Research Article

Health System Governance Capacity in Handling Stunting in South Bolaang Mongondow Regency

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Abstract.

Stunting is currently one of the most prevalent nutritional problems in Indonesia and has become the focus of an ongoing national intervention program. Stunting is a chronic nutritional problem caused by insufficient food intake over a relatively long period of time. A health governance system that can encourage a reduction in stunting rates is needed. This study aims to analyze the capacity of health system governance in handling stunting in South Bolaang Mongondow District. This research used a qualitative approach. Data collection methods include in-depth interviews, observation, and documentation. Data sources consist of primary data and secondary data. Informants in this study were local government officials at various related agencies, Posyandu cadres, village midwives, and village heads involved in handling stunting. Data analysis techniques include data collection, data reduction, data presentation, and conclusion drawing. The results of this study indicate that the capacity of health system governance in handling stunting in South Bolaang Mongondow Regency is not fully adequate. This is because the human resources who play a role in handling stunting are not all trained in multidimensional stunting case management. Villages that are expected to allocate funds for handling stunting have not shown their commitment by implementing the stunting prevention program. The training provided has not been sustainable and equitable, in addition to limitations to its budget.

Keywords: capacity, health system governance, stunting

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1. Introduction

Stunting is a global threat to child development and future human productivity. The World Health Organization (WHO) defines stunting as a condition of failure to thrive in children under five due to chronic malnutrition so that the child's height is below minus two standard deviations (-2SD) from the median child growth standard (WHO, 2020). Globally, an estimated 149 million children under five experience stunting, with the majority of cases occurring in Asia (55%) and Africa (39%), indicating that stunting remains a significant public health challenge in developing countries.

Indonesia faces a fairly heavy burden of stunting. Data from the 2022 Indonesian Nutritional Status Survey (SSGI) showed that the national stunting prevalence reached

21.6%, down from 24.4% in 2021. Despite the decline, this figure is still above the WHO threshold of 20% and far from the National Strategy for the Acceleration of Stunting Prevention (StraNas) target of 14% in 2024. The Indonesian government has designated stunting as one of the national development priorities through Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction, which emphasizes a multi-sectoral approach in handling stunting.

At the regional level, the disparity in stunting prevalence is still very visible. North Sulawesi as one of the provinces with a stunting prevalence below the national average still has several districts with relatively high stunting rates, including South Bolaang Mongondow Regency. Data from the South Bolaang Mongondow Regency Health Office shows that the stunting prevalence in 2022 is still above 25%, making it one of the priority areas for stunting intervention in the province.

The implementation of stunting management policies in the era of decentralization is highly dependent on the capacity of local governments. [1]emphasized that the effectiveness of stunting reduction programs is determined by the quality of regional health system governance, especially in terms of strategic planning, cross-sector coordination, and resource mobilization. Meanwhile, [2]found that limited technical capacity, weak coordination, and limited budget allocation were the main obstacles in implementing stunting programs at the district/city level.

Although various studies have been conducted on stunting risk factors in Indonesia, research focusing on the capacity of health system governance in handling stunting in areas with specific geographic and socio-cultural characteristics is still limited. [3] highlighted that different regional characteristics require an adaptive governance approach, as generic solutions are often ineffective in specific local contexts.

South Bolaang Mongondow Regency as a relatively new region resulting from expansion (formed in 2008) has its own challenges in building its health governance capacity. The area with diverse topography from the coast to the mountains, limited infrastructure, and socio-cultural diversity add to the complexity of implementing stunting management programs. This reality strengthens the urgency of research on the capacity of health system governance in handling stunting in the area.

This study aims to analyze the capacity of health system governance in handling stunting in South Bolaang Mongondow Regency. A comprehensive analysis of aspects of leadership, regulation, human resources, funding, and coordination in handling stunting is expected to provide an overview of the region's ability to implement national policies,

as well as become the basis for formulating strategies to strengthen the capacity of health system governance in accelerating stunting reduction in the region.

2. Literature Review

2.1. Conceptualization of Stunting and the Global Burden

Stunting has become a major focus in global efforts to improve child health. WHO and UNICEF define stunting as a condition of failure to thrive in children due to chronic malnutrition, characterized by a height below -2 standard deviations from the international growth standard. [1]emphasized that stunting is not just a matter of height, but a syndrome that affects cognitive development, immunity, and long-term productivity. According to the Global Nutrition Report 2021, around 149 million children in the world experience stunting, with 55% of cases occurring in Asia. In Indonesia, stunting is still a serious challenge. [4] identified that the decline in stunting prevalence in Indonesia was slower than in neighboring countries such as Thailand and Vietnam. Meanwhile, [5]found significant geographic variation in stunting prevalence between provinces in Indonesia, with the highest disparity in Eastern Indonesia.

2.2. Health System Governance in Handling Stunting

Health system governance is an important determinant of the success of stunting programs. six key dimensions of health governance: strategic leadership, participation, rule of law, transparency, responsiveness, and equity [6], [7], [8]. In the context of stunting, them argued that the effectiveness of nutrition interventions is highly dependent on the quality of service delivery systems and program governance. study in five Asian countries showed that health system decentralization had varying impacts on stunting programs, with local leadership as a key determinant of success. highlighted the importance of building local government capacity in implementing the National Strategy for Accelerating Stunting Reduction in Indonesia [9], [10], [11].

2.3. Multisectoral Approach and Cross-Sector Coordination

Addressing stunting requires a comprehensive multisectoral approach. The conceptual framework identifies determinants of stunting at various levels, from immediate causes

to underlying causes, which require cross-sectoral interventions. evaluated the Scaling Up Nutrition (SUN) initiative in various countries and emphasized the importance of a strong coordination platform between the health, agriculture, education, and social protection sectors. In Indonesia, noted that although a coordination mechanism had been established at the national level, implementation at the regional level still faced bureaucratic obstacles and sectoral egos. found that regions with good cross-sectoral coordination showed a more significant reduction in stunting prevalence [9], [12], [13], [14].

2.4. Human Resource Capacity and Funding

Human resource capacity is a crucial factor in handling stunting. Shrimpton et al. (2016) identified gaps in the capacity of health workers in various developing countries, especially in understanding evidence-based nutrition interventions. [14], [15]in four African and Asian countries showed that sustainable health cadre training had a significant impact on the effectiveness of community nutrition programs. In terms of funding, the global financing gap for stunting interventions, which is estimated to require an additional USD 7 billion per year [14], [15], [16]. At the local level,the use of Village Funds for stunting in Indonesia and found significant variation in village commitment to allocate budget for nutrition programs as importance of mainstreaming nutrition in local budget planning and strong accountability mechanisms [12], [17], [18].

3. Methods

This study uses a descriptive qualitative approach to analyze the capacity of health system governance in handling stunting in South Bolaang Mongondow Regency. A qualitative approach was chosen because it allows for in-depth exploration of complex social phenomena involving various actors and institutional structures in stunting governance. Data collection was carried out through three main techniques. First, in-depth interviews with key informants including the Regency Stunting Reduction Acceleration Team (TPPS) consisting of the Regent as director, Deputy Regent as chief executive, heads of related OPDs, including the Health Office, Village Community Empowerment Office, and Bapelitbangda. Interviews were also conducted with TPPS at the sub-district and village levels, posyandu cadres, and village midwives. Second, observations of the implementation of stunting programs in the field, including stunting discussions and the

implementation of the BTS (Bolsel Completes Stunting) program. Third, documentation studies of related policies such as Regent Regulation No. 13 of 2020 concerning Stunting Reduction and Regent Regulation No. 26 of 2020 concerning the Role of Villages in Preventing Stunting. Data analysis uses an interactive model that includes data collection, data reduction, data presentation, and drawing conclusions. Data validity is guaranteed through source triangulation by comparing information from various levels of government and method triangulation by comparing data from interviews, observations, and documentation. The study focuses on four aspects of governance: transparency, accountability, participation, integration, and institutional capacity in the context of stunting management.

4. Results and Discussion

4.1. Result

A. Governance Structure: Strong Foundation with Evolving Implementation

Bolaang Mongondow Selatan Regency has built a fairly comprehensive governance structure to address stunting (Figure 1). The heart of this structure is the Stunting Reduction Acceleration Team (TPPS) which is tiered from the district to the village. Interestingly, the Regency TPPS is led directly by key figures - the Regent as director and the Deputy Regent as chief executive - indicating a strong political commitment from regional leaders. The District TPPS is organized into several special areas, each with a different intervention focus:

- Specific and Sensitive Intervention Service Sector (coordinated by the Health Service)
- Behavior Change and Family Assistance Division (coordinated by the PP KB PA Service)
- Coordination, Convergence and Planning Sector (coordinated by Bapelitbangda)
- Data, Monitoring, Evaluation and Knowledge Management Sector (coordinated by Poltekes Depkes Manado)

At the sub-district level, TPPS is chaired by the Sub-district Head with members from the Health Center, Sub-district PKK, PLKB, and Village Assistants. While at the village level, TPPS is chaired by the Village Head with members from Posyandu Cadres, PKK

cadres, BPD, community leaders, and village midwives. his structure is supported by a strong policy foundation, including:

- Regent Regulation No. 13 of 2020 Concerning Reducing Stunting
- Regent Regulation No. 26 of 2020 concerning the Role of Villages in Preventing Stunting

Although the structure has been well established, there are still some challenges in its implementation. As expressed in the interview, “Coordination between sectors is not optimal” and “There are sub-districts and villages where TPPS is not running optimally.” This shows that although the governance framework has been established, the effectiveness of its implementation still needs to be improved.

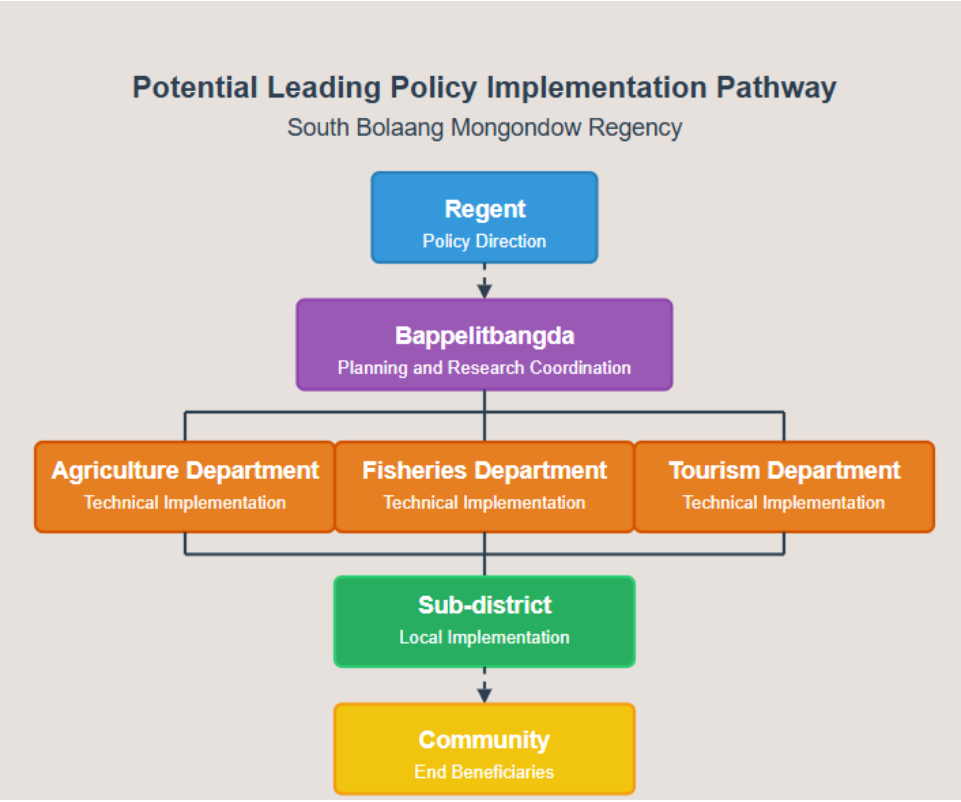


Figure 1: The Structure of stunting reduction acceleration team.

B. Human Resource Shortage: Challenges on the Front Line

Human resources are the spearhead of stunting management, but this is where South Bolaang Mongondow Regency faces a major challenge. Research reveals that human resources capacity is not yet fully adequate, both in quantity and quality.

Midwives, who should be at the forefront, have limited capacity. As revealed in the interview: “Midwives are good enough for stunting detection, but not all are trained in multidimensional stunting case management.” Some midwives are still focused on

specific interventions and have not been integrated with other sectors. More worryingly, “in terms of the number of village midwives, there is still a shortage.”

The condition of posyandu cadres and Human Development Cadres (KPM) is not much different. The majority “do not understand the problem of stunting comprehensively that stunting is a long-term problem.” They also have limitations in terms of screening and education capabilities to the community.

Interestingly, village officials’ understanding of stunting varies widely and tends to “depend on curiosity and interest in finding out more.” Even more concerning, stigma is still a challenge in some villages where “there are also village heads who think that stunting is a social disgrace, making it difficult to work together in determining stunting data.”

Although training has been carried out, it has not been optimal in terms of continuity and coverage. “Many have not received optimal training and evaluation of training participants in terms of field implications is rarely carried out.” This statement highlights the importance of not only providing training, but also ensuring post-training mentoring and evaluation.

From the TPPS Semester II report, several efforts to increase human resource capacity have been carried out, such as Technical Guidance for Posyandu Cadres and KPM and Orientation of the Family Assistance Team (TPK). However, these efforts need to be improved considering “the lack of human resources in the field who understand the essential needs and supplies of each target toddler.”

C. Budget Allocation: Large Funds with Suboptimal Distribution

The budget for handling stunting in South Bolaang Mongondow Regency is quite substantial, but still faces challenges in terms of distribution and utilization. Based on 2024 data, the total budget for accelerating stunting reduction reached IDR 39.5 billion, with details:

- Specific intervention: Rp1.6 billion
- Sensitive intervention: Rp37 billion
- Coordination intervention: Rp867 million

In addition, there is support from the Village Budget of all villages amounting to IDR 9.1 billion.

Although the numbers seem large, based on interviews, this budget is “not yet fully adequate” especially “in the area of sensitive intervention.” The budget distribution

is also not even, where “usually the stunting budget only goes to the Health Office program, PMD Office, PP KB and PA Office, and some to Bapelitbangda.”

Table 1: Distribution of Stunting Program Budget in SKPD in 2024.

Regional Government Unit	Budget Amount (Rp)	Percentage
public health Office	36,240,852,598	54.3%
PUTR Service	24,373,332,550	36.5%
education authorities	4,053,545,685	6.1%
PPKBP3A Service	1,420,095,000	2.1%
Social Services	767,006,370	1.1%
Research and Development Agency	239.186.130	0.4%
PMD Service	183,913,565	0.3%
Department of Cooperatives and SMEs	234,396,000	0.4%
Department of Agriculture	7,820,000	0.01%
Total	**66,753,141,528**	**100%**

Source: SKPD P-APBD FY 2024 South Bolaang Mongondow Regency

From the Table 1 above, it can be seen that more than 90% of the budget is concentrated in the Health Office and PUTR Office. While other offices involved in sensitive interventions get a much smaller portion.

Another challenge is related to the utilization of Village Funds, where “there are still villages that do not meet” the 20% allocation for national priority programs including stunting. This shows the variation in the commitment of village governments in handling stunting.

Problems were also encountered in the policy of using funds from the center, where “The policy in the Technical Guidelines for DAK BOK Stunting Funds and DAK Non-Physical is more directed at operational needs, not aimed at targets for stunted toddlers/underage children.” This condition causes central government funding support to not optimally target direct interventions.

Interestingly, despite the large budget allocation, 64 essential indicators in handling stunting have not been fully met “due to budget and human resource limitations in the regions.” This shows that in addition to the amount of the budget, the effectiveness of its management also needs to be improved.

D. Integration and Coordination Constrained by Sectoral Ego

Handling stunting requires a multi-sectoral approach, and Bolaang Mongondow Selatan Regency has made efforts to integrate various related sectors. As expressed in the

interview, “The program has been integrated across OPDs, through TPPS, the OPDs in question jointly plan and implement the program.”

To facilitate cross-sector coordination, several forums have been formed, namely the “TPPS Meeting Forum, Stunting Discussion Forum, and RKPD.” These forums have “run effectively at the work program planning level,” but unfortunately “still have problems with sectoral egos” in their implementation.

This sectoral ego is one of the main challenges in cross-sectoral coordination. Each OPD still tends to focus on its own sectoral work program without seeing it in the larger framework of integrated stunting handling.

Coordination challenges are also encountered in terms of data management. There are “several indicators in Presidential Regulation No. 72 of 2021, which require data fulfillment to be taken from 2 or more different OPDs, so that the data overlaps.” For example, in the “coverage of Fertile Age Couples (PUS) who receive reproductive health examination services” where the PUS data from the PP KB and PA Service is different from the productive age data at the Civil Registry Service, while the examination services are carried out by the Health Service.

Data inconsistencies also occur between various stunting data collection systems. “Significant differences in prevalence data between the Indonesian Health Survey (SKI) and e-PPBGM” and “Data that is not synchronized between measurements via e-PPBGM Puskesmas and cadre data” are serious challenges in program coordination and planning.

From the Figure 2 above, it can be seen that there is a very significant difference between SSGI/SKI and e-PPGBM data, with a difference of more than 20%. This difference has been analyzed by the district government and it was found that different measurement methodologies were the main cause.

To overcome the challenges of data integration, South Bolaang Mongondow Regency has developed an Integrated Stunting Handling Information System (SI PINTER Bolsel). This innovation is expected to become a “comprehensive and dynamic integrated database” for use by all related OPDs. However, this application is still in the development stage and needs to be continuously refined.

E. Transparency and Accountability: Information Available, Participation Limited

South Bolaang Mongondow Regency has attempted to increase transparency in handling stunting through various information channels. “Information on stunting programs, budgets and activities is conveyed to the community through socialization and

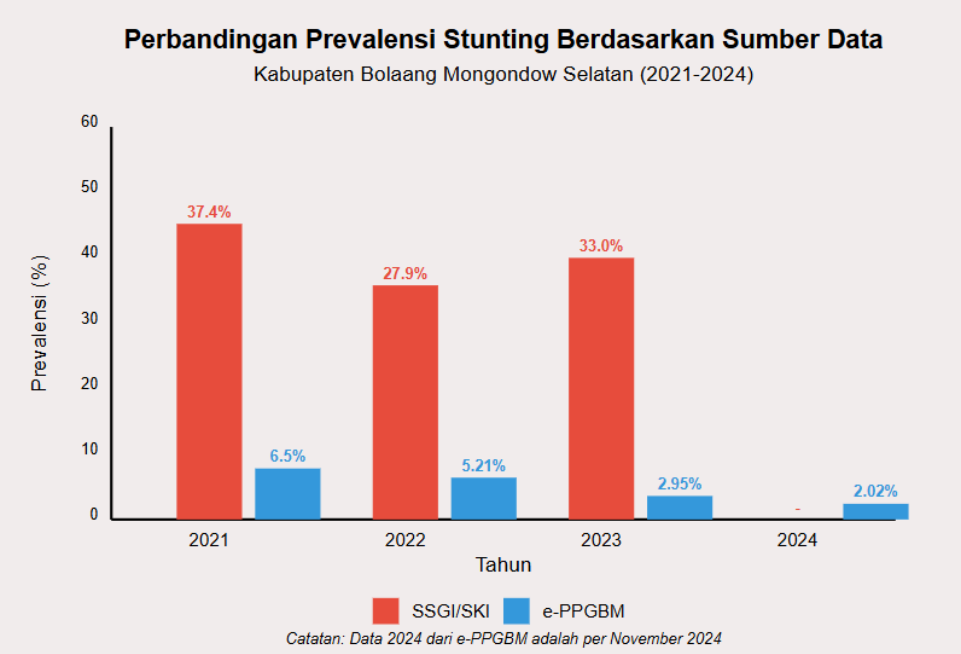


Figure 2: Comparison of Stunting Prevalence Based on Data Sources.

education at the village level, regular meetings and coordination of related stakeholders, utilization of digital information systems that can be accessed by the public."

Information about stunting is also disseminated through various social media such as "Instagram, the Health Service Facebook account, and the official website of the Bolsel Regency Government." Unfortunately, even though the information is available and accessible, "the public is not yet enthusiastic about accessing it."

The impact of this transparency on public trust and participation is still limited. Although "transparency of the stunting program has been able to create trust and social control," it "has not optimally encouraged the wider community to participate actively." This is associated with "the still low level of education and public curiosity."

In terms of accountability, there is a clear accountability mechanism in the implementation of the stunting program. The parties responsible if there is a discrepancy between the achievement and the target are the "District Stunting Reduction Acceleration Team (TPPS) which carries out the planning and implementation of the program" and "Village Government related to ensuring the allocation of village funds for priority stunting programs."

Incentive and sanction mechanisms have been established to encourage accountability. Incentives are given based on "significant performance in reducing stunting prevalence, good convergence between sectors, timely, valid, and transparent data

and reporting" in the form of "additional Regional Incentive (DID) funds and awards at national and provincial levels."

On the other hand, sanctions are given if there is "non-implementation of mandatory programs, incomplete and manipulative reports, a decrease in stunting prevalence and inappropriate use of funds" in the form of "reduction of Regional Incentive Funds, cutting and delaying Regional Transfer Funds (TKDD), written warnings from the Governor and Minister of Home Affairs, special evaluations in the form of strict supervision from BPKP and BPK."

To improve accountability, the district government has also provided a public complaint mechanism through various channels such as "village deliberations, stunting discussions, integrated health posts and cadres, social media, village heads, council members, health centers and health offices." Based on confirmation, "on average, it is followed up to be handled."

F. Programs and Innovations: Creativity Amidst Limitations

South Bolaang Mongondow Regency has developed various programs and innovations in efforts to handle stunting. Some of the main programs include:

1. Stunting discussions at the district, sub-district and village levels to identify and monitor the evaluation of specific and sensitive interventions.

2. The Healthy Pregnant Women Movement Prevents Stunting, in the form of counseling activities and examinations of pregnant women which are complemented by the provision of Blood Supplement Tablets (TTD) and pregnancy exercises.

3. The Nutrition Action Movement Prevents Stunting, focuses on reproductive health and nutrition education for adolescents, including the provision of Iron Supplement Tablets.

4. Supervision of KIA and Nutrition Services and Programs in the management of integrated health posts, to optimize the function of integrated health posts in monitoring child growth and development.

5. Guidance for Prospective Brides and Grooms by the Integrated Marriage Service Center, which involves examination and education related to stunting prevention for prospective couples.

There are several interesting things found in the research, including two superior innovations that were developed:

a. Bolsel Completes Stunting (BTS). This innovation is in the form of providing nutritious additional food (milk, quail eggs, green beans and vitamins) to all stunted toddlers.

The BTS program is implemented voluntarily by involving various parties including "OPD, community organizations, communities, institutions, individuals and businesses." This collaborative approach shows creativity in overcoming budget constraints through mobilizing resources from various parties.

b. Integrated Stunting Handling Information System (SI PINTER Bolsel). This Web System, Geographic Information System (GIS), and Android-based application was developed to "assist policy makers in stunting intervention programs." SI PINTER Bolsel functions as a "comprehensive and dynamic integrated database" and "a means of reporting from target communities in the locus village regarding the interventions implemented." This innovation demonstrates an effort to utilize technology to improve the effectiveness of stunting governance.

Through various programs and innovations, the prevalence of stunting based on e-PPGBM data has shown a significant downward trend, from 15.66% in 2019 to only 2.02% in November 2024. Although SKI data shows a higher prevalence (33% in 2023), the downward trend is still visible compared to 2021 (37.4%).

The number of families at risk of stunting also decreased from 5,153 families in 2023 to 4,174 families in 2024, with the highest distribution in Posigadan District (945 families), Pinolosian (772 families), and Bolaang Uki (725 families) (Figure 3).

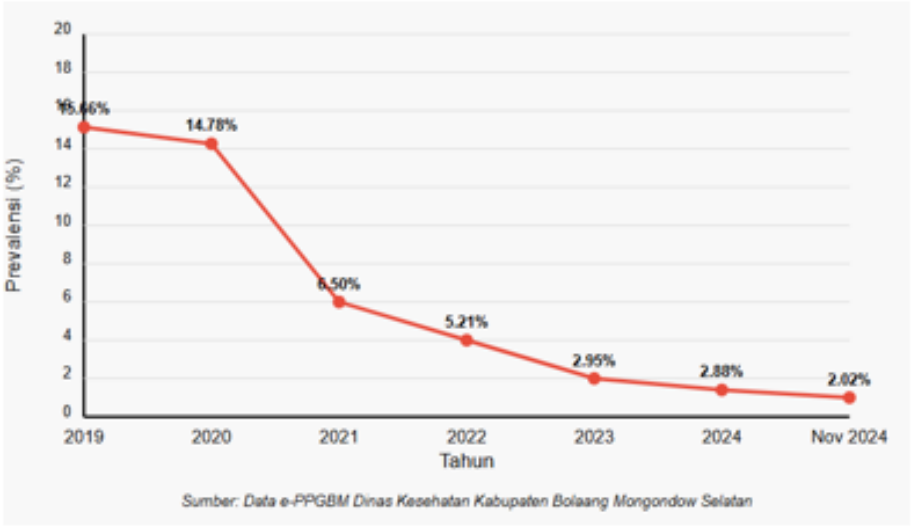
However, several challenges remain in the implementation of the program, particularly related to inter-sectoral coordination, budget constraints, and inadequate human resource capacity. The significant differences between e-PPGBM and SKI data also indicate the importance of aligning stunting measurement methodologies.

G. Community Participation: When Awareness Does Not Match Information Availability

Community participation is the key to the success of the stunting program, but this is where Bolaang Mongondow Selatan Regency still faces major challenges. Based on research, community participation in the stunting program is still not optimal.

Community involvement has so far been limited to formal forums such as "village musrembang" and "meetings such as the implementation of integrated health posts and during counseling in villages." Although information about stunting has been provided through various media, "the community is not yet enthusiastic about accessing it."

Some factors that influence low community participation are "diversity of local cultures and varying levels of community education." In addition, the wrong perception about stunting also still exists, where "there are also village heads who think that stunting is a social disgrace."



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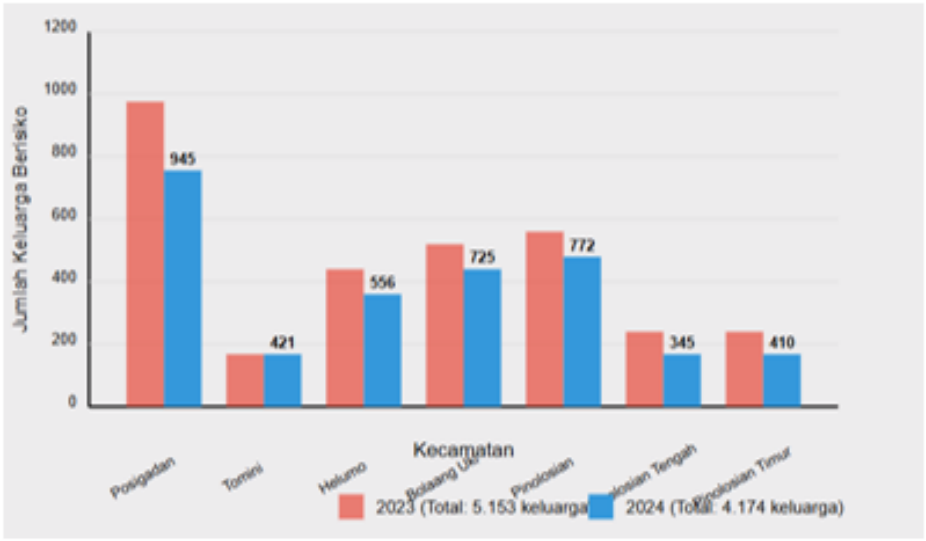

(b)

Figure 3: (a) Trend of Stunting Prevalention (b) distribution of families at risk of stunting.

Interestingly, amidst the limited participation of the general public, there is a positive initiative from health cadres, where “there are special cadres in handling stunting such as KPM (Human Development Cadres) who provide assistance and supervision to families at risk of stunting and families who have stunted children.”

The Bolsel Innovation Program to Complete Stunting (BTS) shows the potential for involvement of various parties outside the government, such as "community organizations, communities, institutions, individuals and businesses." However, effective participation from all actors involved is still not optimal, especially "in sensitive interventions involving sectors outside of health."

Although various efforts have been made to increase community participation, there is still "minimal community participation in stunting management programs in villages, both in supervision and active participation." This indicates the need for a more creative and contextual approach to encourage active community participation in handling stunting.

H. Challenges Faced: Multidimensional Complexity

South Bolaang Mongondow Regency faces various challenges in health system governance for handling stunting. These challenges are multidimensional, covering institutional, human resources, budget, data, and socio-cultural aspects.

Table 2: Summary of Challenges in Stunting Governance.

Dimensions	Main Challenges
Coordination	- Coordination between sectors is not yet optimal - Sectoral egos are still strong - Overlapping policies and programs
Data	- Significant differences between SKI and e-PPGBM data - Data is not synchronized between Puskesmas and cadre measurements - Stunting measurement methods are not standardized
HR	- The capacity of midwives, cadres and village officials is limited - The number of village midwives is still lacking - Training is not yet sustainable and evenly distributed
Budget	- Budget allocation is not yet fully adequate - Distribution between OPDs is not yet even - Village commitments in allocating village funds vary
Socio-cultural	- Public awareness is still low - Perception of stunting as a social disgrace - Parenting patterns are still wrong - Early marriage
Policy	- Determination of locus villages is only based on number/prevalence - Use of DAK BOK funds is more for operational purposes - There is no policy yet on the use of unexpected spending budgets

Some specific challenges that need special attention:

1. Determination of Locus and Non-Locus Villages. "It is necessary to review the need to determine locus and non-locus villages, because so far the process of determining locus villages has only been based on the number and/or prevalence of stunting." In fact, stunted toddlers/toddlers also exist in non-locus villages and require the same attention and handling.

2. Budget Flexibility. “Specifically for handling stunting, it needs to be strengthened with policies from the central government regarding the use of unexpected spending budgets in the APBD so that interventions can be implemented according to measurement data in the current month.”

3. Stunting Measurement Method. “Stunting measurement indicators that do not consider the child’s nutritional status, only TB and BB / Age. So, toddlers with good nutritional status are still recorded as stunted toddlers.”

4. Fund Usage Policy. “The policy in the Technical Guidelines for DAK BOK Stunting Funds and DAK Non-Physical Funds is more aimed at operational needs, not aimed at stunting toddlers/under-age children.”

5. Implementation of 64 Essential Indicators. “64 essential indicators and supplies that have not been 100% implemented due to budget and human resource limitations in the regions.”

4.2. Discussion

The results of the study indicate that the capacity for stunting governance in Bolaang Mongondow Selatan Regency has a strong structural foundation but faces challenges in implementation. This finding is in line with the governance theory which identified six key dimensions of health governance: strategic leadership, participation, rule of law, transparency, responsiveness, and justice. High political commitment with direct involvement of the Regent and Deputy Regent in the TPPS structure indicates strong strategic leadership, but suboptimal cross-sector coordination reflects challenges in the participation dimension [9], [10], [18], [19], [20].

Sectoral egos that become obstacles to coordination are a common phenomenon in multisectoral health governance. effective handling of stunting requires a “Health in All Policies” approach that integrates health into all sectoral policies. However, research by Bappenas and UNICEF (2019) in Indonesia shows that sectoral egos, fragmented budgeting systems, and weak coordination mechanisms are still the main challenges in implementing stunting policies at the regional level [13], [21].

The limitations of human resource capacity found in this study identified gaps in the capacity of health workers in various developing countries, especially in understanding evidence-based nutrition interventions. In Indonesia, that human resource capacity in handling stunting varies between regions, with remote areas experiencing greater

Table 3: Key Finding Matrix Health System Governance Capacity in Handling Stunting in South Bolaang Mongondow Regency.

Dimension	Strengths	Challenges
Structure	• Strong political commitment with Regent-led team • Clear policy foundation (Regent Regulations)	• Poor coordination between sectors • Inactive teams in some villages • Persistent sectoral egos
Human Resources	• Established cadre system • Some trained midwives	• Shortage of trained personnel • Limited understanding of stunting • Inconsistent training distribution
Budget	• Substantial funding (Rp39.5 billion) • Village fund allocation mechanism	• Concentrated in few departments • Inadequate for sensitive interventions • Inconsistent village contributions
Coordination	• Multiple coordination forums • Development of integrated information system	• Data inconsistencies between sources Overlapping responsibilities • Unsynchronized methodologies
Transparency	• Multiple information channels • Established accountability mechanisms	• Low public engagement • Limited impact on participation • Variable complaint follow-up
Programs	• BTS (Bolsel Completes Stunting) innovation • Stunting discussions at multiple levels • Reported reduction in prevalence	• Limited program coverage • Implementation gaps • Significant data reliability issues
Community	• Some involvement in formal forums • Family assistance cadres	• Low overall participation • Cultural barriers and stigma • Limited community awareness

challenges. that ongoing training and post-training mentoring are crucial factors in increasing the effectiveness of nutrition programs. The uneven budget distribution pattern between OPDs, as found in this study, reflects the challenges of aligning the budgeting system with a multi-sectoral approach. According to Ruel et al. (2018), budget allocations for sensitive interventions are often smaller than for specific interventions, even though both are equally important in comprehensive stunting management [22].

The significant differences between SKI and e-PPGBM data found in this study indicate challenges in harmonizing health information systems. WHO (2020) emphasizes

the importance of an integrated and quality health information system in stunting monitoring. study in Indonesia identified variations in measurement methodology as one of the factors causing inconsistencies in stunting prevalence data, which has implications for program planning. Socio-cultural aspects that influence stunting management, such as the perception of stunting as a social disgrace, are in line with the findings of on the importance of understanding the socio-cultural context in stunting interventions. In Indonesia stunting interventions need to be tailored to the local context and involve community leaders to increase acceptance and participation.

Overall, the findings of this study reinforce the concept of the success of stunting management depends on the quality of governance that includes political leadership, effective coordination, capacity building, strong data systems, and adequate resource mobilization. Strengthening health system governance in these dimensions is a prerequisite for the implementation of effective and sustainable stunting programs.

5. Conclusion

Based on the research results that have been described, it can be concluded that the capacity of health system governance in handling stunting in South Bolaang Mongondow Regency is not yet fully adequate, although it has shown progress in several aspects. Structurally, South Bolaang Mongondow Regency has a clear governance framework in the form of a Stunting Reduction Acceleration Team (TPPS) that is tiered from the district to the village level. This structure involves various sectors with a clear division of roles and responsibilities. However, in its implementation, coordination between sectors is still not optimal with sectoral egos and overlapping policies and programs. The capacity of human resources in handling stunting is still limited. Health workers such as midwives, integrated health post cadres, and village officers do not all have a comprehensive understanding and adequate skills in handling multidimensional stunting cases. The training provided is also not sustainable and evenly distributed. In terms of budget, although there has been a large allocation from the APBD and APBDes, its distribution has not been optimal, especially for sensitive interventions. In addition, the village's commitment to allocating Village Funds for the stunting program has not been fully realized. Community participation in stunting programs is still low, influenced by local education and cultural factors. Although information about stunting is available and accessible, the community is not yet enthusiastic about accessing it and actively participating in stunting programs. Innovations such as the Bolsel Program to Complete

Stunting (BTS) and the Integrated Stunting Handling Information System (SI PINTER Bolsel) demonstrate the efforts of local governments in increasing the effectiveness of handling stunting through creative and technology-based approaches. The main challenges in stunting governance in South Bolaang Mongondow Regency include suboptimal coordination between sectors, data quality and consistency, limited human resource capacity, budget constraints, and low community participation. The significant differences between e-PPGBM data and SKI data raise questions about the accuracy of stunting measurements and require further study to align stunting measurement and data collection methods. Overall, although there has been progress in handling stunting in South Bolaang Mongondow Regency, the capacity of health system governance still needs to be improved, especially in terms of inter-sectoral coordination, human resource capacity, budget optimization, and community participation, to achieve higher effectiveness in handling stunting.

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