

Public Service Innovation on Stunting Overcoming in North Luwu Regency

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ABSTRAK

Masalah stunting merupakan salah satu masalah kesehatan masyarakat yang serius di Indonesia, termasuk di Kabupaten Luwu Utara. Stunting memiliki dampak jangka panjang terhadap pertumbuhan fisik, perkembangan kognitif, dan kesehatan anak, serta berpotensi menyebabkan masalah kesehatan dan sosial yang berkepanjangan. Oleh karena itu, penelitian ini bertujuan untuk mengeksplorasi dan mengevaluasi inovasi pelayanan publik dalam mengatasi stunting di Kabupaten Luwu Utara. Penelitian ini menggunakan metode kualitatif dengan pendekatan dokumentasi dan analisis data menggunakan perangkat lunak Nvivo 12 Plus, serta validasi melalui triangulasi data dari berbagai sumber untuk memastikan keakuratan dan kepercayaan temuan. Temuan studi ini menunjukkan bahwa Kabupaten Luwu Utara melalui Program "Kejar Stunting" berhasil menurunkan angka stunting secara signifikan melalui komitmen stakeholder, kolaborasi lintas sektor, dan fokus pada pencegahan. Dengan dukungan kuat dari berbagai pihak terkait, program ini tidak hanya mengurangi prevalensi stunting, tetapi juga memberikan dampak positif yang nyata bagi kesejahteraan anak-anak dan keluarga di wilayah tersebut. Program "Kejar Stunting" yang terbukti secara signifikan dalam menurunkan angka stunting di Kabupaten Luwu Utara melalui pendekatan komprehensif dan kolaboratif, ini menegaskan pentingnya inovasi pelayanan publik dalam menghadapi masalah kesehatan masyarakat yang serius.

ABSTRACT

The dispute of *stunting* tends to be a severe public health problem in Indonesia, including in North Luwu Regency. *Stunting* has a long-term impact on children's physical growth, cognitive development, and health. Furthermore, it has the potential to cause lasting health and social problems. Therefore, this research proposes to explore and evaluate public service innovations that have helped overcome *stunting* in North Luwu Regency. This research implies a qualitative method with a documentation approach and data analysis using Nvivo 12 Plus software, as well as validation through data triangulation from various sources to ensure the accuracy and trustworthiness of the findings. The findings of this study show that North Luwu Regency, through the "Kejar Stunting" Program, has significantly reduced *stunting* rates through stakeholder commitment, cross-sector collaboration, and a focus on prevention. With solid support from various related parties, this program reduces the prevalence of *stunting* and has a real positive impact on the welfare of children and families in the region. The "Kejar Stunting" program has been proven to significantly reduce *stunting* rates in North Luwu Regency through a comprehensive and collaborative approach. This emphasizes the importance of public service innovation in dealing with serious public health problems.

INTRODUCTION

Stunting comes as a serious public health problem when children experience stunted growth due to malnutrition (Kofinti, Koomson, Paintsil, & Ameyaw, 2022; Shrestha, Perry, Thapa, Adhikari, & Weissman, 2022; Steyn & Nel, 2022). The impact of *stunting* is vast, not only affecting the physical health of children with the risk of chronic diseases such as diabetes and heart disease but also impacting cognitive and intelligence development as well as productivity in adulthood (Bigool, 2024; Maulina, Qomaruddin, Prasetyo, Indawati, & Alfitri, 2023; Montenegro

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et al., 2022). In addition, *stunting* also has a significant economic impact, both for individuals and countries, by reducing income potential and exacerbating social inequality (Bogin, 2022; Cermeño, Palma, & Pistola, 2023; Ekholuenetale, Okonji, Nzoputam, & Barrow, 2022). Therefore, overcoming *stunting* is a priority in improving children's welfare and sustainable development (Komarulzaman et al., 2023).

In Indonesia, Presidential Regulation Number 72 of 2021 concerning the Acceleration of Reducing *Stunting* is generally implemented to address the significant problem of *stunting* among children. This regulation also applies in many areas, including North Luwu Regency. This regulation emphasizes the importance of collaboration between central and regional government institutions and the community and the private sector's active role in reducing *stunting* (Perpres, 2021). This comprehensive approach includes specific and sensitive nutritional interventions, increasing access to health services, clean water and sanitation, and educating pregnant women and families about the importance of nutrition in the first 1000 days of a child's life. The aim is to significantly reduce *stunting* prevalence through integrated strategies and programs to ensure optimal child growth and development and to improve the quality of Indonesia's human resources in the future.

North Luwu, like many regions in Indonesia, also faces serious challenges related to *stunting*, namely a condition where children experience stunted growth due to malnutrition over a long period (Beal, Tumilowicz, Sutrisna, Izwardy, & Neufeld, 2018; Sugiyanto & Sumarlan, 2021). *Stunting* is a health problem and has far-reaching impacts, such as reducing productivity, increasing the risk of chronic disease in later life, and hampering social and economic development. Based on the 2017 Nutrition Status Monitoring report regarding problems and performance of nutrition programs in South Sulawesi Province, North Luwu has 30.8% *stunting* problems (DepKes, 2017). Data showing the high *stunting* rate in North Luwu is a call to take sustainable and targeted action to address this problem holistically.

The urgency of dealing with *stunting* in North Luwu is local and part of national efforts to achieve sustainable development targets. In the national priority agenda, Indonesia has committed to significantly reducing the prevalence of *stunting* (Nurfindarti & Ruhjana, 2022; Siswati et al., 2022). Therefore, it is increasingly important to implement innovative efforts in public services involving various parties, including local governments, non-governmental organizations, the private sector, and society as a whole. By understanding the urgency of the *stunting* problem and its consequences, strategic steps can be designed to create sustainable solutions and positively impact children's welfare (Darumurti, Atmojo, & Perdana, 2023; Macella, Mardhiah, & Handayani, 2022).

The problem formulation in this research is described in several questions: (1) What is the urgency of the *stunting* problem in South Sulawesi? (2) How does the North Luwu government carry out public service efforts and innovations to overcome the *stunting* problem? (3) How does this service impact the government and reduce *stunting* rates in North Luwu Regency? By understanding the urgency and factors that influence the prevalence of *stunting*, as well as the efforts and innovations in public services carried out by the North Luwu government, it is hoped that this research can make a significant contribution to formulating policies that are more effective in dealing with *stunting* and create a significant impact on reducing the number and *stunting* in North Luwu Regency.

This research investigates the urgency of the *stunting* problem in South Sulawesi, including North Luwu Regency. Apart from that, this research also aims to analyze the public service efforts and innovations that the North Luwu government has carried out in overcoming the *stunting* problem, as well as identifying the impact of these services on the government and

reducing the overall *stunting* rate. Thus, it is hoped that this research can provide policymakers with in-depth insight to formulate more effective strategies for dealing with *stunting* and improving the welfare of children in North Luwu Regency.

Literature Review

Regarding the government's efforts to tackle *stunting*, it shows that various strategies and programs have been implemented. Governments in several regions have implemented various policies and nutritional intervention programs that focus on the first 1,000 days of life, such as supplementary feeding programs for pregnant women and children, increasing access to health and nutrition services, as well as education about healthy nutritional practices for mother and family (Fahmida, Pramesthi, Kusuma, Wurjandaru, & Izwardy, 2022; Unmehopa et al., 2023; Wahyuni et al., 2021). Apart from that, the government has also collaborated with various parties, including international institutions, non-governmental organizations, and the private sector, to strengthen efforts to overcome *stunting* (Bukari et al., 2022; Erawati, Ketut Sumantra, & Putu Sujana, 2024; Odii et al., 2024; Permatasari & Walinegoro, 2023; Setiarsih et al., 2023). Nevertheless, evaluating these programs' effectiveness and actual impact remains a focus to ensure success in significantly reducing the prevalence of *stunting* (Gebreyohanes & Dessie, 2022; Naga Rajeev et al., 2022).

The government's response through public service innovation and program implementation is crucial in tackling *stunting*. These efforts include policies and intervention programs focused on the first 1,000 days of life, such as providing additional food for pregnant women and children, increasing access to health and nutrition services, and education about healthy nutritional practices for mothers and families. Collaboration with international institutions, non-governmental organizations, and the private sector is vital in strengthening efforts to combat *stunting*. However, the importance of evaluating these programs' effectiveness and actual impact should not be ignored so that assessments continue to be carried out to ensure success in significantly reducing the prevalence of *stunting*.

Public service innovation is the process of developing new ideas, methods, or approaches that purpose to improve the efficiency, quality, and responsiveness of services provided by the government to the public (Corona-Treviño, 2023; Santoso, Warsono, Astuti, & Dwimawanti, 2023). It involves using technology, management strategies, and creative thinking to create solutions that better meet the public's needs and expectations (Fu & Chang, 2019; Ibrahim, Baharuddin, & Wance, 2023; Phillips, Simmons, Simmons, & Yunus, 1984; Yan, Chi, Yang, & Chien, 2019). Public service innovation can cover various fields, such as education, health, transportation, and public administration, and can involve various levels of government, from the central government to local governments (Liu, Yang, Wei, & Wang, 2015; Patterson & Agarwal, 2023; Pratama, 2020). The main aim is to improve the quality of life of the community as well as the efficiency and effectiveness of public management (Hambleton & Howard, 2013; Hayat, 2024; Jopang, Larisu, & Dila, 2023; Priastuti, Sumaryana, & Utami, 2022).

Meanwhile, public services refer to all services the government provides to the community to meet public needs and interests (Martin, Nutley, Downe, & Grace, 2016). This covers various services, from health and education to administrative services and transportation. Public services aim to improve community welfare, promote social justice, and create an environment conducive to sustainable development (Vickers, Lyon, Sepulveda, & McMullin, 2017; Yerkes & Bal, 2022). In the context of public service

innovation, special attention is paid to increasing the efficiency, accessibility and responsiveness of these services through the use of technology, new management strategies and active participation of the public in the service provision process (Benaddi, Hannad, El Kettani, & Askour, 2022; Černáková, 2015; Duhamel, Gutiérrez-Martínez, Cordova-Díaz, & Cue-Funes, 2023; Ojiako, AlRaesi, Chipulu, Marshall, & Bashir, 2024).

Overall, the government's efforts to tackle *stunting* through various nutrition intervention strategies and programs, cross-sector collaboration, and implementation of public service innovations show a solid commitment to improving the welfare of children and families in Indonesia. Although concrete steps have been taken, continuous evaluation of the effectiveness of these programs remains a priority while strengthening cooperation between governments, international institutions, non-governmental organizations, and the private sector. By integrating public service innovation in efforts to overcome *stunting*, it is hoped that we can create a more holistic and sustainable solution and significantly impact society's welfare.

Although many studies have examined the government's efforts to tackle *stunting* through nutritional intervention programs, there is still a lack of research that explicitly analyses this problem from the perspective of public service innovation, especially at the local level, such as in North Luwu Regency. An in-depth study of how public service innovations can be implemented effectively to overcome *stunting*, including strategies specific to the local context and challenges faced at the regional level, still raises gaps that need further exploration. Understanding more deeply the dynamics of public service innovation in the context of *stunting* reduction at the local level can provide valuable insight for decision-makers in designing more targeted and effective policies.

RESEARCH METHODS

This research used qualitative methods, with data sources coming from documentation, including official government documents, scientific literature, online news, and other documents relevant to the research topic. The data search process was carried out by utilizing searches using the keywords "*Stunting di Indonesia*" and "*Stunting di Luwu Utara*". The qualitative approach allows researchers to gain an in-depth understanding of the complexity of the *stunting* issue and the government's efforts to tackle it through analysis of various types of documents available. These data were analyzed carefully to reveal emerging patterns, themes, and differences, providing richer and deeper insight into the research context.

The data obtained was transcribed and then transferred into the Nvivo 12 Plus analysis tool. The first step after the data is obtained is to transcribe the data carefully. Once the transcription is complete, the data is entered into analysis software such as Nvivo 12 Plus. The next stage is organizing the data into relevant units of analysis, such as predetermined themes or categories. Then, a coding or data labeling process is based on specific themes or concepts. Once coding is complete, the coded data is explored further to identify patterns, relationships, and possible findings. Researchers can also use Nvivo 12 Plus features, such as graphical visualization and advanced search tools, to help better understand and present the data during the analysis process. These steps help make it easier to analyze data systematically and thoroughly.

Data validation in this research was carried out through several stages. First, after the data has been transcribed and entered into the Nvivo 12 Plus analysis tool, a verification process is carried out regarding the conformity between the transcription and the initial data to ensure accuracy and thoroughness in transcribing the information. Next, data triangulation was carried out by comparing data from various sources, such as official government documents, scientific literature, online news, and other documents, to strengthen the validity of the findings. With

this approach, the validity of the data in research can be maintained so that the resulting findings have a high level of confidence.

RESULTS AND DISCUSSIONS

The Urgency of the *Stunting* Problem in South Sulawesi

Data regarding the prevalence of stunted toddlers in South Sulawesi provides an in-depth picture of the severity of the *stunting* problem in each district and city in South Sulawesi province (Annur, 2023). This is important to guide more targeted and effective *stunting* prevention efforts at the local level, especially in North Luwu Regency. In 2022, as many as 14 districts in South Sulawesi Province have a prevalence of stunted toddlers that exceeds the provincial average. Meanwhile, 10 other districts/cities show *stunting* prevalence rates for toddlers below the provincial average. This phenomenon illustrates significant variations in malnutrition problems in various regions of South Sulawesi. These differences demonstrate the importance of a focused and locally adapted approach in designing *stunting* reduction programs.

Table 1.
Prevalence of *Stunting* Toddlers in South Sulawesi Province According to Regency/City

| No. | Regency/City | Number of Values |
|-----|----------------------|------------------|
| 1 | Jeneponto | 39,8 |
| 2 | Tana Toraja | 35,4 |
| 3 | Pangkajene Kepulauan | 34,2 |
| 4 | Tana Toraja | 34,1 |
| 5 | Gowa | 33 |
| 6 | Selayar | 32,1 |
| 7 | Takalar | 31,3 |
| 8 | Maros | 30,1 |
| 9 | North Luwu | 29,8 |
| 10 | Sinjai | 29,4 |
| 11 | Wajo | 28,6 |
| 12 | Bulukumba | 28,4 |
| 13 | Bone | 27,8 |
| 14 | Sidenreng Rappa | 27,3 |
| 15 | Pare-pare | 27,1 |
| 16 | Soppeng | 26,9 |
| 17 | Luwu | 26,7 |
| 18 | Enrekang | 26,4 |
| 19 | Palopo | 23,8 |
| 20 | East Luwu | 22,6 |
| 21 | Bantaeng | 22,1 |
| 22 | Pinrang | 20,9 |
| 23 | Makassar | 18,4 |
| 24 | Barrau | 14,1 |

Source: Indonesian Nutrition Status Survey (SSGI) (2022)

Table 1 presents data on the prevalence of stunted toddlers in South Sulawesi Province by district and city based on the 2022 Indonesian Nutrition Status Survey (SSGI) (Annur, 2023). This data provides a clear picture of the distribution of *stunting* problems at the local level in the province. Jeneponto Regency has the highest prevalence rate, with a value of 39.8%, followed by Tana Toraja Regency, Pangkajene Islands Regency, and Gowa Regency, with figures that are

also exceptionally high, above 30%. On the other hand, Barru Regency has the lowest prevalence rate at 14.1%. Presenting this data is essential in developing *stunting* prevention strategies and programs that are more targeted and evidence-based for each district and city in South Sulawesi.

The significant deviation in *stunting* prevalence between districts and cities highlights the importance of locally adapted approaches in tackling this problem of malnutrition. Different social, economic, cultural, and environmental factors can influence the prevalence of *stunting* in each region, so different strategies are needed to overcome it. This data can be the basis for developing more effective policies and programs and appropriate resource allocation to reduce the level of *stunting* in South Sulawesi Province as a whole and evenly.

North Luwu Regency's efforts to reduce *stunting* cases are significant considering its position, which has a reasonably high prevalence in this table. The district must involve various parties, including the government, in providing better services and implementing practical public service innovations. With active involvement and collaboration between stakeholders, it is hoped that North Luwu Regency can implement programs that can significantly reduce the prevalence of *stunting*. Increasing public awareness, accessibility of health and nutrition services, and education about healthy nutritional practices will be an integral part of these efforts. In this way, North Luwu Regency can play an active role in overcoming the problem of *stunting* and improving the welfare of children in the area.

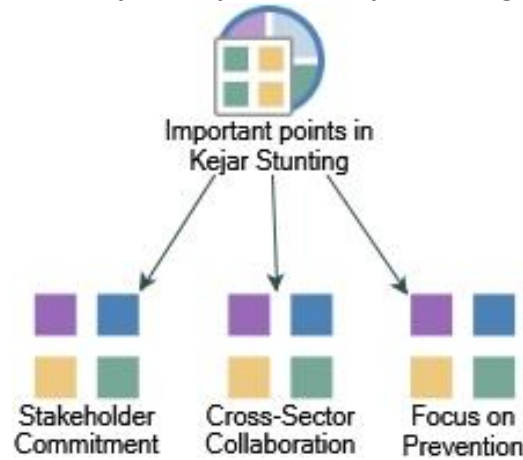
Public Service Efforts and Innovations in Overcoming *Stunting* Problems (Kejar Stunting)

Public service innovation with "Kejar Stunting" in North Luwu Regency is one of the strategic steps to accelerate the reduction of *stunting* prevalence (Lukman, 2022). With a strong commitment from Regent Indah Putri Indriani, this program emphasizes the importance of cross-sector and cross-stakeholder collaboration in facing the challenge of *stunting*. By signing a joint commitment, this program establishes six points of commitment, including the obligation of all parties to support the *Stunting* Coordination Team and establish cooperation between cross-sectors and stakeholders in an integrated manner.

The "Kejar Stunting" innovation accelerates *stunting* interventions by encouraging breakthroughs and innovations in prevention programs (Lukman, 2022). Regent Indah Putri Indriani asked each Regional Apparatus (PD) to develop innovations to accelerate *stunting* reduction through their respective work programs. This step emphasizes the importance of creativity and innovation in dealing with public health problems, as well as providing opportunities for various levels of government, including sub-districts, sub-districts, and villages, to contribute to efforts to reduce the prevalence of *stunting* in North Luwu Regency. Thus, the "Kejar Stunting" program creates a platform for more effective coordination between agencies and facilitates the creation of innovative solutions that suit local and sustainable needs.

There are several important points on how to implement this innovative service. This can be seen in Figure 1.

Figure 1.
Some important points in "Kejar Stunting"



Source: Processed by the author with Nvivo 12 Plus (2024)

Implementation of public services to overcome the problem of *stunting*, or what is known as the *Kejar Stunting* program, requires a strong commitment from various related parties or stakeholders. First of all, the government needs to show a consistent and measurable commitment in terms of resource allocation, regulations, and policies that support this program. This commitment includes providing adequate funding for education, health, and nutrition, as well as long-term program sustainability. In addition, active participation from the private sector, non-governmental organizations, academia, and society is also essential. By involving all relevant parties, the *Kejar Stunting* program can be more effective in reaching the community with various needed services, such as child health monitoring, nutritional counseling, and health education for pregnant and breastfeeding mothers.

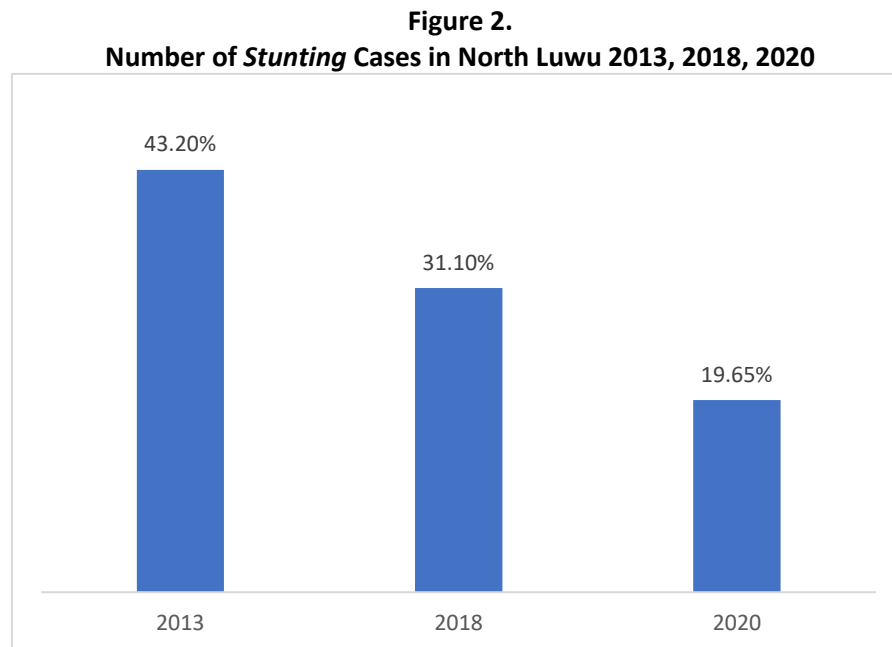
Apart from that, innovation efforts are also a key component in implementing the *Kejar Stunting* program. Innovation in service approaches, technology, and education is essential to increase program efficiency and effectiveness. For example, the use of information and communication technology to monitor children's growth in real-time, the development of affordable and easily accessible nutritional products, and creative and inclusive educational approaches to increase public awareness about the importance of balanced nutrition.

By continuing to develop and implement these innovations, the *Kejar Stunting* program can become more adaptive to changing conditions and community needs, so that it can have a more significant impact in overcoming the problem of *stunting*. Apart from the commitment from various related parties, cross-sector collaboration is also essential in efforts to overcome the *stunting* problem through the *Kejar Stunting* program. This collaboration involves various sectors such as health, education, agriculture, and social and economic sectors to align efforts and resources to support children's growth optimally. For example, collaboration between the Ministry of Health in providing health services and education in nutrition education can increase public access to the information and services needed. Likewise, cooperation between the agricultural sector in promoting nutritious food consumption and the economic sector in supporting family economic empowerment programs to ensure the availability and accessibility of nutritious food. With strong cross-sector collaboration, the *Kejar Stunting* program can integrate various aspects needed to address the *stunting* problem holistically and sustainably.

Apart from handling efforts, focusing on prevention is also an essential aspect of the Chase *Stunting* program. Prevention involves a proactive approach to identifying risk factors for *stunting* early and providing appropriate interventions to prevent *stunting* in children. This includes an optimal nutritional approach from early life, attention to maternal health before and during pregnancy, and promotion of exclusive breastfeeding practices and timely and appropriate complementary foods. By prioritizing prevention, the *Kejar Stunting* program can significantly reduce the incidence of *stunting* and ensure that children can grow and develop optimally from an early age.

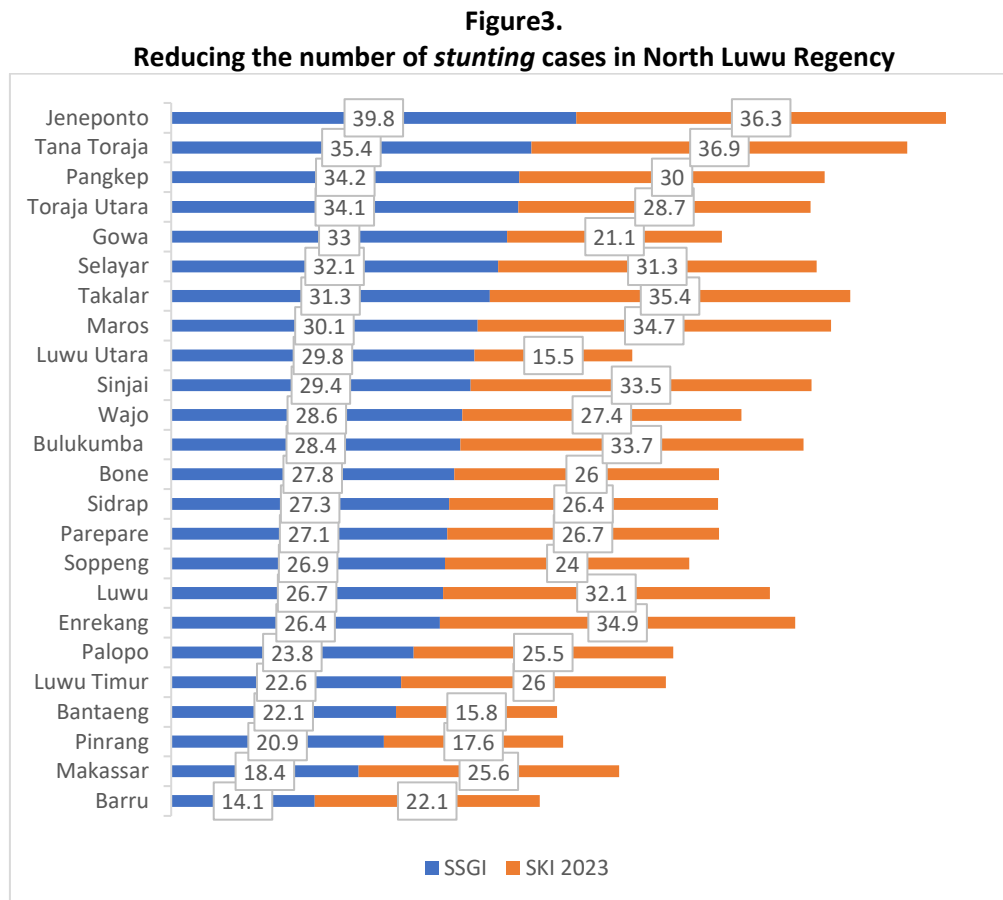
Impact of Public Service Innovation: Reducing *Stunting* Rates in North Luwu Regency

The *Kejar Stunting* Program in North Luwu Regency has had a positive impact by showing a significant reduction in *stunting* rates. This section displays the *stunting* rate in North Luwu District, which, in the 2013 period, was considered crucial in the growth of *stunting* rates in the region. Figure 2 depicts the *stunting* rate in North Luwu Regency in 2013, 2018, and 2020. This data is essential for understanding the impact of public services in the area in recent years.



Source: North Luwu Regency Government (2024)

Figure 2 displays the *stunting* rate in North Luwu Regency in 2013, 2018, and 2020. In 2013, the *stunting* rate reached 43.20%, which decreased significantly to 31.10% in 2018 (Lukman, 2021). This period shows the efforts made by the government and various related parties to reduce the prevalence of *stunting* in the region. However, a more dramatic decline occurred in 2020, when the *stunting* rate decreased to 19.65%. This reflects rapid progress in recent efforts to overcome *stunting* in North Luwu Regency. Apart from the data above, other data also confirms that the number of *stunting* cases in North Luwu Regency continues to decline significantly. This can be seen in Figure 3.



Source: Ministry of Health Makassar Health Polytechnic (2024)

Figure 3 shows the number of *stunting* cases in North Luwu Regency and several other districts in South Sulawesi. Data shows that the number of *stunting* cases in North Luwu Regency has decreased significantly in recent years. The *stunting* rate based on the Indonesian Nutrition Status Survey (SSGI) in 2023 shows a decline from 29.4% to 15.5%, while (SKI) also shows a relatively sizeable downward trend from 29.8 to 15.5 (Redaksi sinyaltajam, 2024). This change shows progress in efforts to overcome *stunting* in the region.

The "Kejar *Stunting*" innovation implemented by the North Luwu Regency Government was officially recognized with the third-best award in handling *stunting* in South Sulawesi Province in the 2022 Public Service Innovation Competition. This success indicates that the program has significantly impacted dealing with *stunting* problems in that area. With support from the South Sulawesi Provincial Government through the Regional Secretariat Organization Bureau, the Kejar *Stunting* program has been implemented effectively, making it one of the innovations that has received recognition at the provincial level to overcome the *stunting* problem comprehensively and sustainably.

With the Pursuit of *Stunting* program and various efforts made by the North Luwu Regency Government and various related parties, the *stunting* rate in the area has decreased significantly in the last few years. The data shows a promising positive trend, with the *stunting* rate decreasing from 43.20% in 2013 to 19.65% in 2020. In addition, the third-best award in handling *stunting* in South Sulawesi Province in the 2022 Public Service Innovation Competition is concrete confirmation of the success of the Pursue *Stunting* program. This shows that public

service efforts through innovation have significantly impacted overcoming the *stunting* problem in North Luwu Regency and are an inspiring example for other regions facing similar challenges.

The influence of the *Kejar Stunting* program on the government, especially the North Luwu Regency Government, is very significant in several aspects. First, this program has reduced the *stunting* rate significantly from 43.20% in 2013 to 19.65% in 2020, showing the government's strong commitment to addressing this crucial public health problem. This success reflects the effectiveness of strategies and innovations in public services that focus on a holistic and integrated approach. Second, the award for third place in the 2022 Public Service Innovation Competition in South Sulawesi Province confirms that this program has not only been substantially successful in reducing *stunting* but has also been formally recognized by the provincial government, improving the image and legitimacy of local governments in facing complex public health challenges. In this way, the *Kejar Stunting* program not only has a direct impact on public health but also strengthens local governments' capacity and reputation in providing effective and responsive public services to community needs

CONCLUSIONS

The "Kejar Stunting" program in North Luwu Regency has successfully overcome the *stunting* problem with a comprehensive approach through strong commitment from various related parties, cross-sector collaboration, and a focus on prevention. With a significant reduction in *stunting* rates and recognition for its innovation, this program has positively impacted the welfare of children and families in the region. This success is reflected in the third-best award for handling *stunting* in South Sulawesi Province in 2022. With support from the South Sulawesi Provincial Government, this program has proven to be an effective and sustainable innovation in comprehensively addressing the *stunting* problem. The success of the "Kejar Stunting" program in North Luwu Regency has had broad positive implications in strengthening efforts to handle *stunting* comprehensively and sustainably in the region. It has become an inspiring example for other regions facing similar challenges. The limitation of this research lies in the data source, which does not consider the results of in-depth interviews. This could be a driving force for further research.

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