ijaiya et al. underline the critical link between socioeconomic factors and malnutrition, emphasizing the need for broader initiatives targeting sanitation, healthcare access, and maternal education (Ijaiya et al., 2024) Richter et al. further highlight that ECD is foundational for achieving long-term health and educational outcomes, underscoring the necessity for targeted policies and interventions (Richter et al., 2019).

Education's role in realizing SDG goals is equally significant. Secanell et al. advocate for embedding SDG principles into educational curricula, particularly at the early childhood level, to foster awareness and sustainable practices for tackling stunting and malnutrition (López Secanell et al., 2023). Efendy et al. also stress the responsibility of higher education institutions in raising community awareness and spearheading stunting prevention initiatives (Efendy et al., 2023).

Socioeconomic and environmental factors further compound the stunting issue. Flores-Quispe et al. highlight the significant impact of socioeconomic inequality on stunting rates in regions such as Latin America and the Caribbean, advocating for policies that enhance purchasing power, women's education, and access to healthcare (Flores-Quispe et al., 2019). De Onis et al. call for consistent monitoring of stunting as a key health indicator, while Beal et al. emphasize the importance of maternal education and healthcare access in reducing stunting prevalence in Indonesia (Beal et al., 2018; De Onis et al., 2012), (Grosso et al., 2020) argue that stunting poses significant risks to human capital and national competitiveness, noting that children affected by stunting often face physical growth delays and cognitive challenges that hinder academic performance and creativity. This ultimately reduces productivity in adulthood and increases the economic burden on countries. (Azizah, 2023) notes that while stunting prevalence in Indonesia remains significant, there has been a consistent decline in recent years. She emphasizes the importance of optimizing stunting prevention programs at both central and local government levels to meet SDG targets by 2030. Additionally, Abul-Fadl and Al-Jawaldeh argue that eradicating stunting is integral to achieving various SDG targets, including poverty alleviation and child health improvement (Abul-Fadl & Al-Jawaldeh, 2022).

Environmental considerations are equally vital. (Liu, 2021) demonstrates the adverse effects of land degradation on stunting, urging that environmental factors be integrated into intervention strategies. Glandon et al. highlight the necessity of multisectoral collaboration among health, education, and nutrition sectors to achieve Universal Health Coverage (UHC) and other SDG targets (Glandon et al., 2018).

Progress has been made, but challenges remain. Yang et al. report the need for more focused interventions in China to meet national nutrition goals (Yang et al., 2020) Similarly, Mugarura et al. point to the high stunting prevalence in Uganda, emphasizing the urgency of improving nutrition and sanitation infrastructure (Mugarura et al., 2020) Jasrotia observes a slow reduction in stunting rates in India, reflecting the complexity of addressing this issue (Jasrotia et al., 2023). Effective strategies for reducing stunting require a holistic approach that encompasses health, education, and socio-economic development (Fader et al., 2018)). The importance of empowering women in preventing stunting has been emphasized, as educated women are more likely to make proper nutritional choices for their children (Margatot & Huriah, 2021).

Achieving nutrition by addressing stunting is central to development. Good nutrition is the foundation for health, productivity, and cognitive development (Martorell, 2017) for both individuals and communities. Optimal nutrition not only improves the quality of life for individuals, but also has a positive impact on economic growth and social stability (Hendriadi & Ariani, 2020). Efforts to enhance nutrition through health and food security programs are crucial for achieving inclusive and sustainable development objectives. Addressing stunting aligns with the Sustainable Development Goals, particularly Goal 2, which aims to eradicate hunger, ensure food security and improved nutrition, and promote sustainable agriculture. The target for 2025 is to reduce the prevalence of stunting and wasting among children under five and to eliminate all forms of malnutrition by 2030. The World Health Organization (WHO) defines stunting as a condition of chronic malnutrition, identified using the height-for-age (PB/U) or length-for-age (TB/U) index, with a z-score below -2. (Unicef, 2021). This metric underscores the importance of addressing stunting early in life, as it significantly impacts a child's physical and cognitive development, ultimately influencing their ability to contribute productively to society.

Based on the Indonesian Nutrition Status Survey (SSGI) conducted by the Ministry of Health, the prevalence of stunting in South Sulawesi Province was recorded at 27.2% in 2022, placing it as the 10th highest in Indonesia. Among 24 districts in the province, 14 had stunting rates above the provincial average, while 10 were below average (South Sulawesi Provincial Government, 2023). In Bantaeng Regency, the stunting prevalence decreased by 0.4% from 2021 to 22.1% in 2022. These improvements highlight Bantaeng's commitment to mitigating stunting through innovative health initiatives and collaborative programs aimed at improving community nutrition.

To support these efforts, Bantaeng Regency has enacted key policies, including Bantaeng Regent Regulation Number 71 of 2019 on the Convergence of the Stunting Prevention Acceleration Program, along with national policies such as Presidential Regulation Number 83 of 2017 on Strategic Food and Nutrition Policy and Presidential Instruction Number 1 of 2017 on the Healthy Community Movement. These regulations align with (Van Meter & Van Horn, 1975) framework, which describes policy implementation as actions by government and private actors to achieve predetermined goals. Furthermore, Edward III's theory identifies four critical variables influencing policy implementation: communication, resources, disposition, and bureaucratic structure.

The success of Bantaeng Regency in reducing stunting prevalence demonstrates the importance of not only regulatory support but also innovations in public service delivery. Examples include initiatives such as the *Puskesmas* Blood Terminal, the SASKIA Flag, Birthday at *Posyandu*, and School-Based Surveillance. Despite a temporary increase during the pandemic, Bantaeng has maintained a consistent focus on reducing stunting, with a targeted rate of 14.5% by 2024. These achievements underscore the role of cross-sector collaboration and effective communication among stakeholders in addressing stunting challenges.

This study explores three key aspects: (1) the implementation of stunting prevention strategies using an SDG framework, (2) local government strategies to mitigate stunting, and (3) the challenges encountered in executing stunting prevention programs in Bantaeng Regency.

Research Methods

This study employs a descriptive qualitative approach, where researchers conducted fieldwork to explore the subject of stunting prevention in Bantaeng Regency. Researchers interacted directly with various stakeholders, including individuals, groups, organizations, community groups, and the private sector, to gather in-depth information. The qualitative approach is suitable for understanding complex social phenomena through descriptive data, including interviews, observations, and written narratives.

The research was conducted in Bantaeng Regency, South Sulawesi Province, using data collection techniques such as direct interviews with key stakeholders involved in stunting prevention, documentation review, and on-site observations. Data analysis followed the framework proposed by (Matthew B. Miles A. Michael Huberman, 1994) encompassing data collection, data reduction, data presentation, and conclusion drawing.

This study specifically focuses on the implementation of stunting prevention policies through the SDG framework, analyzing economic, social, and environmental dimensions. Furthermore, it evaluates the strategies employed by the local government of Bantaeng Regency to address stunting and examines the challenges encountered during the implementation of these strategies using Edward III's theory, which highlights the importance of bureaucratic structure, resources, disposition, and communication..

Results and Discussion

Bantaeng Regency is geographically located ± 120 km south of Makassar, the capital of South Sulawesi Province with a position of 5°21'13"-5°35'26" south latitude and 119°51'42"-120°05'27" east longitude. The land area of Bantaeng Regency is 395.83 km2 and consists of 8 sub-districts, namely: Bissappu, Uluere, Sinoa, Bantaeng, Eremerasa, Tompobulu, Pa'jukukang and Gantarangkeke. Based on data from the Population and Civil Registration Office, the population of Bantaeng Regency in 2023 was 211,623 people. Compared to the population in 2020, the population of Bantaeng Regency experienced a growth of 5.04 percent. Meanwhile, the number of people in the category of children aged 0-14 years amounted to 52,973 people (BPS, 2024). This category of children is the focus of government attention in the data collection process, which includes stunting.

Table 1. Number of Ppoulation Aged 0-14 Years

Age Group	Male	Female	Total Number
0-4	8.306	7.932	16.238
5-9	9.290	8.736	18.024
10-14	8.920	8.791	17.711

Source: Bantaeng Central Statistics Office, 2024

The prevalence of stunted toddlers (height for age) based on the Indonesian Nutrition Status Survey (SSGI) decreased by 0.4% from 22.5% in 2021 to 22.1% in 2022, but hard work is still needed to reduce the stunting rate by 4.05% every year to reach the target of 14% in 2024. The following stunting conditions are prevalent in South Sulawesi.

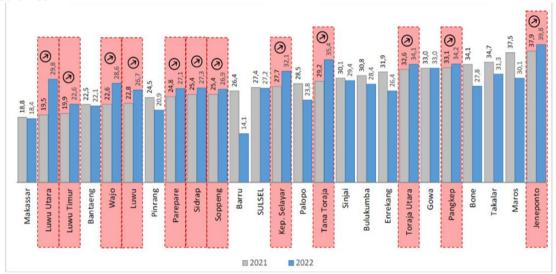


Figure 1. Stunting Prevalence by Regency/City in South Sulawesi in 2021 and 2022 Source: Women's Empowerment and Child Protection Service, Bantaeng Regency

The Sustainable Development Goals (SDGs) provide a global framework to tackle the world's pressing challenges through collaborative efforts among nations. In the context of this research, the SDGs serve as a guiding principle for addressing stunting by integrating economic, social, and environmental strategies. These dimensions are critical for ensuring comprehensive and sustainable solutions, as they encompass improving nutritional access, enhancing community health services, and promoting environmental conditions that support child growth and development. According to data from the Indonesian Nutrition Status Survey (SSGI), the prevalence of stunting in Bantaeng Regency has shown a decline by 0.4 percent since 2021. The figure is 22.1 percent (Bantaeng Regency Government). Stunting plays a significant role in shaping human development. It is also a key metric in the Sustainable Development Goals (SDGs), particularly in Goal 2: "Eradicate hunger, ensure food security and enhanced nutrition, and encourage sustainable agriculture." The target for 2025 is to decrease the rate of stunting and wasting in children under five, aiming to completely eliminate all forms of malnutrition by 2030. Stunting, characterized by chronic malnutrition during critical growth periods, affects children under five by impairing both their physical and brain development. This condition, which typically manifests after the age of two, is measured by a height-for-age (TB/U) or length-for-age (PB/U) index with a z-score of less than -2, as defined by the World Health Organization (WHO). Beyond health implications, stunting poses long-term risks to a nation's human resources, productivity, and economic growth, potentially widening poverty and inequality.

In response to this challenge, Bantaeng Regency has implemented comprehensive stunting prevention measures anchored by robust legal frameworks. These include Regent Regulation Number 71/2019 on the Convergence of the Stunting Prevention Acceleration Program and Presidential Regulation Number 83/2017 on Strategic Food and Nutrition Policy. Additionally, Presidential Instruction Number 1 of 2017 on the Healthy Community Movement and Bantaeng District Regulation Number 1 of 2016 on No Smoking Areas strengthen local initiatives.

What sets Bantaeng apart is the synergy between regulatory support and innovative programs designed to address stunting. The region's approach reflects a strong commitment to collaboration across sectors, creating a model for achieving stunting reduction targets. These efforts position Bantaeng as an example for other regions facing similar challenges, showcasing the importance of tailored, multi-sectoral strategies in addressing complex health and development issues.

Implementing stunting prevention with the SDGs approach in Bantaeng Regency

Economic aspects

The implementation of stunting prevention efforts in Bantaeng Regency aligns with the Sustainable Development Goals (SDGs), particularly Goal 2: "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture." Bantaeng Regent Decree Number 430/72/II/2021 marked a decisive step by establishing a working group to address integrated nutrition challenges. This policy was introduced to address the economic constraints faced by the community, particularly in providing adequate care for children categorized as stunted. Several regulations were enacted to support these efforts, demonstrating the local government's commitment to comprehensive stunting mitigation.

While these actions represent progress, there are significant barriers to their effective implementation. For instance, the Department of Women's Empowerment and Child Protection (DPPKB) faces a chronic budget shortfall, which limits its ability to expand programs like the Acceleration of Stunting Reduction initiative. This issue is compounded by the lack of clear policies in the Village Community Empowerment Office (PMD), which restricts the use of village funds for stunting prevention. The absence of actionable guidelines has left local programs underfunded and unevenly implemented, hindering progress in addressing stunting comprehensively.

These resource limitations and policy gaps directly impact the alignment of Bantaeng's stunting prevention initiatives with SDG parameters. Specifically, the inability to utilize village funds limits local governments' capacity to support interventions targeting economic vulnerabilities, such as providing supplemental nutrition and access to healthcare for underprivileged families. This disconnect underscores the need for strategic planning and enhanced interagency collaboration to effectively utilize available resources and bridge the policy gaps.

The correlation between stunting prevention policies in Bantaeng and the SDGs lies in addressing economic inequities that perpetuate chronic malnutrition. For example, SDG Goal 1 (No Poverty) and Goal 10 (Reduced Inequalities) emphasize the importance of equitable resource distribution, which remains a challenge in Bantaeng Regency. Addressing these issues requires targeted interventions, such as revising village fund policies to explicitly include stunting mitigation and increasing budget allocations for health and nutrition programs.

Empirical evidence highlights the urgency of these efforts. For example, despite the formation of the working group, stunting prevalence in Bantaeng remains above 20%, reflecting the ongoing struggle to mobilize sufficient resources and integrate programs at the local level. This necessitates a re-evaluation of current strategies to ensure they are both economically sustainable and effectively aligned with SDG targets. Moreover, fostering partnerships between local governments, private sectors, and communities can create innovative funding mechanisms to overcome existing financial constraints.

In conclusion, while Bantaeng Regency has made strides in addressing economic constraints to combat stunting, more robust strategies and clearer policy frameworks are needed. Strengthening the alignment of local initiatives with the SDGs requires addressing resource inadequacies, clarifying village fund utilization, and fostering interagency collaboration. These measures are essential to creating a sustainable and inclusive approach to stunting prevention in line with global development goals.

Social Aspect

In each *Puskesmas* (Community Health Center), innovative approaches to stunting management have been introduced, with strong community support enabling cadres to implement programs effectively. One notable innovation is the "One Flag One Target Maternal and Child Health (SASKIA)" initiative, pioneered by the head of Sinoa *Puskesmas*, H. Iwan Setiawan, SKM., M. Kes., in Bantaeng Regency. This initiative involves placing flags in homes where pregnant women, infants, and toddlers reside, serving as a visual marker for health workers to prioritize these households. The program is further enhanced by the E-SASKIA application, which enables midwives to monitor and address health conditions in real-time, improving the efficiency and reach of stunting prevention efforts.

The SASKIA program exemplifies how local innovations can address stunting by raising awareness and fostering behavioral changes within communities. Increased public awareness of the importance of proper nutrition and regular health monitoring has been a significant factor in supporting stunting prevention. However, challenges persist in areas with persistently high stunting rates. The Bantaeng district government is gradually expanding its intervention efforts to include these areas, although progress remains slow.

Despite its promising framework, a deeper analysis reveals areas for improvement. While the SASKIA program provides an innovative approach, its effectiveness depends on the integration of broader systemic strategies, such as improving access to healthcare, enhancing resource allocation, and addressing underlying socioeconomic factors. For instance, studies have shown that community-based health interventions are most successful when combined with comprehensive public health measures, including nutritional education, sanitation improvement, and economic empowerment programs (Azizah, 2023; WHO, 2021).

Moreover, the reliance on community support highlights the need for sustained investment in capacity building for cadres and health workers. Adequate training and resources are essential for maintaining the quality and scalability of programs like SASKIA. Furthermore, integrating digital tools such as E-SASKIA with national health information systems could improve data accuracy and enable more targeted interventions, aligning with Sustainable Development Goals (SDG) 3 and 5, which emphasize health and gender equality.

To summarize, the SASKIA initiative showcases significant potential in addressing stunting at the local level through community-driven innovation and technological

integration. However, its success relies on overcoming systemic challenges and ensuring adequate resources for broader implementation. Future efforts should focus on integrating local innovations like SASKIA with comprehensive health and social policies, fostering a sustainable and inclusive approach to stunting prevention. Additionally, strengthening empirical evidence and conducting detailed evaluations of program outcomes will provide valuable insights and guidance for replicating its success in other regions.

Enviromental aspect

The success of stunting prevention policies is intricately linked to environmental factors, as access to clean water, adequate sanitation, sustainable food systems, and climate resilience play pivotal roles in addressing chronic malnutrition. In Bantaeng Regency, efforts to integrate environmental considerations into stunting prevention are still evolving but remain critical for achieving long-term success.

One key environmental challenge is limited access to clean water and sanitation, which exacerbates the prevalence of waterborne diseases and poor hygiene practices, both of which contribute to stunting. To address this, the local government has collaborated with the Public Works Office to implement the Community-Based Total Sanitation (STBM) program, focusing on improving access to safe drinking water and promoting hygiene practices. Additionally, infrastructure development projects aim to provide households with reliable sanitation facilities, reducing the risk of diarrhea and other infections that impair nutrient absorption in children.

Food security is another crucial environmental factor influencing stunting. The regional government has partnered with agricultural and food security agencies to encourage local food production through initiatives like the Sustainable Food Home Area (KRPL) program. This program promotes the use of household gardens to grow diverse, nutrient-rich crops, ensuring a steady supply of fresh food for families. Moreover, efforts to enhance post-harvest management and reduce food waste directly contribute to improving nutritional intake for vulnerable populations.

Climate change further complicates the environmental landscape, as its impact on agriculture and food security poses additional risks to vulnerable communities. In response, Bantaeng Regency has started integrating climate-resilient agricultural practices into its policies, such as promoting drought-resistant crops and encouraging agroforestry to mitigate the effects of extreme weather events. These measures not only enhance food security but also strengthen the region's capacity to adapt to climate-related challenges.

To ensure effective implementation, collaboration among stakeholders is essential. Village and sub-district governments, the Family Welfare Empowerment Team (PKK), and Family Planning Cadres (KB) play significant roles in promoting community participation in environmental health programs, such as *Posyandu* activities and hygiene campaigns. Moreover, the involvement of Village Guidance Officers (Babinsa) and Bhayangkara Builder of Community Security and Order (Bhabinkamtibmas) has been instrumental in mobilizing communities to adopt better environmental practices.

Integrating environmental considerations into stunting prevention policies aligns closely with the Sustainable Development Goals (SDGs), particularly Goal 6 (Clean Water and Sanitation), Goal 2 (Zero Hunger), and Goal 13 (Climate Action). By addressing these environmental factors, Bantaeng Regency can create a more holistic and sustainable approach to stunting prevention, ensuring that environmental improvements complement social and healthcare interventions.

While significant strides have been made in addressing social and healthcare dimensions, greater emphasis must be placed on environmental factors to achieve comprehensive stunting prevention. Strengthening infrastructure for clean water and sanitation, enhancing food security through local agriculture, and adopting climate-resilient practices are critical steps toward creating a healthier and more sustainable future for Bantaeng's children.

Local government strategy to combat stunting in Bantaeng Regency

Multi-Sectoral Approach

The multi-sectoral approach serves as the core of stunting prevention strategies in Bantaeng Regency. Collaboration among various agencies ensures that policies and programs are effectively integrated to achieve optimal results. Each sector plays a complementary role, creating synergy in the implementation of stunting prevention programs. Cross-sectoral coordination is strengthened through an outcome-based monitoring system designed to evaluate the effectiveness of the programs. Data from various agencies is collected and analyzed to ensure that each intervention delivers measurable impacts. This monitoring process also helps identify challenges in program implementation and provides data-driven solutions.

This approach has yielded significant results, with a 0.4% reduction in stunting prevalence within the past year. This demonstrates that synergy among agencies and community engagement plays a pivotal role in the program's success. By focusing on policy integration, evidence-based monitoring, and the involvement of all stakeholders, the multi-sectoral approach proves to be a highly effective strategy for ensuring a sustainable reduction in stunting rates in Bantaeng. In Bantaeng Regency, the local government has collaborated with at least 16 OPDs and 2 vertical institutions that carry out various activities to reduce the stunting rate. The following are the responsibilities and functions of each OPD in interventions to reduce stunting.

Table 2. Roles and Responsibilities of Agencies in Stunting Prevention

No	Agency	Roles
1	Regional Financial Management Agency	Facilitates technical guidelines, financial planning, monitoring, and guidance on stunting prevention funds.
2	Health Office	Coordinates with other departments, provides nutritional supplements, health promotion, and local nutrition surveillance.
3	Public Works Office	Develops water and sanitation infrastructure and monitors implementation.
4	Office of Education	Coordinates nutritional training for PAUD educators and reproductive health counseling for adolescents.
5	Food Security Office	Promotes diverse, safe food consumption, and strengthens food systems through KRPL and food security programs.
6	Office of PMD, PP, and PA	Coordinates village-level stunting policies, monitors village stunting meetings, and strengthens village institutions.
7	Population Control and Family Planning Office	Promotes parenting during the first 1,000 days, provides family planning services, and conducts marriage age counseling.

8	Youth and Sports Office	Engages youth in stunting campaigns, promotes antenatal care, and raises awareness about 1,000 HPK.
9	Department of Agriculture	Increases production of fruits, vegetables, and medicinal plants while promoting environmentally friendly farming.
10	Housing, Settlement and Land Agency	Facilitates livable housing and sanitation for underprivileged families.
11	Department of Transportation	Improves transportation access to remote areas and connectivity for hard-to-reach areas.
12	Office of Communication, Informatics, and Standardization	Disseminates public service information on stunting policies and monitors policy implementation.
13	Environmental Bureau	Controls water and soil pollution, promotes waste management through the 3R system, and encourages partnerships for environmental quality.
14	Office of Cooperatives, SMEs and Trade	Supervises distribution and quality of food and beverage products, promotes healthy products, and prevents misuse of hazardous materials.
15	Ministry of Industry and Labor	Monitors the processed food industry, promotes health check-ups for workers, and supports lactation rooms in workplaces.
16	Social Welfare Department	Provides social welfare data (DTKS), optimizes PKH and BSP programs, and conducts capacity-building meetings (P2K2).
17	Ministry of Religion	Implements premarital counseling, strengthens Pesantren Health Posts and Sakinah family counseling.
18	BPJS Kesehatan	Improves promotive and preventive services, including secondary prevention and early detection of diseases.

Source: Processed data by researcher, 2024

The data indicates that Bantaeng Regency has engaged various agencies with specific roles in stunting prevention, covering aspects of health, nutrition, sanitation, education, food security, and social welfare. The Health Office leads direct interventions by providing nutritional supplements, conducting nutrition surveillance, and promoting health, while the Public Works Office addresses sanitation and clean water needs to support public health. The Food Security and Agriculture Offices play a crucial role in improving access to nutritious food through local food diversification and environmentally friendly agricultural practices. Additionally, the Office of PMD, PP, and PA ensures the implementation of stunting policies at the village level by strengthening institutions and monitoring activities. Although this approach reflects a comprehensive multi-sectoral strategy, its implementation requires better integration, particularly in terms of interagency coordination and outcome-based monitoring, to ensure that all programs deliver measurable impacts on reducing stunting rates. By strengthening the framework and fostering synergy among agencies, this program has the potential to become an effective model for stunting prevention at the national level.

Specific Interventions

Specific interventions are strategic steps designed to directly address nutritional problems among vulnerable groups, including pregnant women, infants, and young children. In Bantaeng Regency, the provision of supplementary feeding (PMT) for pregnant women with chronic energy deficiency (CED) and malnourished children has become a priority program. PMT ensures that daily calorie and nutrient requirements

are met during pregnancy and the critical early years of child development. Additionally, the government ensures that pregnant women routinely receive iron and folic acid supplementation to prevent anemia, a key risk factor for low birth weight. This supplementation is delivered through *Posyandu* and healthcare services accessible across all villages, ensuring equal coverage for the community.

Malnourished children or those at risk of stunting also receive direct support through the provision of vitamin A and other micronutrient supplements. Vitamin A boosts immunity and supports healthy metabolic processes essential for optimal growth. The Bantaeng government has also strengthened immunization services to protect children from diseases that could exacerbate their nutritional challenges, such as measles and diarrhea. High immunization coverage significantly reduces the risk of health complications among children, supporting their overall growth and development.

The local government has expanded access to maternal and child health services, including routine prenatal check-ups to monitor the condition of mothers and their unborn children. These services also include education on the importance of consuming nutritious food, adopting healthy lifestyles during pregnancy, and making regular visits to healthcare facilities. All these measures are supported by a local surveillance system that allows for the regular monitoring of children's growth using anthropometric indicators such as weight and height.

Specific interventions in Bantaeng have proven highly effective as they directly target the root causes of stunting, primarily chronic malnutrition. This system also facilitates early detection of children at risk of stunting, enabling timely interventions. Through these efforts, Bantaeng Regency not only supports the healthy growth of children but also contributes to improving their quality of life in the long term.

This approach not only supports the reduction of stunting prevalence but also lays the foundation for a healthier and more productive future generation. The government continues to enhance the capacity of healthcare workers, particularly in remote areas, to ensure that every child has access to quality health services. By focusing on essential nutrition, consistent growth monitoring, and integrated health services, this strategy remains one of the key effective approaches to tackling stunting in Bantaeng Regency.

Nutrition-Sensitive Interventions

Nutrition-sensitive interventions aim to improve the environmental conditions that support child development. In Bantaeng Regency, the Community-Based Total Sanitation (STBM) program has become a top priority to ensure access to clean water and adequate sanitation facilities. Clean water and sanitation are critical components in preventing waterborne diseases such as diarrhea, which can cause nutrient malabsorption and exacerbate nutritional deficiencies in children. The STBM program is implemented across villages, actively involving the community through education and empowerment to adopt proper sanitation practices, such as using hygienic latrines.

In addition to sanitation, the Sustainable Food Home Area (KRPL) program helps households utilize their yards to grow nutritious food. This program reduces community reliance on hard-to-access or expensive food sources while promoting a healthier and more diverse diet. Through KRPL, families can cultivate vegetables, fruits, and medicinal plants that not only meet their nutritional needs but also provide additional income opportunities.

The Bantaeng government actively promotes behavioral change campaigns to raise community awareness about the importance of environmental cleanliness, healthy eating habits, and parenting practices that support child development. These campaigns involve *Posyandu*, schools, and local community groups to widely disseminate relevant information. The behavioral change campaigns also emphasize the importance of exclusive breastfeeding for the first six months of a child's life to ensure optimal growth and development.

Communities are encouraged to actively participate in community-based programs such as *Posyandu* and STBM activities. This participation fosters a sense of ownership among residents, ensuring the sustainability of these interventions. Additionally, the role of health cadres is critical in ensuring that educational messages reach all layers of the community effectively.

Nutrition-sensitive interventions complement specific interventions by creating an environment that supports the success of stunting prevention efforts. This approach has proven effective in addressing the indirect determinants of stunting and promoting overall quality-of-life improvements. By fostering a healthy ecosystem that supports child growth, this strategy provides long-term and sustainable benefits for the people of Bantaeng.

The Challenges of Implementing Stunting Prevention Policies in Bantaeng Regency

Basically, policy implementation is carried out to achieve predetermined goals. George C. Edward III explains that policy implementation is influenced by four variables, namely: Communication, Resources, Disposition, and Bureaucratic Structure. These four indicators are used to analyze the challenges of policy implementation in stunting prevention in Bantaeng Regency.

Communication

Effective policy implementation requires that implementers have a clear understanding of their responsibilities and that the policy's goals and objectives are communicated effectively to the target groups to minimize implementation distortions. In the context of stunting prevention in Bantaeng Regency, the communication challenges are relatively minor, according to the head of BKKBN. This is due to the wellestablished communication network involving 16 Regional Apparatus Organizations (OPD), two vertical government institutions, the UPT Integrated Nutrition Service Center, and Rural/Urban Community Institution Cadres (IMP). These cadres are further divided into Village Family Planning Assistant Officers (SKOP Desa) and Hamlet Family Planning Assistant Officers (SKOP Dusun). In addition, in the implementation of handling stunting cases, there are 4 applications or websites that connect central and local government communication, including: Electronic System Ready to Marry, Ready to Get Pregnant (Elsimil) initiated by the National Population and Family Planning Agency, Ikhtiar Men-Zerokan Stunting (Inzting) initiated by the South Sulawesi Provincial Government, E-PPGBM as an electronic system for recording and reporting nutrition, and the Family Information System (SIGA).

Resources

Where even if the policy content has been communicated clearly and consistently, the implementation will not be effective if the implementers lack the necessary resources. These resources can be in the form of human resources, such as the implementers' competencies, and financial resources. The DPPKB faces a budget

shortfall in implementing the family and golden generation program, while policies related to stunting mitigation implementation by the Community and Village Empowerment Agency are not yet available, causing village funds to remain unusable for stunting handling at the village level. Another challenge, according to the Head of the Integrated Nutrition Service Center (UPT) of Bantaeng Regency, is the lack of human resources at the Integrated Nutrition Service Center, particularly the shortage of pediatricians, obstetricians, nutritionists for needs analysis, and midwives. As a result, the frequency and quality of nutrition services for families at risk of stunting are only available weekly. Therefore, increasing financial and human resources is a top priority to ensure the sustainability and effectiveness of the stunting prevention program.

Disposition

Refers to the inherent traits and characteristics possessed by the implementer. If the implementer has a good disposition, they can effectively carry out policies as intended by the policymakers. Edward III (1980; 98) states that the attitude of the implementer can sometimes cause problems if their perspective or approach differs from that of the policymakers. Therefore, to anticipate this, considerations should be made regarding the placement of staff (implementers) and incentives. The challenge in implementing the Stunting Policy in Bantaeng Regency from the perspective of disposition is the mismatch between the positions and placements of the staff and their actual capabilities. In such situations, it is often found that employees with sufficient knowledge and skills are not placed in positions that match their abilities and potential. Conversely, there are situations where underqualified individuals hold positions that require specific expertise. This leads to a mismatch between the tasks assigned and the available skills. Therefore, improper job placement can hinder the success of the Stunting Policy program because the quality of task execution will be directly affected by the competence and qualifications of the individuals responsible for those tasks.

Bureaucratic Structure

Bureaucratic Structure is the arrangement of work components (units) within an organization, indicating the division of labor and clarifying how different functions or activities are integrated or coordinated. Additionally, the organizational structure also demonstrates job specialization, the chain of command, and the reporting channels (Edward III, 1980;125). An overly long organizational structure tends to weaken supervision and create red tape, which consists of complicated and complex bureaucratic procedures that render organizational activities inflexible. Aspects of the organizational structure include Standard Operating Procedures (SOP) fragmentation. The division of tasks in addressing stunting by the PMD (Community Empowerment Office) is still not optimal in its implementation, as some activities that should be carried out to tackle stunting are not fully executed. For instance, stunting prevention programs like the distribution of supplementary food may not be well implemented. Furthermore, issues arise in the selection process of IMP (Rural/Urban Community Institutions) cadres, where cadre nominations are often influenced more by family ties with the village head rather than based on ability and competence. This results in suboptimal quality of stunting management programs at the village level, which in turn can affect the overall effectiveness and success of stunting prevention and mitigation efforts.

Conclusion

The implementation of stunting prevention with an SDG approach in Bantaeng Regency has taken economic aspects into account by issuing various policies to assist the community, especially children affected by stunting, by providing free treatment to reduce stunting rates. From a social perspective, participation, understanding, and awareness of stunting are very good, as evidenced by community support for the placement of signs in their homes to facilitate both specific and sensitive interventions. Meanwhile, from an environmental aspect, community involvement in combating stunting is evident through actions such as visiting local health centers or reporting to relevant agencies if their peers experience similar issues. The local government's strategy for stunting prevention involves collaboration with 16 Regional Work Units (OPD) and 2 Vertical Government Agencies, and conducting specific and sensitive interventions to reduce stunting rates.

However, the government strategies for addressing stunting in Bantaeng Regency face implementation challenges, primarily in Communication, where all Regional Apparatus Organizations (OPDs) often expect information from one another and lack coordination, resulting in slow intervention execution. In terms of Resources, there is a shortage of pediatricians, obstetricians, nutritionists for needs analysis, and midwives. Consequently, the frequency and quality of nutritional services for families at risk of stunting are only available weekly. Disposition issues arise when there is a mismatch between positions and the skills possessed, leading to employees with adequate knowledge and skills being placed in roles that do not align with their abilities and potential. Bureaucratic Structure is another challenge, as the selection process for IMP (Village/Urban Community Institutions) cadres or employees is often influenced by familial relationships with village heads rather than based on merit and competence.

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