

Strategic Planning, Resource Allocation, Operational Efficiency, Organisational Effectiveness, Accountability Measures, and Budgetary Performance in the Stunting Prevalence Reduction Program in Sigi Regency

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ABSTRACT

Reducing the prevalence of stunting is a national priority and a significant challenge for local governments, including Sigi Regency. This study aims to analyse the planning, allocation, efficiency, effectiveness, accountability, and budget performance of the stunting reduction program in Sigi Regency. It employs a qualitative descriptive approach supported by secondary quantitative data to enhance the analysis. Data was collected through in-depth interviews, documentation studies, and field observations in several OPDs and stunting locus villages. The results indicate the program's effectiveness is relatively high, evidenced by a 10.4% reduction in stunting prevalence within a year. However, budget efficiency remains weak due to overlapping activities, inadequate coordination between OPDs, and a predominance of operational spending. While accountability for budget implementation is administrative, it lacks a results-based focus and does not include participatory reporting from the community. Budget performance regarding outcomes shows positive results but is unevenly distributed across regions, and output reporting has not been fully validated. These findings stress the need to strengthen cross-sector coordination, implement thematic budget tagging systems, adopt results-based reporting, and improve data integration in program planning and evaluation. Strategic recommendations include enhancing the role of TPPS, maximising the use of SIPD, and developing risk- and performance-based budget plans to ensure the sustainability of stunting reduction programs efficiently and accountably.

INTRODUCTION

Stunting constitutes a multifaceted public health issue and exerts a long-term influence on the quality of human resources. This condition is defined by a child's height being below the standard for their age, resulting from chronic malnutrition, recurrent infections, and insufficient stimulation during the first 1,000 days of life. Consequently, stunting impedes physical growth and adversely affects children's cognitive development and future productivity. Hence, the prevention and management of stunting represent a strategic concern within health development efforts to enhance the quality of human resources in Indonesia. (Brou et al., 2023; Hanieh et al., 2019; Pesu et al., 2021).

Data from the 2022 Indonesian Nutrition Status Survey (SSGI) noted that the prevalence of stunting nationally reached 21.6 per cent. In Central Sulawesi Province, the figure is even higher, at 28.2 per cent, making it one of the provinces with the highest prevalence in Indonesia. One of the districts of main concern is Sigi Regency. In 2021, the prevalence of stunting in this district was recorded at 40.7 per cent, but it decreased to 36.8 per cent in 2022 and dropped drastically to 26.4 per cent in 2023. This significant decrease places Sigi Regency as one of the regions with the best progress in handling stunting (Anastasia et al., 2023; Meher et al., 2023; Picauly et al., 2023; Rahardiantoro et al., 2024; Thahir et al., 2023).

This success is inseparable from various program interventions carried out by local governments. One of the flagship programs is the "One Million Eggs Program," which aims to increase children's nutritional intake by regularly feeding animal protein. In addition, cross-sector synergy is also strengthened through village funds to provide additional food, incentives for posyandu cadres, and educational activities for the community. This multi-sectoral and participatory approach shows that the success of stunting programs depends not only on health aspects but also on fiscal policies and careful budget management (Lestari et al., 2024; van den Heuvel, 2019).

However, these positive achievements still leave important challenges, especially regarding efficiency, effectiveness, and accountability in using the budget. Many stunting programs run parallel in various sectors, but not all are supported by an integrated budget planning and evaluation system. Therefore, a thorough analysis of how the budget is planned, allocated, and utilised optimally to reduce stunting is needed. This is important so that every rupiah spent has a significant impact on reducing stunting rates.

In this context, this study becomes relevant because it examines six important aspects of public budget management: planning, allocation, efficiency, effectiveness, accountability, and budget performance. These six aspects are key indicators in assessing the success of budget policies, especially in priority programs such as stunting interventions. This kind of study has not been carried out comprehensively, especially at the district level, so it is expected to make meaningful scientific and policy contributions.

This study specifically aims to analyse the budget planning process of stunting programs in Sigi Regency, evaluate its allocation patterns across sectors, assess the efficiency and effectiveness of its use, and examine the extent to which budget accountability and performance support the achievement of national

targets. With this approach, it is hoped that a comprehensive mapping of potential improvements in regional public financial governance, that is, results-based budgeting, will be obtained.

The benefits of this research are not only academic but also practical. From the theoretical side, this study enriches the literature in the field of public financial management, especially in evaluating regional-based health program budgets. Meanwhile, practically, the results of this study can be a strategic recommendation for local governments, policymakers, and supervisory institutions in managing the stunting budget more efficiently, effectively, and accountably. In addition, this study can also be a starting reference for future research that wants to explore budget management in the context of other social intervention programs.

The uniqueness or *novelty* of this study lies in the simultaneous approach that combines six key indicators of budget management in one comprehensive evaluation framework. Most previous studies have only partially highlighted one or two aspects, such as program effectiveness or budget use efficiency. With this integrative approach, it is hoped that this study will present a complete picture of the dynamics and challenges of budget management of stunting programs in the regions, especially in Sigi Regency, which is undergoing significant changes in efforts to accelerate the reduction of stunting prevalence.

LITERATURE REVIEW

Public Financial Management

Public Financial Management (MKP) is a strategic process that includes planning, budgeting, implementing, supervising, and evaluating the use of public funds to achieve national development goals and improve community welfare. According to Mardiasmo, MKP focuses on the technical aspects of budget management and includes the dimensions of policies, institutions, and the application of good governance principles. The main objective of the MKP is to ensure that the use of the public budget is carried out efficiently, effectively, transparently, and accountably, as well as to contribute to economic growth and social justice (Bisogno & Cuadrado-Ballesteros, 2022; Ross, 2020; Rutherford, 2023).

In practice, MKP has several main functions. The planning stage is formulating needs and resource allocation based on development priorities. The budgeting stage then converts the plan into concrete figures through a budget document. Furthermore, implementing the budget realises activities by regulations and technical standards, which an accurate financial information system must support. Supervision is carried out internally and externally to prevent irregularities, while evaluation is used to measure the budget's impact on program performance. Accountability is an important foundation for the government to be accountable for using funds in the community (Guoqian Ren et al., 2019; Mkasiwa, 2023).

Some of the principles that are the foundation of the MKP include transparency, accountability, efficiency, effectiveness, and fairness in budget distribution. Along with the development of modern governance, new

approaches in the MKP, such as *New Public Management (NPM)*, *Performance-Based Budgeting*, *Medium-Term Expenditure Framework (MTEF)*, and *Value for Money (VfM)*, are increasingly being implemented. This approach emphasises the importance of outcome-orientedness, efficiency in using budgets, and sustainability in planning and implementing public programs (Bisogno et al., 2022; Ho et al., 2023).

In the context of priority programs such as reducing the prevalence of stunting, the MKP theory provides a relevant framework to assess the effectiveness and efficiency of budget management. Through this approach, it can be analysed how the planning process and budget allocation are carried out, the extent to which the program's implementation reflects the principles of value for money, and how accountability and financial performance are measured based on real achievements on the ground. Thus, MKP is an important tool in ensuring that the stunting reduction program runs according to procedures and has a real impact on improving nutrition and public health (Puron-Cid et al., 2019; Urdaneta et al., 2021).

Value for Money (VfM) Theories need to be developed to explain how the budget is planned, allocated, and utilised optimally to reduce stunting.

Theory of *Value for Money (VfM)* is an important principle in public financial management that emphasises achieving maximum results from every fund spent. This concept is built on three pillars: economy, efficiency, and effectiveness. Economics means obtaining inputs at the most economical price without sacrificing quality. Efficiency has to do with optimizing the use of resources to produce as much output as possible. Meanwhile, effectiveness focuses on achieving program goals directly and having a real impact on society. Thus, VfM is not solely about savings, but also balances cost, quality, and results in the context of development (Cingolani & Fazekas, 2020; Gargani & King, 2024; Guoqian Ren et al., 2019).

The three pillars of VfM are interrelated and ensure that public spending produces optimal benefits. For example, in a nutrition intervention program, objectives are achieved if nutritious foodstuffs are purchased at a reasonable price and quality is guaranteed; efficiency if the distribution is carried out on time and cost-effectively; and effectiveness if the stunting rate decreases. This principle encourages responsible use of budgets, avoids waste, and strengthens *evidence-based policy making*. Therefore, implementing VfM is an important element in the evaluation and accountability of the government budget (Ren et al., 2021; Shiva et al., 2024; Volden, 2019).

In the context of stunting reduction programs, VfM theory assesses how budget management reflects optimal value for the community. The assessment indicators include costs per unit of input (economy), budget realisation to output (efficiency), and the achievement of outcomes and social impact (effectiveness). This kind of evaluation helps to ensure that the programs are not only implemented but also bring measurable and sustainable results in analysing the budget planning process of stunting programs in Sigi Regency, evaluating its allocation patterns across sectors, assessing the efficiency, and improving the

quality of nutrition and public health (Barton et al., 2019; Waci et al., 2024; Zhao et al., 2023).

Fiscal Accountability Theory

Fiscal accountability is a fundamental principle in public financial management that requires the government to manage state finances for the public. This principle emphasises the importance of transparency in every budget stage, from planning, allocation, implementation, to reporting. According to Schick and the OECD, fiscal accountability includes the ability of governments to explain and account for their fiscal policies, both in terms of revenue and spending, to maintain public confidence and macroeconomic stability (Arkedis et al., 2021; Sofyani et al., 2022).

In practice, fiscal accountability has several main dimensions: fiscal transparency, reporting and accountability, supervision and auditing, and public participation. Fiscal transparency means that budget information is presented openly and easily accessible, while reporting demands the preparation of accurate and timely financial statements. Supervision can be carried out by internal institutions such as the inspectorate or external institutions such as the BPK and the DPR. Community involvement through development planning deliberations (*musrenbang*) also strengthens the function of social control over the use of public funds (Adrison, 2024; Lewis et al., 2020).

In decentralisation, such as in Indonesia, fiscal accountability is becoming increasingly important because local governments have broad authority in budget management. Institutional capacity, a transparent financial reporting system, and the use of information technology determine the success of accountability at the regional level. Especially in the stunting reduction program, fiscal accountability includes transparency in budget allocation, reporting of the use of funds to the public and the DPRD, and tangible evidence of program results. Community involvement in evaluation and supervision is urgently needed to ensure the budget is used responsibly (Brandon, 2022; Pribadi et al., 2024).

Budget Performance Theory

Budget performance theory is an approach that emphasises the relationship between budget allocation and the results achieved, both in the form of outputs and outcomes. In this case, the main focus is not only on how much of the budget is spent but also on how much benefit results from using that budget. According to Mardiasmo (2009), budget performance is a measure of the success of budget implementation in achieving goals through programs and activities that have been planned, and reflects the effectiveness and efficiency of the use of public funds (Amirkhani et al., 2019; Decker et al., 2023).

Budget performance assessment can be seen from several components, such as the rate of budget absorption, achievement of output targets, program impact (outcome), and efficiency and cost-effectiveness. For example, high budget absorption indicates good administrative realization but must be associated with concrete achievements such as increasing service coverage or decreasing stunting

prevalence. This approach also assesses the ratio between inputs and outputs and the effectiveness of program outcomes compared to set targets (Budding et al., 2022; Jalali Aliabadi et al., 2019; Sembiyeva et al., 2024). Performance-based budgeting is commonly used in applying this theory. The approach links between inputs (resources), outputs (activities or services performed), and outcomes (tangible results). In the context of priority programs such as stunting reduction, budget performance is critical to gauge whether the allocation of funds is truly impactful in improving the nutritional status and public health. Proper budget performance evaluation will help ensure public funds are used productively, results-oriented, and sustainably (Liyang & Mengying, 2024; Myaing & Lim, 2024).

Theoretical Linkages between Concepts

The four main theories that have been described—public financial management, *value for money*, fiscal accountability, and budget performance—are complementary in forming an ideal conceptual framework for public budget management. The theory of Public Financial Management becomes the main foundation that governs the entire financial cycle from planning to evaluation, emphasizing the importance of good governance and results-oriented use of resources. Each stage in the budget cycle requires strengthening the principles of efficiency, effectiveness, and transparency so that public programs run optimally.

The Value for Money *theory* strengthens the public financial management framework by underlining the importance of achieving the best results from each budget unit spent. By assessing the economic aspects, efficiency, and effectiveness, this theory encourages the government to maximize the social impact of public spending without waste. On the other hand, the theory of fiscal accountability exists to ensure that the entire budget management process is carried out openly, accountable, and involves mechanisms of supervision and active public participation.

Finally, budget performance theory becomes an evaluative instrument that relates the use of the budget to real achievements in the field. By measuring reasonably priced input and outcome indicators, this theory ensures that the success of a program is determined by concrete results, not just by budget realization. In the context of stunting prevalence reduction programs, the integration of these four theories provides a comprehensive approach to designing, implementing, and evaluating fiscal policies that are highly effective and have a direct impact on people's welfare. Social control's function overfocuses on the technical aspects of budget management and optimizing.

METHODOLOGY

This because it examines six important aspects of study uses a qualitative descriptive approach that aims to describe in depth the budget management process in the stunting reduction program in Sigi Regency. This approach was chosen because it is able to capture the dynamics of the planning process, allocation, efficiency, effectiveness, accountability, and budget performance from various perspectives of policy actors in the field (Mediani et al., 2022; Samsudin

et al., 2023). However, to strengthen the interpretation of the aspects of efficiency, effectiveness, and performance, descriptive quantitative data is also used as a complement to the analysis. The research locations include various strategic agencies such as Bappeda, the Health Office, DPMD, and the Regional Inspectorate, as well as several priority villages. The research was carried out for five months, from April to September 2024.

The main focus of this research is on the six dimensions of public budget management in stunting reduction programs, namely: planning, allocation, efficiency, effectiveness, accountability, and performance. Budget planning is analyzed through the process of preparation and integration across sectors. The allocation is seen from the distribution of funds to various sectors and priority programs. Efficiency and effectiveness are analyzed based on the ratio of coinformationsts and outputs as well as the achievement of outcomes to the program targets. Accountability is measured through the reporting and supervision process, while budget performance is assessed from the impact of the budget on reducing the prevalence of stunting.

Primary data was obtained through in-depth interviews with key officials at Bappeda, the Health Office, DPMD, village heads, health workers, and regional auditors. Meanwhile, secondary data is obtained from official documents such as RKPD, DPA, LRA, LKjIP, and audit reports. In addition, direct observation was carried out in villages that were the locations of active intervention to see the implementation of posyandu activities, distribution of supplementary food, and community education. Data collection techniques include semi-structured interviews, documentation studies, and field observations.

Data analysis was carried out using **Thematic Analysis**, which aims to identify and interpret patterns of meaning from qualitative data. The analysis process begins with the transcription of the interview, the initial coding of important quotes, the grouping of the code into themes, and the interpretation of the results. The three main themes analyzed were planning quality, accountability level, and budget performance. The tools used can be in the form of Excel matrices or qualitative analysis software such as NVivo or ATLAS.ti. The final results of the analysis are in the form of thematic narratives, tables, and maps of relationships between themes to facilitate visualization (Daniel et al., 2023; Morasa et al., 2022).

The findings of the thematic analysis are expected to make a real contribution to improving the stunting budget management system at the regional level. The implications of this study include the provision of empirical evidence on budget planning and implementation practices, the strengthening of transparency and monitoring mechanisms, and the measurement of the impact of results-based budgeting. Thus, this research is not only an academic study, but also an evaluative instrument for improving the performance of local governments in sustainably dealing with stunting issues (Bahasoan et al., 2019; Syafrawati et al., 2023)

RESEARCH AND DISCUSSION

Budget Planning for Stunting Reduction Program in Sigi Regency

Budget planning for stunting reduction programs in Sigi Regency focuses on integrating local policies with relevant national policies. Referring to planning documents such as the RPJMD, the related OPD Strategic Plan, and the RKPD, as well as referring to the National Strategy for the Acceleration of Stunting Reduction, this planning prioritizes budget allocation based on stunting prevalence data. In the last three years, the prevalence of stunting in Sigi Regency has shown a significant decrease, but it is still above the national target, with prevalence data in 2021 of 40.7%, 2022 of 36.8%, and the forecast for 2023 of 26.4%. Despite the decline, the pace of stunting reduction is still relatively slow, so it requires more effective and focused budget planning.

Budget planning in Sigi Regency is carried out through a Musrenbang mechanism that involves various levels of government, ranging from villages to districts. However, there are several challenges in its implementation, such as the lack of priority for stunting programs in the Village Musrenbang, limited planning capacity at the village and sub-district levels, and the lack of cross-sector involvement in integrated planning. To overcome this challenge, Bappeda and the Sigi Regency Health Office have made efforts to build collaborative planning with other OPDs, but budget integration at the district level is still not optimal.

The budget allocation for the stunting reduction program in Sigi Regency comes from various sources, including the Regency Budget, Village Fund, Non-Physical DAK such as BOK for Posyandu, as well as assistance from ministries and donor agencies. However, based on the evaluation of budget realization data for 2022-2023, the budget allocation is still disproportionate and does not reflect regional priorities in reducing stunting. Some of the problems found include the low proportion of budgets for nutrition promotion and education activities, the lack of poor household-based interventions, and the lack of budget for data-based monitoring and evaluation.

In the context of participatory planning, Mardiasmo emphasizes the importance of involving multi-sector actors, including the community and health cadres, in budget preparation. The limitations of microdata are an obstacle to ensuring that the interventions carried out are on target. Therefore, budget planning in Sigi Regency needs to include better data integration and strengthen community participation in the Village Musrenbang to propose more effective programs.

Various policies and legal bases that underlie the planning of stunting reduction programs in Sigi Regency include Permendagri No. 90 of 2019 concerning Classification, Codification, and Nomenclature of Regional Development Planning and Finance, Presidential Regulation No. 72 of 2021 concerning the Acceleration of Stunting Reduction, and the Sigi Regent Decree regarding the determination of stunting locus. These documents provide a framework for the budgeting and implementation of integrated and data-driven stunting reduction programs.

The stages of budget planning in Sigi Regency include identifying problems and priority loci based on SSGI data, synchronizing cross-sector

programs, and allocating budgets through SIPD-based e-planning and e-budgeting systems. However, an evaluation conducted by Bappeda and the Regional Inspectorate revealed the fragmentation of activities, the lack of data integration between OPDs, and the lack of community participation in budgeting. Therefore, it is recommended to increase the effectiveness of budget planning by using a performance-based monitoring system and strengthening the capacity of human resources of planners at the village and sub-district levels.

Some of the recommended strategic steps to improve budget planning for stunting reduction programs in Sigi Regency include strengthening data and analysis dashboards based on electronic applications, focusing on priority programs that have a direct impact on stunting reduction, active involvement of villages and local cadres in planning and budgeting, and the use of data-based applications for decision-making. With these steps, it is hoped that budget planning can be more efficient, on target, and have a significant impact on reducing stunting in Sigi Regency.

Table 1. Summary of Key Findings in Stunting Budget Planning in Sigi Regency

Findings	Explanation
Stunting Prevalence Data	The prevalence of stunting decreased from 40.7% (2021) to 26.4% (2023), but it is still above the national target.
Budget Allocation	The budget allocation is not proportional, with a lack of budget for nutrition education and monitoring.
Program Fragmentation	Many activities are spread across OPDs without synergy, resulting in overlap and waste of budgets.
Data Integration	The absence of data integration between OPDs causes overlapping planning.
Limited Community Participation	The lack of community involvement in the Village Musrenbang to propose the stunting programs.
Recommendations	Strengthening data and application-based analysis dashboards, as well as the active involvement of villages and local cadres.
Supporting Policies	Related policies, including Presidential Regulation No. 72 of 2021, provide a legal basis for stunting planning.

Source: Researcher's Processed Results, 2025

Budget Allocation Patterns for Stunting Programs in Various Sectors

The pattern of budget allocation for stunting reduction programs in Sigi Regency shows a tendency for fragmentation across sectors and program integration that is still limited. Although structurally the allocation is spread

across various OPDs such as the Health Office, the Social Service, the PUPR Office, and the Education Office, the allocated budget has not been explicitly reflected in planning documents such as Renja or LRA due to the weak *thematic budget tagging* mechanism. Activities that are supposed to support the acceleration of stunting reduction are often not recognized as part of the program. The Health Office dominates budget allocations through specific intervention programs such as PMT and malnutrition treatment. In contrast, the sector responsible for sensitive interventions still provides a small portion and tends to be inconsistent from year to year.

The character of allocation that focuses more on downstream or curative aspects, such as treatment and handling of malnutrition cases, suggests that upstream or preventive approaches have not been a major concern. For example, nutrition education for adolescent girls, improving household sanitation, and family food security have not been strong priorities in budgeting. The main cause is the lack of optimal information systems, such as SIPD, in supporting the marking of stunting thematic budgets, so that tracking budgets per sector becomes difficult and inaccurate. Villages with a high stunting burden do not always receive adequate allocations due to the weak connection between village planning and the district system.

In addition, the weakness of coordination between OPDs in the TPPS forum is also a fundamental problem. Although the TPPS has been established, its function is still administrative and has not become a strategic space in compiling a map of roles and cross-sector allocations. Planning is still carried out based on the sectoral logic of each agency, which causes overlapping activities and budget waste. Sectoral egos hinder the preparation of synergistic thematic budget documents, and the weak coordination position of Bappeda exacerbates this situation.

Other technical challenges include data misalignment between levels of government and limited capacity of human resources in OPDs in understanding thematic-based planning. Stunting data released by the center often cannot be accommodated into the RKA because it comes out after the planning document is prepared. In addition, the Village Fund as a potential resource is also often not used for stunting programs because village planning is not based on district data, and is not integrated into the regional e-planning system. As a result, interventions in the field are not always in accordance with factual needs.

As a solution, an integrative approach is needed that combines institutional, procedural, and technical aspects. TPPS needs to be strengthened structurally and functionally, with Bappeda as a cross-sector coordinator who actively aligns programs between OPDs. The Stunting Thematic Musrenbang can be a space to unite the top-down and bottom-up approaches concretely. The use of *budget tagging* systems through SIPD or e-planning, intervention mapping through the Sector Authority Matrix, and stunting monitoring dashboards are important tools to support collaboration. Training for OPD planners and section heads on results-based planning, tagging techniques, and indicator integration is also important for effective and sustainable synchronization.

Table 2: Patterns of Fragmentation and Challenges of Stunting Program Budget Allocation in Sigi Regency

Aspects Studied	Findings and Explanations
Dominance of the Health Sector	Focus on specific interventions such as PMT and malnutrition treatment.
Lack of Allocation of Sensitive Interventions	Sanitation, clean water, and nutrition education programs are inconsistent and small in portions.
Weak Thematic Tagging Budget	SIPD has not supported budget tracking across sectors
Allocation Gap between Villages	Villages with a high burden of stunting do not always receive adequate interventions.
TPPS Coordination Is Not Optimal	The function of TPPS is still a formality, without a map of roles and allocations between OPDs
Ego Sektoral OPD	Planning is still based on sectoral logic, not a thematic approach.
Synchronous Data	Central and regional data are not in line, making it difficult to plan and allocate
Lack of Risk-Based Planning	The village activity plan does not use district stunting data as a basis.
Strategic Recommendations	Thematic Musrenbang, TPPS strengthening, stunting dashboard, tagging training, data integration

Source: Researcher's Processed Results, 2025

Efficiency and Effectiveness of Budget Use

The use of the stunting reduction program budget in Sigi Regency has shown success in terms of effectiveness, especially seen from the reduction in stunting prevalence by 10.4% in just one year. This achievement reflects that specific nutrition intervention programs, such as PMT and early detection of malnutrition, have had a significant impact on targeted outcomes. This is an important indicator that, in substance, budget allocations have been directed to priority programs that support the achievement of human development, especially in the aspect of child nutritional health.

However, the efficiency aspect of budget use still faces a number of challenges. One of the important findings is that there is overlap in activities between OPDs, such as nutrition counseling and PMT distribution, that are carried out without coordination, causing duplication of resources. This shows that not all OPDs apply the principle of efficiency consistently, because different units carry out similar activities without a clear division of roles. In addition to causing budget waste, this also reduces the effectiveness of activities in the field.

Most of the budget tends to be absorbed in operational and administrative activities such as official trips, procurement of logistics activities, and ceremonial activities, whose contribution to stunting reduction is still low. Based on the OECD evaluation framework (2021), efficiency not only means high budget

absorption, but also optimization in the ratio of inputs and outputs that have a direct impact. In this context, Sigi Regency still needs to improve governance and intervention design so that budget spending is truly aligned with the principle of *value for money*.

To improve efficiency, several improvement steps are needed, such as the preparation of a calendar of joint activities between OPDs, mapping overlapping programs, and strengthening the coordinating role of Bappeda and TPPS. There needs to be a mechanism for sharing roles that are mutually agreed upon, so that activities that have nutritional intervention content are not carried out partially. A results-based and integrative approach is key to ensuring that every budget spent has an optimal impact on stunting reduction.

Table 3. Analysis of the Efficiency and Effectiveness of the Stunting Program Budget in Sigi Regency

Aspects Studied	Key Findings
Effectiveness	Stunting reduction of 10.4% (2022–2023); PMT, posyandu, nutrition campaign successful
Efficiency	Duplication of activities between OPDs; Dominant Ceremonial Activities
Problems Found	Large allocation to operations; Overlap of PMT and education budgets
Recommended Improvements	Calendar of joint activities, duplication mapping, and strengthening OPD coordination

Source: Researcher's Processed Results, 2025

Accountability for Budget Management of Stunting Reduction Programs

Accountability in the management of the stunting program budget in Sigi Regency is running well on the administrative side, but it is still weak from a results-oriented substantive aspect. Financial reporting by each OPD has been carried out regularly through SIPD and internal activity reports. However, no cross-sector reporting platform unifies program outputs and outcomes in one comprehensive information system. This makes it difficult to monitor the real impact of the budget that has been used thoroughly.

The findings of the Regional Inspectorate show that most of the audits carried out are still procedural, such as checking the suitability of budget realization with the RKA. However, there have not been many results-based audits to measure the effectiveness of the program in reducing stunting rates. It is recorded that only 36% of stunting-related programs have outcome indicators that can be measured across sectors. In fact, strengthening outcomes is very important to assess the effectiveness of public investment on community welfare.

According to the theory of accountability from Romzek and Dubnick (1987), good accountability not only prioritizes procedural compliance, but also being professional and responsive to results. In this context, transparency is an important indicator, but the results of the FGD show that only a small part of the data is publicly accessible. The absence of participatory reporting at the village

level is also a weakness in ensuring community involvement in supervising the budget used for stunting programs.

To overcome this, the Sigi Regency Government needs to carry out substantive accountability reforms. Some recommendations that can be made include: (1) developing a dashboard for reporting results between OPDs; (2) the preparation of more accurate and measurable outcome indicators; (3) community involvement in village-based supervision; and (4) open publication of performance reports. With this step, the management of the stunting program budget not only meets the administrative aspect, but also provides a guarantee that the budget has a real impact on the community.

Table 4. Dimensions of Accountability for Stunting Budget Management in Sigi Regency

Dimensions of Accountability	Findings
Administrative	Routine OPD reporting, SIPD is used; Indicators are still limited
Noun	Only 36% of programs have cross-sector outcome indicators.
Transparency	The data is not yet open to the public; No Village Participatory Reporting.
Recommended Improvements	Cross-OPD dashboard, outcome indicators, Program Performance Publications

Source: Researcher's Processed Results, 2025

Budget Performance in Supporting Stunting Reduction Targets

The budget performance in the stunting reduction program in Sigi Regency shows encouraging results in terms of outcomes. Based on SSGI data, the prevalence of stunting has managed to drop from 3.8% in 2022 to 26.4% in 2023, exceeding the annual national target. This success is inseparable from the increase in budget allocation in the health sector, which directly targets the main target groups, such as toddlers and pregnant women, through PMT activities, posyandu, and behavior change campaigns.

However, this success has not been completely evenly distributed in all sub-districts. Some areas, such as Tanambulawa and West Marawola, still record stunting rates above 20%, which shows that the distribution of programs and budgets is not optimal. Equitable distribution of interventions is a challenge in strengthening budget performance, because some areas with a high case burden have not received a proportional allocation. This suggests that budget allocation still needs to be adjusted to local risk maps.

In terms of output reporting, the number of toddlers receiving PMT and mothers who participated in nutrition training did increase. However, the validity of the data still needs to be improved. Internal audits found discrepancies between budget realization and the number of beneficiaries in some areas. This means that even though the program is running and the budget

is absorbed, the reporting has not fully described the real conditions, so the overall evaluation of budget performance is still limited.

To improve overall budget performance, it is necessary to improve the reporting system based on real data, integration between sectors, and strengthen the mapping of high-risk areas. Budget performance will be optimal if every rupiah spent is truly targeted at the right location and target group, with verified output and outcome reporting. That way, the Sigi Regency Government can maintain and even accelerate the rate of stunting reduction fairly and sustainably.

Table 5. Budget Performance on Stunting Reduction Targets in Sigi Regency

Performance Indicators	Findings
Outcome (Hasil)	Reduction in stunting: 36.8% → 26.4% (2022–2023)
Output (Activity)	>8,500 toddlers received PMT; 1,200 mothers participated in nutrition training
Equitable	Certain sub-districts are still >20%; Program distribution is not optimal
Recommended Improvements	Reporting integration, mapping of risk areas, Real-time M&E system.

Source: Researcher's Processed Results, 2025

CONCLUSIONS AND RECOMMENDATIONS

The decrease in the prevalence of stunting in Sigi Regency from 36.8% to 26.4% in one year shows that the effectiveness of the use of the budget is quite high. This reflects the success of a number of specific interventions such as supplementary feeding (PMT), nutrition counseling, and increasing the coverage of posyandu services. Budget. However, the planning has been carried out based on regional planning, documents, and national policies. However, it is still faced with the challenge of inter-sector integration and limited village participation in the preparation of priority programs.

Although effective, the efficiency of budget use is still an issue. Duplication of activities between OPDs, large budget allocations for operational activities, planning weak technical coordination lead to potential waste and inefficiency. The fragmentation of activities between sectors and the lack of optimal thematic budget tagging systems add to the problems in tracking and optimizing the budget across sectors. A joint activity calendar mechanism is needed, as well as strengthening the role of Bappeda and TPPS as coordinators of program planning and implementation.

In terms of accountability, financial reporting has been carried out in accordance with administrative procedures through the SIPD. However, substantive accountability is still low because reporting is not results-based and has not been integrated across OPDs. Only a small percentage of stunting programs have measurable outcome indicators, and public access to program data is still limited. This shows the need to develop an integrated reporting

system that is able to reflect the relationship between inputs, outputs, and program outcomes.

Overall, budget performance in supporting the stunting reduction target is considered positive, but it is not evenly distributed in all sub-districts. Output reporting has not been fully validated and has not accurately described field achievements. For this reason, it is necessary to strengthen monitoring and evaluation based on real data, integration of reporting between sectors, and budget allocation based on the burden of cases per region. With these improvements, the stunting reduction program in Sigi Regency can run more efficiently, accountably, and sustainably.

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