

# Strategies for Accelerating Stunting Reduction Using Education and Social Protection Dimensions in Tarakan City

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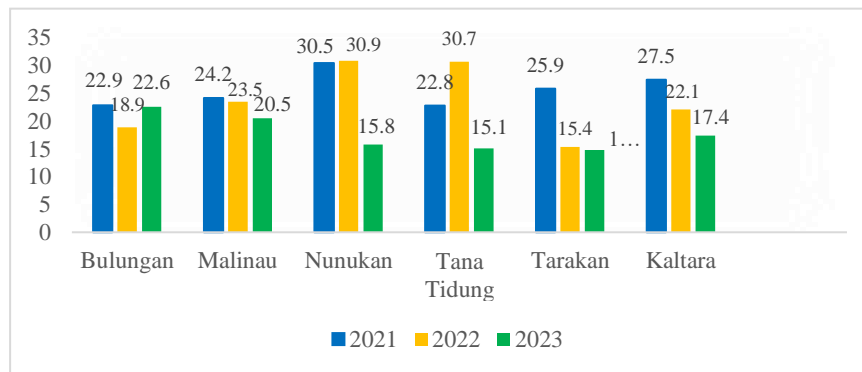
**Abstract.** Reducing stunting in Tarakan City is a priority to enhance children's quality of life and support sustainable human development. This study projects the acceleration of stunting reduction by focusing on education and social protection and analyzes efforts to optimize the Early Childhood Education (ECE) quality improvement program and the Family Hope Program/Beneficiary Card in lowering stunting rates. Using a quantitative approach with forecasting, the research examines trends in the Certain Index of Stunting Control for 2024-2028. The results indicate an upward trend in the Certain Index of Stunting Control, suggesting a decrease in stunting prevalence. The cross-cutting analysis emphasizes the need for collaboration among the government, broadcasting agencies, and the community to implement integrated programs. These findings can guide policy-making for effective, sustainable interventions to reduce stunting in Tarakan City.

**Keywords:** The Certain Index of Stunting Control, Projection, Accelerating Stunting Reduction

## 1. Introduction

Stunting is a growth and development disorder in children caused by chronic malnutrition and recurrent infections, characterized by height or length below the standards set by the ministry responsible for health affairs [1]. Stunting occurs during the First 1000 Days of Life, posing risks of physical growth delays and increased vulnerability to diseases. This phenomenon not only impacts individual health but also has long-term implications for the productivity and well-being of the community as a whole. Children who experience stunting tend to have lower cognitive abilities and are at a higher risk of developing chronic diseases in the future.

In line with this, stunting is part of the social transformation stages in the health sector to achieve the vision of a Golden Indonesia 2045. With the realization of this vision in 2045, stunting is expected to reach 5 percent. In Indonesia, the prevalence of stunting is currently at 21.6 percent, with a target of 14 percent by 2024. This reduction target aligns with President Jokowi's directive, which also aims for a stunting rate of 13.5 percent in the following year, 2025. Meanwhile, at the regional level, efforts to reduce stunting are also a primary focus, including in the city of Tarakan, North Kalimantan. Although national targets have been set, each region faces unique challenges and characteristics in addressing stunting issues. Tarakan City, as one of the cities in North Kalimantan is also committed to reducing stunting rates in line with national targets.



**Figure 1.** Prevalence of Stunting in Districts/Cities in North Kalimantan Based on the Indonesian Nutrition Status Survey

Figure 1 shows that the prevalence of stunting in Tarakan City in 2021 and 2022 is 15.40 percent from the previous figure of 15.90 percent. This shows that stunting in Tarakan City has decreased significantly in the last year. Although the prevalence of stunting in Tarakan City is lower than the national level, this figure has not yet reached the regional target stated in the 2019-2024 Regional Medium-Term Development Plan of Tarakan City, which is 6 percent.

To measure and monitor the effectiveness of stunting management in various regions, including Tarakan City, the Indonesian government has developed the Certain Index of Stunting Control. The Certain Index of Stunting Control is an instrument designed to evaluate the performance of stunting reduction programs at the national, provincial, and district/city levels [2].

**Table 1.** Certain Index of Stunting Control 2018-2022

| YEAR | CERTAIN INDEX OF STUNTING CONTROL |
|------|-----------------------------------|
| 2018 | 55,32%                            |
| 2019 | 62,31%                            |
| 2020 | 64,00%                            |
| 2021 | 67,60%                            |
| 2022 | 65,30%                            |

Based on the achievement of the Certain Index of Stunting Control over the past five years, Tarakan City has shown a significant increase in the index. In 2018, the Certain Index of Stunting Control in Tarakan City was 55.32 percent, categorized as a medium value. It then increased in 2019, reaching 62.31 percent, still within the medium value category. By the end of 2021, the achievement of the index remained in the medium category with a value of 67.60 percent. However, in 2022, the index decreased by 2.30 percent, resulting in a value of 65.30 percent, which remained within the medium value category.

In addition to serving as an evaluation tool, the development of the Certain Index of Stunting Control is also intended to meet the Disbursement Linked Indicators (DLI) of the Investing in Nutrition and Early Years (INEY) Program, which is part of the collaboration

between Indonesia and the World Bank [2]. The Certain Index of Stunting Control for districts/cities is structured around five dimensions with ten indicators. At the national level, the education dimension and social protection dimension require more attention in efforts to accelerate stunting reduction in Indonesia. The same applies at the provincial and district/city levels, particularly in Tarakan City.

To accelerate stunting reduction in Tarakan City, a holistic and comprehensive approach is needed. Early Childhood Education (ECE), which is a constituent indicator of the education dimension, has a vital role in efforts to accelerate stunting reduction. According to Susanto (2018: 16), Early Childhood Education (ECE) is education provided for children aged 0-6 years through the provision of various stimuli to help growth and development both physically and mentally so that they are ready to carry out education to the next level [3].

Early Childhood Education (ECE) not only serves as a place of learning but also as a platform for implementing health and nutrition programs that can reach children and their families. Although 124 Early Childhood Education (ECE) centers are available in Tarakan City and are spread across sub-districts and villages, the participation of families with children under five still does not cover the entire Tarakan region. There are still families who have not utilized existing Early Childhood Education (ECE) services, both due to a lack of awareness of the importance of early childhood education and other constraints such as the busyness of parents who ultimately prefer their children to remain at home with domestic assistants. This results in uneven benefits of the Early Childhood Education (ECE) program in supporting efforts to reduce stunting in Tarakan City.

In addition to the education dimension, social protection also plays a crucial role in reducing stunting. Social protection programs such as the Family Hope Program/Beneficiary Card are designed to reduce the social and economic vulnerabilities faced by poor families. The Family Hope Program/Beneficiary Card helps to fulfill basic needs such as nutritious food and health services. Effective implementation of the Family Hope Program/Beneficiary Card in Tarakan City can help reduce stunting by providing support in the form of government assistance to the most vulnerable families. However, the implementation still faces challenges, especially related to uneven distribution.

This research focuses on projecting the acceleration of stunting reduction in Tarakan City using two main dimensions, namely the education dimension and the social protection dimension. By analyzing existing data, this study aims to identify an acceptable effort for stunting reduction, to identify the roles and functions of stakeholders, and the framework for partnerships between the public and private sectors to accelerate stunting reduction in Tarakan City. With future annual projections, an increase in the gross enrollment rate of Early Childhood Education (ECE) and Family Hope Program/Beneficiary Card recipients will influence an increase in the overall The Certain Index of Stunting Control so that the index value can be in the high-value category, as well as increase the achievement in sustainable stunting reduction in Tarakan City.

## **2. Literature Review**

### **1) The Certain Index of Stunting Control**

The Certain Index of Stunting Control is a tool created to assess the effectiveness of the stunting reduction acceleration program at the national, provincial, and district/city levels [2]. It is also designed to meet the requirements of Disbursement Linked Indicators (DLI) 8 of the Investing in Nutrition and Early Years (INEY) Program, a partnership between the Government

of Indonesia and the World Bank. This index was developed by the Central Statistics Agency and the Secretariat of the Vice President of the Republic of Indonesia in collaboration with experts in health, nutrition, and education.

The Stunting Control Index is presented at the national, provincial, and district/city levels. At the national and provincial levels, the index includes six dimensions: health, nutrition, housing, food, education, and social protection. However, at the district/city level, the index comprises only five dimensions, excluding the food dimension. The certain index of stunting control has been developed to compare the progress of intervention coverage for target households at the national, provincial, and district/city levels [2].

## **2) Forecasting**

Forecasting is a prediction of something that has not yet occurred (Subagyo, 2002) [4]. It is closely related to planning, as plans are formulated based on forecasts of what may happen in the future. This process involves taking historical data and projecting it into the future using mathematical models. Gaspersz (2005) defines forecasting as an estimation of future demand based on predictor variables derived from historical time-series data [5]. This view is supported by Nasution and Prasetyawan (2008), who describe forecasting as a process for estimating future needs in terms of quantity, quality, time, and location to meet the demand for goods or services [6]. Quantitative forecasting is generally based on available historical data and analyzed using specific methods. According to Subagyo, forecasting aims to minimize the impact of uncertainty, meaning that the goal of forecasting is to achieve results with minimal errors [4]. From these definitions, we can conclude that forecasting is both an art and a science of predicting future events. It relies on past data to meet future needs and aims to prepare for unforeseen circumstances.

## **3) Accelerating Stunting Reduction**

Based on Presidential Regulation of the Republic of Indonesia Number 72 of 2021, Accelerating the Reduction of Stunting includes all efforts that encompass specific and sensitive interventions, implemented in a convergent, holistic, integrative, and quality manner through multisectoral collaboration at the central, regional, and village levels [1].

The target groups are adolescents, prospective brides and grooms, pregnant women, breastfeeding mothers, and children aged 0-59 months. In its implementation, a national action plan is developed through a family-based approach to stunting risk, which includes (1) providing data on families at risk of stunting, (2) assisting families at risk of stunting, (3) supporting all prospective brides/grooms of childbearing age, (4) conducting surveillance of families at risk of stunting, and (5) conducting stunting case audits.

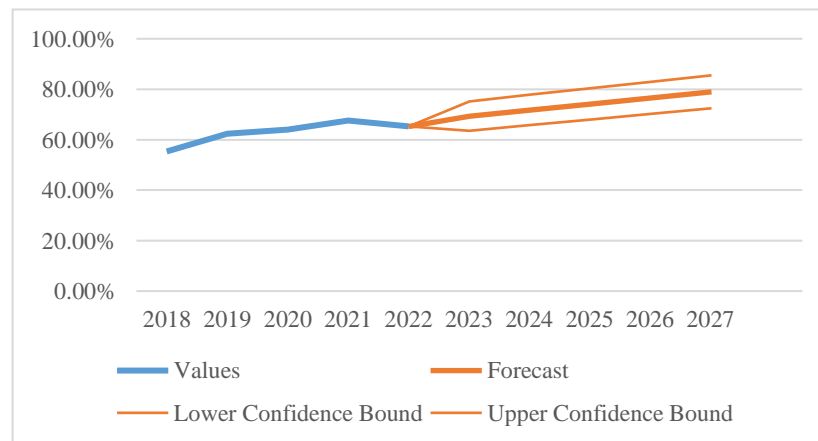
## **3. Methodology**

This research uses a quantitative approach with a Microsoft Excel-based forecasting sheet analysis tool that aims to forecast or predict the decline in stunting marked by an increase in the Certain Index of Stunting Control and analyze efforts to optimize programs to improve the quality of Early Childhood Education (ECE) and the Family Hope Program/Beneficiary Card. According to Heizer and Render (2015: 113), forecasting is the art and science of predicting future events [7]. The forecasting analysis, in this case, will produce projections in the form of an increase in the Certain Index of Stunting Control for the next five years, from 2024 to 2028. After the data is projected, the role of each actor will be analyzed to accelerate stunting reduction in the projection results.

## 4. Results and Discussion

### 1) Projection of The Certain Index of Stunting Control with Forecasting Method

Projection can be interpreted as an estimate of future conditions using current data. Forecasting or projection of the Certain Index of Stunting Control for the period 2024 to 2028 was carried out using the forecasting method in Microsoft Excel. The results of the analysis in Microsoft Excel show that there are significant changes in the Certain Index of Stunting Control within five years.



**Figure 2.** Projected The Certain Index of Stunting Control for the 2024-2028 Period

It can be seen in Figure 2 that the index value has an upward trend in the next five years. This forecasting analysis uses data from the last five years and shows a consistent increase. This projection provides an optimistic picture of the future development of the index so continuous efforts are needed as a supporting factor to ensure that this positive trend can be improved. Further explanation can be seen in the following table.

**Table 2.** Projection Results of the Certain Index of Stunting Control (percent)

| Timeline | Values | Forecast | Lower Confidence Bound | Upper Confidence Bound |
|----------|--------|----------|------------------------|------------------------|
| 2018     | 55.32  |          |                        |                        |
| 2019     | 62.31  |          |                        |                        |
| 2020     | 64.00  |          |                        |                        |
| 2021     | 67.60  |          |                        |                        |
| 2022     | 65.30  | 65.30    | 65.30                  | 65.30                  |
| 2023     |        | 69.39    | 63.55                  | 75.23                  |
| 2024     |        | 71.79    | 65.77                  | 77.81                  |
| 2025     |        | 74.19    | 67.99                  | 80.39                  |
| 2026     |        | 76.59    | 70.22                  | 82.96                  |
| 2027     |        | 78.99    | 72.45                  | 85.53                  |
| 2028     |        | 81.39    | 74.68                  | 88.10                  |

Table 2 shows that in 2024, the Certain Index of Stunting Control was at 71.79 percent then in 2025 it became 74.19 percent, shifting again to 76.59 percent and 78.99 percent in 2026, and from 2027 until 2028 the Certain Index of Stunting Control was 81.39 percent. This shows that there is an increase in the development of the Certain Index of Stunting Control in the next few years. Not only has the index value increased, but the value category in 2028 has also experienced a positive trend, from a medium category value to a high category value, which means that the prevalence of stunting has also decreased significantly.

In order to address the Certain Index of Stunting Control, strategic steps will be taken with a focus on two main dimensions: education and social protection. Regarding education, special attention will be given to Early Childhood Education (ECE) through a program aimed at improving its quality. In addition to being a place for children to play, ECE is very useful for providing health education for parents. Research by Astarani, Poernomo, Idris, and Oktavia (2020) revealed that parents who participated in health education about stunting gained new knowledge and understanding [8]. Through health education in ECE, parents will better understand the causes, characteristics, impacts, and prevention of stunting. This effort aims to raise awareness among parents about the importance of health and nutrition to promote healthy behavior and prevent stunting in children.

Early Childhood Education (ECE) plays a crucial role in the early developmental stages as it is the golden age of the child, during which optimal brain growth and development occur with a good process. Therefore, it is essential for a child to receive adequate nutrition, communication, and stimuli that strengthen cognitive, social, and emotional development according to their age. [9] indicates that environmental factors significantly influence the expression of signals from the child's genome, especially during the golden period of brain development. Factors such as nutritional intake, behavior, repeated infections, parent/caregiver stimulation, stressful experiences, and fulfillment of emotional needs for affection after birth can have both positive and negative effects on brain development [10].

The program aims to improve the quality of Early Childhood Education (ECE) by targeting the Gross Participation Rate of Early Childhood Education (ECE). This is because the participation rate of Early Childhood Education (ECE) in Tarakan City is only around 58.93 percent in 2023, which means that approximately 41.07 percent of families with toddlers are not utilizing these services in Tarakan City. The number of Early Childhood Education (ECE) centers is evenly distributed across four sub-districts with accessible regional conditions in the Tarakan region. This indicates that there are still obstacles to utilizing early childhood education (ECE) services, one of which is caused by a lack of public awareness of the importance of early childhood education. Many families do not understand that early education is not only about play, but also about establishing an essential foundation for children's development. This lack of understanding means that many parents do not see early childhood education as a priority, especially in families with low economic backgrounds or limited education.

In line with the program to improve the quality of early childhood education (ECE) in Tarakan City, various efforts can be made to enhance and increase its accessibility. These efforts include providing fee subsidies and conducting intensive campaigns to emphasize the importance of early childhood education (ECE).

#### a. Improving the accessibility of Early Childhood Education (ECE)

In Early Childhood Education (ECE), accessibility can be improved in two ways. Firstly, financial accessibility refers to an individual's ability to pay tuition fees and other related costs. Secondly, physical accessibility includes factors such as transportation and time. According to Carneiro (in Perdana, 2015), these two aspects are crucial in determining accessibility to ECE

[11]. Furthermore, parents' perceptions significantly influence their decision to send their children to Early Childhood Education institutions [12]. This finding is supported by [13], who identified several factors that impact children's access to ECE. These factors include the education level of the head of the household, household income, the number of household members, the marital status of parents, and the household's location.

In the context of Tarakan City, it's crucial to prioritize improving access to early childhood education, with a focus on financial accessibility. This means investing in infrastructure development to create safe, comfortable, and appealing learning environments for our children. Research by Bento & Dias (2017) emphasizes the importance of providing adequate facilities, such as play areas, well-equipped classrooms, playgrounds, small libraries, and engaging learning materials, to motivate children and encourage parental enrollment [14]. By enhancing these facilities, we can boost enrollment rates and ensure that every child has the opportunity to access quality early childhood education. Additionally, addressing the financial barriers faced by underprivileged families is essential, and we must consider policies to subsidize early childhood education to make it more accessible for all.

b. Subsidizing early childhood education costs

The investment in education is crucial for the growth and development of our society. Fattah in Afmansyah (2019) highlights the distinction between direct and indirect education costs [15]. Direct costs cover expenses related to teaching and student learning, while indirect costs encompass the missed opportunities for students during their learning journey.

Families with lower-middle incomes strive to provide their children with access to early childhood education to nurture their creativity. Subsidizing early childhood education fees is essential in breaking down financial barriers for these families. By making early childhood education more affordable, we can eliminate economic obstacles that hinder children from receiving quality education from an early age.

Furthermore, the subsidy can include the provision of nutritious food during the child's time in early childhood education. This not only aims to provide essential nutrition but also addresses malnutrition, a leading cause of stunted growth. By extending this subsidy, we can empower more children from underprivileged families to access early childhood education, directly contributing to the reduction of stunted growth. Let's work together to ensure that every child has the opportunity to thrive and succeed.

c. Campaign on the Importance of Early Childhood Education (ECE)

The campaign on the importance of ECE should be carried out intensively through various media, including mass media, social media, direct activities within the community, as well as educational programs for parents to understand their child's monthly growth and development in ECE schools. Through this campaign, it is hoped that the community will better understand that ECE is not only a place for playing but also an essential institution for providing nutrition education, healthy lifestyle habits, and developmental stimulation needed to prevent stunting. This campaign can involve healthcare workers, teachers, community members, and parents who have already accessed ECE. Activities that can support the promotion of ECE include: (1) organizing ECE festivals and exhibitions, which combine all ECEs in Tarakan City, offering comprehensive information on the benefits of ECE and its role in stunting prevention, (2) creating educational content in the form of public service advertisements through social media, local television, radio, print media, as well as featuring testimonials from parents who have experienced the benefits of ECE, and (3) distributing posters, banners, or billboards containing information about the benefits of ECE at health service centers, village offices, and sub-district

offices.

To improve the Certain Index of Stunting Control and reduce stunting, efforts are being made to strengthen the program for recipients of the Family Hope Program or Beneficiary Card. This program provides conditional cash assistance to poor families, enabling them to meet basic needs, including nutrition and healthcare, and ensuring that children receive necessary health check-ups and immunizations. According to a study by Cahyadi, Hanna, Olken, Prima, Satriawan, and Hakim (2020), the Family Hope Program contributes to reducing stunting in children aged 0-60 months through several mechanisms: (1) increased behavior in seeking health check-ups at local health facilities, including immunization, (2) improved awareness of children's birth weight information, and (3) enhanced child nutrition, such as consuming nutritious eggs and milk [16]. The requirements for Beneficiary Card holders receiving assistance from the Family Hope Program include that pregnant or breastfeeding mothers and children aged 0-6 years must undergo health check-ups at local health facilities, and school-aged children must attend school with a minimum attendance of 85 percent during effective school days. By maximizing the social protection program with a comprehensive approach, this program not only prevents indication of stunting but also strengthens the community's nutritional resilience as a whole, thus achieving a healthy and productive generation.

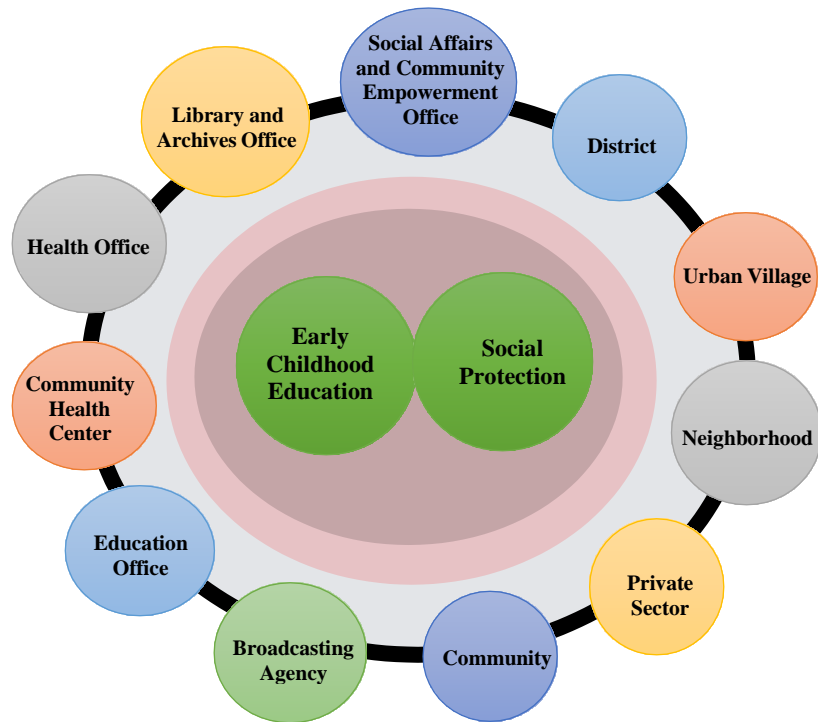
An integrated strategy that focuses on improving the quality of Early Childhood Education and strengthening the Family Hope Program and Beneficiary Card is expected to accelerate the reduction of stunting in Tarakan City. By increasing early childhood education participation and providing comprehensive social support, Tarakan City can effectively and sustainably address the issue of stunting.

To improve the Certain Index of Stunting Control and reduce the prevalence of stunting, follow-up actions can be carried out. These include conducting comprehensive verification data collection, which involves gathering accurate and up-to-date information on children's nutritional status, regularly monitoring children, identifying stunting risk factors, assessing the health condition of pregnant women, ensuring access to health and education services, and examining the socio-economic conditions of families. This data collection not only helps identify families that have not yet been reached by social assistance programs but also allows the government and related agencies to allocate resources more effectively with targeted interventions and conduct regular program evaluations. This approach will not only improve the Certain Index of Stunting Control, but also accelerate the reduction of stunting rates in Tarakan City by providing assistance and ensuring that children have equal opportunities to grow and develop optimally.

## **2) Crosscutting and Role Analysis of Each Actor**

To clarify the projection of accelerating stunting reduction in the City of Tarakan, the roles of various involved actors are needed. These actors include several Regional Apparatuses of the Tarakan City Government, broadcasting agencies, and communities that interact directly with the public.





**Figure 3.** Cross-cutting Projection of Stunting Reduction Acceleration

The forecasting method projects a significant increase in the Certain Index of Stunting Control in the City of Tarakan. This suggests that the initiatives to enhance Early Childhood Education quality and implement the Family Hope Program/Beneficiary Card, along with related activities, will have a positive impact on reducing stunting rates in the future. These projections provide a positive outlook, indicating that with continuous involvement and strengthened collaboration among stakeholders, along with well-targeted and sustainable programs in the City of Tarakan, the expected improvement target for the index can be achieved.

a. Government

The government, specifically several regional apparatuses in the City of Tarakan plays a crucial role in efforts to improve the quality of Early Childhood Education, particularly through a cross-sectoral or cross-cutting approach. The regional apparatuses directly involved, as depicted in the cross-cutting above, include the Health Office, Education Office, Library and Archives Office, and Community Health Centers. Various health programs initiated by the Health Office, such as balanced nutrition campaigns and sanitation initiatives, directly contribute to creating a healthy environment for children in Early Childhood Education.

**Table 3.** The Role of Local Government Agencies Through a Cross-Cutting Approach

| Local Government Agencies   | Roles  |
|-----------------------------|--|
| Education Office            | Plays a central role in the cross-cutting approach for programs aimed at improving the quality of early childhood education (ECE). This is achieved through the development of a holistic curriculum that meets national standards, providing ongoing training for ECE educators, supplying ECE resources, collaborating with other sectors such as health, social services, and non-governmental organizations, and implementing policies that support the enhancement of ECE quality, including the accreditation of ECE institutions. According to Habiburrahman (2020) as cited in Herlida (2023), accreditation is crucial for institutions as it helps determine the extent to which the institution meets the quality criteria set by the government or national education standards [17]. It serves as a minimum reference quality standard for institutional evaluation and as a basis for continuous quality improvement in education. |
| Library and Archives Office | The Library and Archives Office supports early childhood education (ECE) by providing educational and engaging reading materials for children and parents. They can also organize literacy programs to enhance early reading and writing skills, which will positively impact children's cognitive development. In addition to focusing on children, the office can provide training for ECE teachers on how to effectively use reading materials in the learning process.   |
| Health Office               | Provides routine health services, nutrition programs, and health counseling, in collaboration with the Education Office, to monitor children's development and detect health issues early on. In addition, health counseling can be conducted involving children's parents to enhance their understanding of the importance of nutrition and hygiene.  |
| Community Health Center     | As a primary health service unit, the community health center collaborates with ECE to provide health counseling and regular check-ups for children. This helps monitor their growth and development and prevents indications of stunting. Additionally, the community health center can educate parents about the importance of health and nutrition in supporting children's growth and development.   |

**b. Private Sector**

The private sector plays a crucial role in improving the quality of Early Childhood Education (ECE) programs, in addition to the government. This involvement can include providing resources, collaborating with the government and communities through Corporate Social Responsibility (CSR) programs, and offering training to develop educators' skills. Through various forms of support and collaboration, the private sector can help create a better

educational environment and ensure every child has access to quality early childhood education. This is part of corporate social responsibility and a contribution to sustainable social development.

c. Community

In this case, the involved communities include Integrated Health Service Posts, Early Childhood Education (ECE) working groups, and various community groups, such as women's or social communities, whose expertise and experience can enrich activities to ensure that the ECE quality improvement program runs effectively and comprehensively. This synergy not only enhances the quality of education and health in ECE but also strengthens social bonds and a sense of collective responsibility within the community, creating an environment that supports the holistic growth and development of children.

d. Broadcasting Agency

Broadcasting agencies can reach a wide and diverse audience, including parents, teachers, and local communities. ECE campaigns are disseminated in the form of broadcasting educational content specifically designed for early childhood with interactive learning experiences. Additionally, broadcasting agencies also air activities focused on raising parents' awareness about the importance of early childhood education. They can also spread information regarding ongoing ECE school activities and programs, such as schedules for Integrated Health Service Posts, regular health check-ups for children, and community events that support early childhood education. This ultimately increases community participation and ensures that this information reaches all segments of society.

Through various media channels such as mass media, radio, and social media, broadcasting agencies not only support the quality improvement program for Early Childhood Education (ECE) in the City of Tarakan but also ensure effective distribution of information regarding the Family Hope Program and Beneficiary Card. By disseminating educational and informative content, recipients of the Family Hope Program and Beneficiary Card can gain a better understanding of their rights and obligations, as well as learn how to utilize the assistance to improve their family's welfare.

Not only do broadcasting agencies play a role, but the government's role in the cross-cutting approach is also crucial to ensure that the Family Hope Program and Beneficiary Card are comprehensively accessible to the community in the City of Tarakan. Specifically, the Social Affairs and Community Empowerment Office, along with the Urban Village and the Neighborhood Association Chair, is responsible for identifying and verifying families that qualify for assistance and coordinating the timely and targeted distribution of aid. Additionally, the Social Affairs and Community Empowerment Office, together with the Urban Village and the Neighborhood Association Chair, collaborate to gather accurate data on the economic and social conditions of the local community. With the synergy between the Social Affairs Office, the Urban Village, and the Neighborhood Association Chair, this social assistance program can run effectively and efficiently, ensuring that no family is left behind in the efforts to improve welfare and accelerate the reduction of stunting in the City of Tarakan.

## 5. Conclusion

After analyzing the results and having discussions, it can be concluded that the forecast for accelerating the reduction of stunting through the Certain Index of Stunting Control from 2024 to 2028 indicates an increasing trend. This can be achieved through targeted interventions in the education sector, particularly by improving the quality of Early Childhood Education

(ECE), and in the social protection sector, which involves comprehensive data collection for the Family Hope Program and Beneficiary Card from the Ministry of Social Affairs of the Republic of Indonesia. To improve the quality of Early Childhood Education (ECE), interventions may include enhancing accessibility, providing cost subsidies, and carrying out Early Childhood Education (ECE) campaigns. Meanwhile, the implementation of the Family Hope Program and Beneficiary Card in the region should involve comprehensive and periodic verification data collection from the community to update information and ensure that the program reaches eligible individuals for the Family Hope Program and Beneficiary Card.

This projection allows for the creation of more targeted and effective interventions, ensuring improvements in the quality of early childhood education and the provision of comprehensive social support, thereby resulting in an increase in the certain index of stunting control and a significant reduction in stunting rates in the future.

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