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Effectiveness of Regional Policies in Reducing Stunting in South Buru Regency

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Abstract

Stunting is a human resource development issue that remains a serious challenge in various regions, including South Buru Regency. This study aims to analyze the effectiveness of regional policies in reducing stunting prevalence in South Buru Regency by examining the regional context, demographics, and socioeconomic conditions, as well as policy implementation.

This study uses a descriptive qualitative approach. Data were obtained through secondary data sourced from official publications of the Central Statistics Agency, in addition to local government reports, policy documents, and reports from related agencies in the health and social development sectors. and primary data from interviews. Data analysis techniques were carried out through descriptive and interpretative analysis by examining the relationship between policies, health indicator achievements, and regional structural conditions.

The study results show that despite improvements in several development indicators, such as the Human Development Index and regional economic growth, stunting prevalence in South Buru Regency remains influenced by various structural factors. Geographical factors, limited access to maternal and child health services, high poverty rates, and an economic structure dominated by the primary sector are key obstacles to achieving optimal policy outcomes. Furthermore, the implementation of stunting reduction policies has not been fully effective and equitable across regions and has not fully reached the most vulnerable groups.

This study concludes that the effectiveness of stunting reduction policies in South Buru Regency remains partial and requires strengthening cross-sectoral coordination, equitable distribution of basic services, and policy adjustments to the characteristics of the island region. Therefore, more integrated, sustainable, and locally based policies are needed to support accelerated stunting reduction and improve the quality of human resources in South Buru Regency

INTRODUCTION

Stunting is a key indicator of the quality of human resource development, both at the national and regional levels. Stunting results from long-term chronic malnutrition, particularly during the crucial first 1,000 days of life (HPK), from pregnancy to age two. This condition hinders children's physical growth and cognitive development, the impact of which is not only short-term but also persists into adulthood (Black et al., 2013; WHO, 2019). Therefore, stunting cannot be viewed solely as a health issue, but rather as a structural and multidimensional development problem.

Various studies show that children with stunting are at higher risk of limited learning abilities, lower educational attainment, and decreased work productivity in adulthood (Hoddinott et al., 2013). These long-term impacts directly impact the quality of human capital, which can ultimately reduce a region's economic competitiveness. Furthermore, the high prevalence of stunting has the potential to increase the government's fiscal burden due to increased financing needs for the health sector, remedial education, and social protection (World Bank, 2020). Thus, stunting is a major obstacle to achieving sustainable and inclusive economic growth.

Within the framework of sustainable development, reducing stunting is a crucial prerequisite for achieving development goals in health, education, and inequality reduction. This is reflected in the Sustainable Development Goals (SDGs), which place improving nutritional status and human resource quality as an integral part of the global development agenda (UNDP, 2020). In Indonesia, reducing stunting has been designated as a national strategic agenda in human resource development, given its broad impact on workforce quality and the successful achievement of the future demographic dividend (Bappenas, 2018).

In the context of fiscal decentralization and regional governance, the success of stunting reduction policies depends heavily on the role of local governments. Local governments have the authority to translate national policies into programs and activities tailored to the social, economic, and geographic conditions of their regions. However, policy effectiveness is determined not only by the size of the budget allocation, but also by the quality of planning, cross-sectoral coordination, human resource capacity, and a consistent policy monitoring and evaluation system (Rondinelli, 2013; Smoke, 2015). Without strong policy governance, various stunting reduction programs have the potential to fall short of their targets.

The challenges of implementing stunting reduction policies are increasingly complex in island regions, including Maluku Province. Geographical characteristics such as the scattered population across small islands, limited transportation facilities, and dependence on weather conditions contribute to unequal access to maternal and child health services, nutrition, clean water, and sanitation (WHO, 2019; UNICEF, 2021). Furthermore, high logistics costs to reach remote areas often limit the intensity and sustainability of stunting reduction programs implemented by local governments.

On the other hand, the socioeconomic characteristics of island communities contribute to the high risk of stunting. Dependence on the primary sector with fluctuating incomes, relatively low levels of education, and suboptimal parenting and food consumption practices increase nutritional vulnerability among pregnant women and toddlers (Black et al., 2013). The interaction between limited access to basic services and these socioeconomic conditions reinforces the intergenerational cycle of poverty and stunting, which is difficult to break without integrated and sustainable policy interventions.

South Buru Regency is one of the regencies in Maluku Province facing stunting, with a relatively high prevalence rate that has tended to fluctuate in recent years. Data from the Indonesian Nutritional Status Survey (SSGI) shows that stunting reduction in South Buru Regency is unstable and remains above the provincial and national averages. This indicates that the interventions implemented have not been fully effective in achieving consistent and sustainable stunting reduction (Ministry of Health of the Republic of Indonesia, 2024).

The high prevalence of stunting in South Buru Regency is inextricably linked to limited basic infrastructure, access to health and nutrition services, and relatively high poverty rates. In addition to these structural factors, the stunting problem is also related to regional policy

governance. The local government has established a Stunting Reduction Acceleration Team (TPPS) and implemented various specific and sensitive interventions. However, in practice, challenges remain, including cross-sectoral coordination, inadequate implementation capacity, and weak policy monitoring and evaluation systems (OECD, 2020; World Bank, 2020).

Previous research on stunting in Indonesia has generally focused on individual and household determinants, such as nutritional intake, maternal education, income, and sanitation conditions. While these studies have made important contributions to understanding the causes of stunting, studies specifically analyzing the effectiveness of regional policies from an institutional and implementation perspective, particularly in island regions, are relatively limited. Policies are often positioned as context, rather than as the primary object of analysis.

Based on this description, research on the effectiveness of stunting reduction policies in South Buru Regency is highly urgent. This research is crucial for understanding the extent to which regional policies have been effectively implemented in the context of an archipelagic region, as well as the factors influencing their success and limitations. The research findings are expected to provide empirical contributions to the development of more contextual, integrated, and sustainable stunting reduction policies at the regional level.

The research findings are expected to provide a basis for local governments to strengthen stunting reduction policy governance, improve cross-sectoral coordination, and formulate more adaptive strategies. Therefore, this research is expected to contribute to more effective and sustainable stunting reduction efforts.

1.2 Problem Formulation

Based on this background, the research problem is formulated as follows:

1. How is the development of stunting prevalence in South Buru Regency?
2. How are regional policies implemented in efforts to reduce stunting?
3. To what extent are regional policies effective in reducing the prevalence of stunting in South Buru Regency?
4. What factors influence the effectiveness of stunting reduction policies in the area?

1.3 Research Objectives

This research aims to:

1. Analyzing the development of stunting prevalence in South Buru Regency.
2. Reviewing the implementation of regional policies in handling stunting.
3. Assessing the effectiveness of regional policies in efforts to reduce stunting.
4. Identifying factors that influence the effectiveness of stunting reduction policies in South Buru Regency.

Concept and Definition of Stunting

Stunting is a condition of growth failure in toddlers, characterized by a height or length below the standards for age set by the World Health Organization (WHO). This condition reflects chronic, long-term malnutrition, particularly during the first 1,000 days of life (HPK), from pregnancy to age two (WHO, 2019).

From a public health perspective, stunting is not only related to low nutritional intake, but also to exposure to recurrent infectious diseases, environmental quality, and limited access to maternal and child health services. These factors interact and cause permanent impairments in children's growth and cognitive development.

In the context of development, stunting is understood as an indicator of the failure of the development system to ensure the fulfillment of children's basic needs. Black et al. (2013) confirmed that stunting is correlated with poor educational quality, an increased risk of chronic disease, and decreased economic productivity in adulthood.

Stunting and Human Resource Development

Human capital theory positions health and nutrition as initial investments that determine the quality of individual productivity and long-term economic growth (Becker, 1993). Within this framework, stunting reflects a failure of initial investment in human resources.

Children who experience stunting tend to have lower learning abilities and limited educational attainment. This condition results in lower skills and work capacity in adulthood, thus hampering labor productivity.

Hoddinott et al. (2013) showed that individuals who experienced stunting in childhood had lower income levels than those who did not experience stunting. These impacts are long-term and difficult to reverse through intervention in adulthood.

At the macro level, the high prevalence of stunting can weaken regional economic competitiveness and slow economic growth. Therefore, reducing stunting is a crucial prerequisite for human resource development and achieving the demographic dividend.

Public Policy and Policy Effectiveness

Public policy is a series of government decisions and actions aimed at resolving public problems (Dye, 2017). Policy effectiveness refers to the extent to which a policy achieves its stated goals and produces desired changes in conditions.

According to Dunn (2018), a policy is considered effective if the results achieved align with the policy's initial objectives, both in terms of output and outcome. Thus, policy effectiveness is not solely measured by the existence of the program or the size of the budget.

The implementation process is a key determinant of policy effectiveness. Hill and Hupe (2014) emphasize that weak coordination, implementing capacity, and oversight mechanisms can render well-designed policies ineffective in practice.

Stunting Reduction Policy in Indonesia (2 paragraphs)

Indonesia's stunting reduction policy is designed through a convergence approach that integrates specific interventions in health and nutrition with sensitive interventions, such as sanitation, education, and social protection (Bappenas, 2018). This approach emphasizes that stunting is a multidimensional issue that requires cross-sectoral involvement.

Within a decentralized framework, local governments have a strategic role in implementing stunting reduction policies tailored to local conditions. However, the success of these policies depends heavily on the fiscal and administrative capacity and coordination between regional government agencies (Smoke, 2015).

Challenges of Policy Implementation in Island Regions

Island regions have distinct geographic characteristics from mainland regions, characterized by dispersed populations and limited transportation facilities. This situation leads to unequal access to basic services, including health and nutrition (UNICEF, 2021).

This limited access directly impacts the low coverage of maternal and child health services and nutrition services. WHO (2019) noted that remote areas tend to have a higher risk of stunting due to limited services and high logistics costs.

In addition to geographic factors, the limited fiscal and administrative capacity of island regional governments also impacts policy effectiveness. The World Bank (2020) emphasizes that regions with low fiscal capacity often face difficulties in maintaining the sustainability of social programs.

Effectiveness of Regional Policies in Reducing Stunting

The effectiveness of regional policies in reducing stunting can be measured by the alignment of policy planning with regional needs and the integration between programs and sectors. Effective policies should reach the most vulnerable groups in society.

Cross-sector coordination is a key factor in increasing policy effectiveness. The OECD (2020) emphasizes the importance of clear institutional roles and integrated working mechanisms in multidimensional policies such as stunting reduction.

Furthermore, the capacity of policy implementers at the regional level is crucial for successful implementation. Limited human resources and a weak understanding of stunting management strategies can hinder the achievement of policy targets.

In the context of an archipelagic region, policy effectiveness is also determined by the ability of local governments to adapt implementation strategies to local geographic and socioeconomic characteristics. Therefore, analyzing the effectiveness of regional policies in South Buru Regency is crucial for comprehensively understanding the challenges of policy implementation.

METHODS

Types and Approaches of Research

This study uses a qualitative approach with descriptive-analytical methods to analyze the effectiveness of regional policies in reducing stunting in South Buru Regency. A qualitative approach was chosen because it allows for an in-depth understanding of the policy formulation and implementation process, the roles of policy actors, cross-sector coordination mechanisms, and the factors influencing the success and obstacles to implementing stunting reduction policies.

Location and Time of Research

This research was conducted in South Buru Regency, Maluku Province. The location was selected based on the high prevalence of stunting, the island characteristics of the region, limited access to basic services, and the implementation of stunting reduction policies aligned with national policies. These conditions make South Buru Regency a suitable location for a study on the effectiveness of regional policies.

The study covers the period 2022–2024, a crucial phase in strengthening stunting reduction policies in the regions, including stunting-based budgeting and the implementation of eight

convergence actions. Primary data collection was conducted in August 2025, while secondary data was obtained from official documents and publications during the study period.

Data Sources and Types

This study used both primary and secondary data. Primary data were obtained through in-depth interviews with stakeholders directly involved in stunting reduction policies and through field observations. Secondary data were obtained from regional policy documents, government performance reports, stunting and socioeconomic statistics from the Central Statistics Agency (BPS), and relevant scientific publications.

Data Collection Techniques

Data collection techniques included in-depth interviews, documentation studies, and field observations. Semi-structured interviews were conducted to gather information on policy implementation, cross-sector coordination, and obstacles and strategies for addressing stunting.

Research Informants

Research informants were selected purposively based on their involvement and knowledge of stunting reduction policies. Informants included local government officials and staff, policy implementers in the field, village governments, community leaders, and other relevant parties. The number of informants was not strictly determined but adjusted according to data needs until data saturation was reached.

Data Analysis Techniques

Data analysis was conducted qualitatively and descriptively through the stages of data reduction, data presentation, and drawing and verifying conclusions. Data were obtained from interviews and observations.

RESULTS AND DISCUSSION

Results and Discussion

Development of Stunting Prevalence in South Buru Regency

Development of the Number of Stunted Toddlers in 2021–2024

The development of the number of stunted toddlers in South Buru Regency during the 2021-2024 period, as shown in Table 4.1, illustrates a complex dynamic. The increase in the number of stunted toddlers in 2022 indicates that the policies and programs implemented during that period were unable to offset the structural pressures affecting the community's nutritional status. From a stunting theory perspective, this condition reflects the accumulation of long-term risk factors that cannot be addressed through short-term interventions alone.

Table 4.1: Development of the Number of Stunting Toddlers
South Buru Regency, 2021-2024

Year	Number of Stunting Toddlers
2021	368
2022	390
2023	319
2024	274

Source: Bappeda South Buru Regency, 2024 (processed)

These fluctuations also demonstrate that stunting reduction does not always follow a linear path following established policy directions. Stunting, as a chronic condition, is heavily influenced by the continuity of interventions, the stability of budget support, and the consistency of basic services. Therefore, the increase in 2022 can be interpreted as a reflection of suboptimal policy continuity or disruptions in the nutrition and maternal and child health service chain.

The decline in the number of stunted toddlers in 2023 and 2024 indicates a positive change in policy outcomes. From a public policy effectiveness perspective, this decline can be categorized as an early outcome, indicating that the policy is achieving its objectives.

Distribution of Stunting Toddlers Between Sub-districts in South Buru Regency

Table 4.2 shows that the number of stunted toddlers in South Buru Regency is unevenly distributed across sub-districts, both in terms of level and dynamics of change. Kepala Madan Sub-district consistently recorded the highest number of stunted toddlers during the 2022–2024 period, although it decreased from 161 toddlers in 2023 to 112 toddlers in 2024. This indicates improvement, but still leaves a relatively large stunting burden.

Namrole District experienced a very significant decline, from 86 toddlers in 2022 to only 2 toddlers in 2024. This sharp decline illustrates the success of the intervention in the area, both in terms of program reach and the effectiveness of implementation at the local level.

Fena Fafan District exhibited different dynamics. The number of stunted toddlers increased from 3 in 2022 to 94 in 2024. This spike suggests limitations in service access, implementation capacity, or data collection and recording. Waesama District exhibited a relatively positive trend, with a decrease in the number of stunted toddlers from 36 in 2023 to 4 in 2024. Meanwhile, Ambalauw and Leksula Districts exhibited relatively small fluctuations, but nonetheless reflected that the stunting problem has not been fully addressed consistently. This means that overall, these variations between districts confirm that stunting in South Buru Regency is a spatial and contextual issue, which cannot be understood solely through district-level aggregate figures.

Table 4.2: Number of Stunting Toddlers per District (2022–2024)

Subdistrict	2022	2023	2024
Madan Chief	140	161	112
Lexula	24	47	20
Fena Fafan	3	46	94
Ambalauw	9	6	26

Subdistrict	2022	2023	2024
Waesama	25	36	4
Namrole	86	52	2

Source: Bappeda South Buru Regency, 2024 (processed)

Conclusion of Findings

1. Kepala Madan and Namrole have consistently been the sub-districts with the highest stunting contributions.
2. Fena Fafan experienced a sharp spike in 2024, indicating local issues (access, service, or recording).
3. Waesama shows a drastic decline, reflecting the potential for more effective policy implementation practices.

These results show that the decline in stunting is spatial and contextual, and not uniform across sub-districts.

Analysis of Policy Effectiveness Based on Outcome Achievements

According to the theory of public policy effectiveness, a policy is considered effective if it produces outcomes that align with its stated objectives. In this study, the outcome in question was a reduction in stunting prevalence.

When compared to Table 4.1, the decline in the number of stunted toddlers at the district level indicates that regional policies are beginning to produce positive outcomes. However, a closer look at Table 4.2 reveals that these outcomes are not evenly distributed and are still concentrated in certain regions. This suggests that the effectiveness of regional policies is partial, not comprehensive. In Hill and Hupe's theory of policy implementation, this situation indicates a gap between policy formulation and implementation at the local level. In other words, regional policies have been designed with clear objectives, but the results achieved are highly dependent on the implementation process in each sub-district.

Implementation of Regional Policies in Efforts to Reduce Stunting in South Buru Regency

The operational implementation of stunting reduction policies in South Buru Regency is realized through specific health and nutrition interventions implemented by the Health Office, in collaboration with community health centers (Puskesmas) and integrated health posts (Posyandu). Policy implementation is reflected not only in the program's existence but also in the achievement of service indicators, equitable implementation across regions, and budget support, which determine the quality and intensity of interventions on the ground.

Based on the 2024 Evaluation of Stunting Intervention Achievements and Realization of the South Buru District Health Office, specific interventions were implemented through the Simultaneous Stunting Intervention scheme, which refers to ten main indicators (10 Pasti), including target data collection, anthropometric measurements, nutrition education, interventions for toddlers with nutritional problems, and recording and reporting through the e-PPGBM system. Institutionally, all 13 community health centers have implemented these interventions.

Table 4.3. Scope of Implementation of Specific Stunting Interventions in South Buru Regency, 2024

Specific Intervention Indicators	Scope of Implementation
Registration of prospective brides and grooms	100%
Data collection on pregnant women	100%
Toddler data collection	100%
Standardized anthropometric measurements	85%
Toddler visits to integrated health posts	72%
Assistance for toddlers with nutritional problems	68%
Nutrition education for mothers and toddlers	75%
Providing nutritional interventions	70%
Registration to e-PPGBM	80%
Routine monitoring and evaluation	65%

Source: South Buru District Health Office, Intervention Evaluation Stunting 2024 (processed)

Table 4.6 shows that target data collection has reached 100 percent for prospective brides, pregnant women, and toddlers. However, in the follow-up service indicator, intervention coverage has decreased, particularly for toddler visits to integrated health posts (Posyandu) (72%), assistance for toddlers with nutritional problems (68%), and routine monitoring and evaluation (65%). This indicates that comprehensive data collection has not been fully accompanied by an even intensity of services and assistance.

Variations in implementation outcomes at the community health center level, as shown in Table 4.4, show that only 5 of 13 community health centers achieved high coverage (≥80%), while 6 were in the medium category, and 2 were still in the low category (<60%). This difference primarily occurred in areas with limited geographic access, limited health personnel, and limited logistical constraints.

Table 4.4. Overview of Coverage Variations Specific Interventions Between Health Centers

Coverage Category	Number of Community Health Centers
High coverage (≥80%)	5
Moderate coverage (60–79%)	6
Low coverage (<60%)	2
Total	**13**

Source: South Buru District Health Office, 2024 (processed)

The relationship between implementation level and stunting development is more clearly seen in Table 4.5. Community health centers with high implementation consistently showed a decrease in the number of stunted toddlers, and some even experienced significant reductions, such as the Waetawa, Wamsisi, and Oki Baru Community Health Centers. Conversely, community

health centers with low implementation tended to show stagnant stunting, while those with moderate implementation showed varying results. These findings confirm the relationship between the quality of policy implementation and stunting reduction outcomes at the service area level.

Table 4.5. Integration of Specific Intervention Implementation and Stunting Development in 13 Community Health Centers in South Buru Regency

No	Name of Health Center	Subdistrict	Specific Intervention Coverage (%)	Implementation Category	Stunting Development (2023–2024)
1	Biloro	Madan Chief	≥80	Tall	Decrease
2	Waepandan	Madan Chief	60–79	Currently	Limited decline
3	Walbele	Madan Chief	<60	Low	Stagnant
4	Lexula	Lexula	≥80	Tall	Decrease
5	Ewiri	Lexula	60–79	Currently	Fluctuating
6	Waemulang	Lexula	<60	Low	Stagnant
7	Waekatin	Fena Fafan	60–79	Currently	Increase
8	Ulima	Ambalauw	60–79	Currently	Fluctuating
9	Waelua	Ambalauw	<60	Low	Stagnant
10	Water	Waesama	≥80	Tall	Significant decrease
11	Wamsisi	Waesama	≥80	Tall	Significant decrease
12	New Oki	Namrole	≥80	Tall	Significant decrease
13	Namrole	Namrole	60–79	Currently	Decrease

Source: South Buru District Health Office (2024 Stunting Intervention Evaluation), South Buru Regency Bappeda (Stunting Data per Community Health Center 2023–2024), processed.

In terms of policy support, Table 4.6 shows a significant increase in budget allocation in 2024, focused on specific interventions directly targeting the 1,000 HPK target group. This budget increase differs from the 2022–2023 period, which focused more on governance and capacity building. The impact is reflected in the decrease in the number of stunted toddlers, from 319 in 2023 to 274 in 2024. This demonstrates that a large, well-targeted, and integrated budget significantly contributes to policy outcomes.

Table 4.6. Development of the Stunting Intervention Program and Budget in the Public Health Sector

Year	Intervention Cluster	Examples of Main Activities	Targets & Key Indicators	Total Budget (Rp)
2022	Governance and surveillance	8 Convergence Actions, Nutrition Surveillance, Nutrition Campaign	District/Sub-district/Village Working Groups are formed, measuring toddler height/weight	**744,669,000**
2023	Capacity building and education	GERMAS Stunting, cadre training, anthropometry workshop	Improving knowledge of cadres & health workers, active integrated health posts	**420,000,000**
2024	Intensive specific interventions (upstream–downstream)	PMT for pregnant women with special needs, signatures for teenagers and pregnant women, complementary feeding, immunization, referrals for malnutrition, sanitation	Pregnant women with special needs receive PMT, toddlers receive complete immunization, exclusive breastfeeding, ODF, e-PPGBM	**±4,626,326,000**
2025	Sustainability & system strengthening	Advanced GERMAS, advocacy, guidance for Pokjanal, cadre training	Active Posyandu, trained cadres, functioning institutions	**451,212,000**

Source: South Buru District Health Office: Evaluation of Stunting Interventions 2022–2025

However, despite increased budget support, implementation outcomes across community health centers remain inconsistent. This finding suggests that budget is an important prerequisite, but not the sole determinant of policy success. Implementer capacity, equitable service delivery, and program sustainability are crucial factors in determining the effectiveness of stunting reduction policy implementation.

Overall, the implementation of stunting reduction policies in South Buru Regency has been structurally sound and supported by relatively adequate programs and budgets, particularly in 2024. However, this implementation remains partial due to disparities in capacity and quality of implementation among community health centers (Puskesmas). These findings confirm that the primary challenge to stunting reduction in South Buru Regency lies not in the absence of policies, but rather in the uneven and inconsistent implementation of policies at the primary care level.

Effectiveness of Regional Policies in Reducing the Prevalence of Stunting in South Buru Regency

The effectiveness of regional policies in reducing stunting prevalence in this study was analyzed by comparing policy objectives, the level of policy implementation, and the results achieved (outcomes). This approach aligns with the theory of public policy effectiveness, which states that a policy is considered effective if it produces tangible changes in line with its stated objectives, particularly in addressing the public problems targeted by the policy.

Changes in Stunting Prevalence as an Indicator of Policy Effectiveness

Based on the discussion in Subchapters 4.2 and 4.3, the prevalence of stunting in South Buru Regency showed a downward trend during the 2023–2024 period, both at the district level and in some sub-districts and community health centers. This decline in the number of stunted toddlers is a key indicator in assessing the effectiveness of regional policies.

In aggregate, the decline in stunting prevalence demonstrates that regional policies are capable of producing positive outcomes. This indicates that stunting reduction policies go beyond planning and budgeting, but have had a tangible impact in the form of a reduction in the number of stunted toddlers. Therefore, from an outcome perspective, regional policies demonstrate initial effectiveness.

However, policy effectiveness cannot be assessed solely on aggregate reductions. The analysis in Subchapters 4.2 and 4.3 shows that stunting reductions were not evenly distributed across all regions. Some sub-districts and community health center (Puskesmas) areas experienced significant declines, while others remained stagnant or even fluctuated. This indicates that policy effectiveness is partial and heavily influenced by regional context and local implementation capacity.

Conformity between Policy Implementation and Stunting Outcomes

The effectiveness of stunting reduction policies in South Buru Regency is inextricably linked to the socioeconomic conditions of the community, particularly the relatively high poverty rate. According to data from the Central Statistics Agency (BPS), the percentage of poor people in South Buru Regency reached 14.91 percent in 2024, or approximately 9,610 people. This high poverty rate reflects limited household purchasing power for nutritious food, inadequate environmental quality, and limited access to basic services, which are theoretically the main determinants of stunting.

Data on the level of implementation of specific interventions and the development of stunting indicate that stunting reduction policies work differently across regions. Community health centers (Puskesmas) operating in areas with high levels of specific intervention implementation, such as Biloro, Leksula, Waetawa, Wamsisi, and Namrole and Oki Baru, consistently show significant reductions in the number of stunted toddlers. This finding suggests that, despite these areas being in relatively high poverty contexts, stunting reduction policies can still produce positive outcomes when implemented intensively, consistently, and sustainably. Conversely, in areas with low levels of policy implementation, such as Walbele, Waemulang, and Waelua, stunting reduction policies have not yet produced significant changes. The limited coverage of specific interventions, the low frequency of visits to integrated health posts (Posyandu), and the weak support for toddlers with nutritional problems have resulted in poor households remaining in a state of high nutritional vulnerability. Consequently, stunting prevalence in these areas tends to stagnate despite the existence of formal policies and programs.

The above results confirm that poverty is not the sole determinant of stunting, but rather closely interacts with the quality of policy implementation. In areas with relatively high poverty rates but supported by strong policy implementation, stunting prevalence can be reduced. Conversely, in areas with similar poverty rates but weak policy implementation capacity, stunting tends to persist.

Furthermore, research findings indicate that stunting reduction policies in South Buru Regency have not been fully integrated with cross-sectoral poverty reduction policies. Sectoral

interventions in the health sector still face limitations when not optimally supported by social protection programs, increased household income, and improved access to basic infrastructure. Therefore, the reduction in stunting reflects the technical success of health service implementation rather than structural changes in the community's socioeconomic conditions.

Effectiveness of Inter-Regional Policies

The effectiveness of stunting reduction policies is also analyzed based on their ability to reach all regions proportionally, according to their level of need and vulnerability. Data shows that although the number of stunted toddlers in South Buru Regency decreased from 390 in 2022 to 274 in 2024, a decrease of approximately 29.7 percent, this achievement was not evenly distributed across regions.

The disparity in policy effectiveness between regions is evident at the sub-district level. Namrole Sub-district experienced a significant decline, from 86 stunted toddlers in 2022 to just 2 in 2024, a decrease of approximately 97.7 percent. Conversely, Fena Fafan Sub-district experienced a sharp increase, from 3 stunted toddlers in 2022 to 94 in 2024. This extreme difference indicates that stunting reduction policies have not been working uniformly, and their effectiveness is heavily influenced by regional characteristics and the capacity of primary health care services.

This difference in achievement is closely related to the disparity in healthcare service capacity between regions. Namrole District is the only district with a general hospital and two community health centers, while the other districts are served only by community health centers without referral facilities. Furthermore, Kepala Madan and Leksula Districts each have three community health centers, compared to Ambalau District, which has only one. This variation in the number of facilities has direct implications for service coverage, the frequency of toddler monitoring, and the speed of handling malnutrition cases.

The disparity in service capacity is also reflected in the level of implementation of specific interventions at the community health center level. Only five of 13 community health centers (38.5 percent) were in the high implementation category (≥80 percent), and all showed a consistent decline in the number of stunted toddlers. Conversely, community health centers with low implementation rates (<60 percent) showed stagnant stunting.

From an operational perspective, disparities between regions are reflected in the achievement of basic service indicators, such as integrated health post (Posyandu) visits, assistance for children with nutritional problems, and routine monitoring and evaluation. Regions with better service capacity demonstrate high indicator achievement and significant reductions in stunting, while regions with limited facilities and geographic access experience policy lag, resulting in less than optimal stunting reduction outcomes.

Factors Influencing the Effectiveness of Stunting Reduction Policies in South Buru Regency

The effectiveness of stunting reduction policies in South Buru Regency is not solely determined by budget size or the existence of programs, but is influenced by a combination of factors such as implementation capacity, fiscal policy, socioeconomic conditions, regional spatial characteristics, community behavior, cross-sectoral coordination, and data quality and monitoring systems. The evaluation of policy implementation and analysis of socioeconomic data indicate that these factors interact and shape variations in policy effectiveness across regions.

Health Service Implementation Capacity

The capacity to implement basic health services is the most important factor determining the effectiveness of stunting reduction policies. Community health centers (Puskesmas) with high intervention implementation rates (≥80 percent) generally have a greater availability of health workers and cadres, active integrated health service post (Posyandu) functions, and consistent monitoring and reporting systems. Conversely, limited human resources and weak Posyandu activities result in suboptimal support for toddlers with nutritional problems, thus limiting policy outcomes.

Consistency and Focus of Intervention Budget

Policy effectiveness is greatly influenced by the consistency and precise focus of budget allocation. Findings indicate that a large budget is not automatically effective if it is not directed at specific interventions targeting the biological determinants of stunting. Significant reductions in stunting occur when the budget is focused on PMT for pregnant women with special needs (KE), complementary feeding (MP-ASI), nutritional supplementation, immunization, nutrition referrals, and sanitation. Conversely, when the budget is predominantly allocated to administrative and promotional activities, the impact on stunting reduction tends to be limited.

Household Socio-Economic Conditions

High poverty rates and the dominance of primary sector livelihoods with unstable incomes limit the effectiveness of stunting reduction policies. Poor households tend to have unsustainable food consumption, especially when facing seasonal income shocks. This situation reinforces the nutrition-poverty trap, so health interventions without economic empowerment support risk producing only temporary effects.

Accessibility and Characteristics of the Archipelago Region

The characteristics of island regions and the wide span of control of community health centers influence the intensity of services and the effectiveness of policies. Sub-districts with large areas and long distances to service centers face limitations in the frequency of visits, toddler monitoring, and distribution of nutritional interventions. Conversely, areas with closer distances and more comprehensive health facilities are able to implement interventions more intensively and consistently, resulting in significant reductions in stunting.

Community Behavior and Participation

Community participation in basic health services remains a limiting factor in policy effectiveness. Coverage of integrated health post (Posyandu) visits, toddler support, and routine monitoring has not reached optimal levels. Low participation leads to delays in nutritional detection and intervention. While education programs and the GERMAS program have increased knowledge, changing health behaviors requires economic support, access to services, and the ongoing strengthening of the role of cadres.

Cross-Sector Coordination

Cross-sector coordination at the sub-district and village levels is uneven. The utilization of Village Funds and the integration of health, sanitation, and social protection programs remains limited in some areas, preventing sensitive interventions from optimally strengthening specific ones.

Data Quality and Monitoring System

Variations in the quality of data recording and reporting through e-PPGBM impact the accuracy of policy planning and evaluation. Regions with good data quality are able to make evidence-based policy adjustments, while regions with inconsistent data face limitations in effective decision-making.

CONCLUSION

This study concludes that the prevalence of stunting in South Buru Regency during the 2021–2024 period showed a fluctuating trend but tended to decline in the last two years. The decline in the number of stunted toddlers in the 2023–2024 period indicates that policy outcomes are showing results, although improvements have not been consistent since the beginning of the observation period and are uneven across sub-districts.

The decline in stunting has been shown to be spatially and contextually significant. Some sub-districts, such as Namrole and Waesama, experienced significant declines, while others continued to show stagnation or an increase in cases. These findings confirm that the stunting problem in South Buru Regency cannot be represented solely by aggregate district indicators but is heavily influenced by local conditions in each region.

In terms of implementation, the stunting reduction policy has been implemented structurally and administratively through specific interventions in all community health centers (Puskesmas), with relatively full target data collection coverage. However, in the advanced implementation phase, the quality and intensity of implementation remain suboptimal and vary across community health centers. The low coverage of integrated health post (Posyandu) visits, assistance for children with nutritional problems, and routine monitoring and evaluation reflect limitations in health service capacity, the role of cadres, and access and logistical constraints in island regions.

In aggregate, stunting reduction policies in South Buru Regency have demonstrated partial and conditional effectiveness. Areas with high levels of intervention implementation have consistently reduced stunting prevalence, while areas with low implementation tend to stagnate. This suggests that policy effectiveness is highly dependent on the quality of implementation at the service level as well as the socioeconomic and geographic context of the region.

Policy effectiveness is also influenced by the interaction of various factors, including health service capacity, budget consistency, household socioeconomic conditions, accessibility within island regions, community participation, cross-sectoral coordination, and the quality of data and monitoring systems. Limitations in these factors mean that policies have not been able to provide equitable impacts, while regions with better governance and implementation capacity have benefited more significantly.

Suggestion

Based on the research results and conclusions that have been described, several suggestions that can be put forward are as follows:

Strengthening spatially targeted policy approaches.

The South Buru Regency government needs to shift its policy approach to stunting reduction from an aggregate district-level approach to a more contextual approach based on sub-district characteristics. Areas with stagnant or increasing stunting trends should receive priority intervention through program adjustments, service intensity, and more proportional resource allocation based on local vulnerability levels.

Improving the quality and intensity of intervention implementation at the health service level. Although target data collection has gone well, local governments need to strengthen the

subsequent implementation phase, particularly by increasing the coverage of integrated health service post (Posyandu) visits, assistance to toddlers with nutritional problems, and the frequency of monitoring and evaluation. Strengthening the capacity of health workers and Posyandu cadres, both in terms of numbers, competency, and incentives, is a crucial prerequisite for improving the quality of policy implementation.

Strengthening cross-sector coordination systems and policy governance. Reducing stunting, as a multidimensional problem, requires more effective coordination between the health, education, sanitation, social protection, and community economic empowerment sectors. The Stunting Reduction Acceleration Team (TPPS) needs to strengthen its role as a central coordination center, with clear task allocation, integrated work mechanisms, and regular cross-sectoral performance evaluations down to the sub-district and village levels.

Strengthening budget consistency and integration of stunting reduction programs. To sustainably improve policy effectiveness, consistent budget allocations are needed to support priority stunting reduction interventions. Integration between specific and sensitive programs needs to be strengthened so that interventions are not sectoral and fragmented, but rather complement each other in structurally reducing stunting risk factors.

Improving data quality, monitoring systems, and policy evaluation. Regional governments need to strengthen accurate, up-to-date, and integrated stunting data systems across agencies. Monitoring and evaluation systems based on spatial data and service delivery are crucial for early identification of problem areas and ensuring policies are adaptive and responsive to field dynamics.

Strengthening community participation and behavioral change. Efforts to reduce stunting need to be accompanied by strategies to increase community participation, particularly among target families. Education on nutrition, parenting, and the use of maternal and child health services needs to be carried out sustainably, involving community leaders, local cadres, and using a culture-based approach so that policy interventions are accepted and implemented effectively at the household level..

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