



Evaluation of A Stunting Prevention Program Based on Collaborative Governance: A Case Study of the Ananda Bergizi Program in the City of Batu

Kartika Trisulandari^{1*}, Wike², Fadillah Amin³

^{1,2,3} Department of Administrative Science, Universitas Brawijaya, Malang, Indonesia

*Corresponding Author: kttrisulandari@gmail.com

Article History

Manuscript submitted:

23 June 2026

Manuscript revised:

06 July 2026

Accepted for publication:

07 August 2026

Manuscript published:

19 August 2026

Abstract

This study evaluates the ANANDA BERGIZI Program in Batu City as a collaborative governance-based initiative to reduce stunting. Batu City provides an important research context because, despite being an agricultural region with a relatively strong economy, it recorded the second-highest stunting prevalence in East Java in 2022 according to the Indonesian Nutritional Status Survey (SSGI), reaching 25.2%. Using a qualitative case study approach, data were collected from 12 key informants to address three research questions: (1) how the program is implemented from a collaborative governance perspective, (2) how effective the program is in reducing stunting prevalence using the CIPP Model (Stufflebeam), and (3) what factors drive and hinder its implementation. The findings indicate that program implementation has remained largely informal, relying on social capital and personal leadership rather than institutional strengthening. The expansion of participating actors from 40 to 66 reduced coordination quality and data completeness. The program performed satisfactorily on biometric indicators and short-term nutritional behavior change, although recovery from stunting and documentation completeness remained limited. Adaptive leadership, evidence-based diagnosis, and the social capital of Posyandu cadres supported implementation, while weak formal regulation, sectoral ego, and workload concentration within a single agency constrained effectiveness. The study concludes that stronger regulation, integrated monitoring, and institutional capacity are essential for long-term program sustainability.

Keywords

program evaluation;
collaborative governance;
stunting;
local government;
batu city.

Copyright © 2026, The Author(s)

This is an open-access article under the CC BY-SA license



How to Cite: Trisulandari, K., Wike, & Amin, F. (2026). Evaluation of A Stunting Prevention Program Based on Collaborative Governance: A Case Study of the Ananda Bergizi Program in the City of Batu. *Media of Health Research*, 4(3), 923-937. <https://doi.org/10.70716/mohr.v4i3.688>

Introduction

Stunting is a condition of failure to grow in children due to chronic malnutrition, and it remains a major global problem (Putri et al., 2025). Data show that the highest prevalence of stunting occurs in Africa (32%), followed by Asia and Oceania (27.4% each), while Europe records the lowest prevalence (11.3%) (Ssentongo et al., 2021). Nevertheless, global progress in reducing

stunting has been inconsistent. An analysis of 174 countries from 1990 to 2015 found that low-income countries actually achieved faster reductions in stunting than high-income countries (Balla et al., 2021).

As a developing country with a large population, Indonesia faces significant challenges in addressing stunting. Data from the Indonesian Nutritional Status Survey (SSGI) recorded a decline in stunting prevalence from 30.8% in 2018 to 21.5% in 2023, reflecting various government efforts through supplementary feeding programs and community nutrition education (Kesehatan, 2023). Even so, as of 2024, the national stunting prevalence still stood at 19.8%, far above the President's target of 14% (Kementerian Kesehatan RI, 2025). This condition places Indonesia in a position requiring accelerated intervention, given the long-term impact of stunting on the quality of human resources—including cognitive impairment, reduced productivity, and an increased risk of noncommunicable diseases in adulthood (UNICEF & Kementerian Kesehatan RI, 2023).

The high national prevalence of stunting has driven the emergence of various regulations and development policies, including those formulated by Bappenas (Apriska et al., 2022). Indonesia has even been recorded as having a higher stunting prevalence than other middle-income countries (Widaryanti, 2019). Therefore, addressing stunting in Indonesia cannot be viewed solely as the government's responsibility; it requires cross-sectoral collaboration among societal elements (Damayanti et al., 2021).

The multisectoral nature of the stunting problem has driven the emergence of collaborative governance as a relevant strategy. Ansell & Gash (2008) define collaborative governance as a form of governance in which one or more public institutions directly engage non-state stakeholders in a formal, deliberative, consensus-oriented collective decision-making process. Presidential Regulation No. 72 of 2021 on the Acceleration of Stunting Reduction has even mandated a cross-sectoral convergence approach as the primary national strategy.

Batu City represents a significant research context, as in 2022 it recorded the second-highest stunting prevalence in East Java according to the SSGI (25.2%)—an anomaly given its status as an agrarian region with a relatively strong economy. In response, the Batu City Government developed the Bapak/Bunda Asuh Anak Stunting (BAAS) program, which later evolved into the ANANDA BERGIZI Program (Anak Bebas Stunting, Pendampingan Gizi Terintegrasi / Stunting-Free Children through Integrated Nutrition Mentoring). This program involves 66 cross-sectoral stakeholders who serve as "foster parents" for stunted toddlers during a 12-week mentoring period.

Although ANANDA BERGIZI has unique characteristics as a collaborative governance practice on a scale never previously implemented in Batu City, a comprehensive evaluation of its implementation and effectiveness has never been conducted. This research gap is critical, given that the literature on collaborative governance in addressing stunting has thus far been dominated by normative studies of policy design, with little attention paid to the actual dynamics of implementation in the field—particularly how the collaborative process unfolds when formal regulatory support remains weak. This study offers novelty by simultaneously evaluating ANANDA BERGIZI through two analytical frameworks: the collaborative governance model of Ansell & Gash (2008) and Stufflebeam's CIPP evaluation model, thereby capturing not only the process of collaboration among actors but also the program's measurable effectiveness in reducing stunting.

Based on the foregoing, this study aims to fill this gap by answering three research questions: (1) How is the ANANDA BERGIZI Program implemented from a collaborative governance perspective? (2) How effective is this program in reducing stunting prevalence? (3) What are the driving and inhibiting factors in its implementation?

Materials and Methods

This study employed a qualitative approach. The research population comprised stakeholders of the BAAS and ANANDA BERGIZI Programs, drawn from government, health institutions, academia, the private sector, and community cadres. The sample consisted of 12 key informant groups selected through purposive sampling combined with snowball sampling to reach additional actors not initially identified. The recruitment of informants was discontinued once data saturation was achieved. The primary instrument was the researcher herself/himself (human instrument), supported by a semi-structured interview guide. Data validity was ensured through source and method triangulation, prolonged observation, and peer debriefing. Data analysis employed the interactive model of Miles, Huberman, and Saldaña (2014), comprising data condensation, data display, and conclusion drawing and verification, conducted iteratively. This study obtained ethical approval and was conducted in accordance with the principles of informed consent, anonymization of informants' identities, and informants' right to refuse or withdraw participation without consequence.

Results and Discussions

Result

1. Implementation from a Collaborative Governance Perspective

a. Starting Conditions

The research findings identified three significant dimensions of starting conditions. First, the Health Department's dominance as the sole holder of stunting data creates a substantial power imbalance. All toddler data is centralized at the Health Department, so other actors depend entirely on access to this institution's data. This imbalance is exacerbated by systematic data distortion resulting from target pressures at the Community Health Center (Puskesmas) level, as identified by an academic informant:

"The data at the posyandu is accurate because posyandus are more honest—there is no pressure. However, when these community health centers start facing pressure—that is when things usually start to get manipulated. They manipulate the data system so that when it's entered, the status must show as 'green.'" (Prof. ACA, Academic at the Faculty of Public Health, Airlangga University, April 2026).

From the academic perspective, this imbalance has deeper roots: the quality of the data underlying the program is not always guaranteed to be objective, owing to target pressures at the Puskesmas level.

"The data at the posyandu is correct because the posyandu is more honest; there's no burden. But once the puskesmas starts to feel that burden—that's usually when the manipulation begins. Playing with categories, creating inclusion-exclusion criteria. Even more extreme is building it into the data system itself. So when it's entered, the color has to be green. If it's not green, it has to be adjusted—lowered, raised—so that it stays green as desired." (Prof. ACA, Academic, Faculty of Public Health, Airlangga University, interview, April 2026).

This finding on systematic data distortion carries serious implications. If the baseline data used as the program's foundation contains systematic bias, the entire intervention design built on it risks missing its true target. This gap in technical capacity was also directly felt by non-health actors serving as foster parents.

Second, OPD (regional government agency) participation is semi-mandatory, with varying levels of motivation. Monitoring data quantitatively confirms the erosion of commitment: from weeks 9 to 12 of BAAS Cycle 1, only 65–75% of OPDs remained actively

engaged on their own initiative. The Mayor acknowledged that inter-agency sectoral ego remains a dominant structural barrier. Third, although the TPPS (Stunting Reduction Acceleration Team) never held formal meetings to design programs collectively, the positive experience with BAAS served as social capital that enabled the launch of ANANDA BERGIZI based on already established trust.

b. Institutional Design

Inconsistent regulatory instruments characterize the institutional design of the ANANDA BERGIZI program. Karsa Husada Regional General Hospital has a formal cooperation agreement (PKS) for clinical referral services, but participation in ANANDA BERGIZI is based solely on a signed commitment. The program lacks a binding mayoral regulation (Perwali) that applies across government agencies (OPDs), so reporting obligations are not legally enforceable. The consequences are immediately apparent: reporting formats across actors are inconsistent, reporting frequency is irregular, and there are significant differences in the completeness of the data reported. The program also lacks a horizontal coordination forum that brings all foster parents together regularly. The only integrated monitoring mechanism identified is a shared Google Spreadsheet developed pragmatically by Karsa Husada Regional General Hospital. This workaround fills a gap in the institutional design that was not originally planned. Stronger institutionalization measures were only realized when the TPPS Municipal Regulation was enacted in March 2026.

"For the designation of RSUD Karsa Husada Batu as the referral facility for implementing the pediatric specialist referral examination program, a formal cooperation agreement was made with the Batu City Health Department. Meanwhile, for the implementation of ANANDA BERGIZI activities, only a signed statement of commitment was made, indicating that RSUD Karsa Husada was willing to take part in the activities together with other OPDs." (RSKH, Director of RSUD Karsa Husada Batu, interview, April 9, 2026).

A similar statement was made by informant WK, as follows:

"With perhaps a single regulation as one of the interventions, that would ensure that a program can run and be effective. Furthermore, to borrow the term, there could be something like a reward-and-punishment mechanism attached to whatever program is being carried out." (WK, Mayor of Batu, interview, April 2026).

This dichotomy—a formal PKS for clinical referral services, but only a "signed commitment" for participation in the ANANDA BERGIZI program—reveals a hierarchy of binding force within the program's institutional design. Formal regulation was present only where a tradition of PKS agreements already existed, rather than being deliberately designed as the backbone of multi-actor collaboration.

Recent developments indicate a stronger step toward institutionalization: the new TPPS Perwali (Mayoral Regulation) was successfully enacted in March 2026, along with a more operational Regional Action Plan (RAD) for stunting.

"Just this past March 2026, we finally have the new TPPS Perwali and a more operational stunting RAD. So the legal basis is now stronger for future programs." (Secretary of the Batu City Health Department, interview, May 2, 2026).

c. Facilitative Leadership

The study identified two levels of facilitative leadership. At the regional head level, leadership operates through personal example and hierarchical instructions—unlike the Ansell & Gash model, which emphasizes facilitating deliberative processes. Quantitative monitoring data confirm this impact: when leadership pressure eased, OPD activity dropped from ~85% in week 10 to 65% in week 12. At the technical level, the Health Department acted

as a single actor bearing the burden of coordinating nearly all aspects of the program—a situation prone to capacity overload.

Mayor WK offered an insider's perspective on the leadership challenges in promoting collaborative governance within regional bureaucracy. He argued that government must be not only collaborative but also adaptive—a principle he described as essential, while acknowledging that it is not easy to realize.

"In line with what forms part of the vision and mission of my Batu administration, it's not just about being a collaborative government, but now adaptiveness must be added as well. Why? Because the community we lead has developed tremendously in terms of information technology. So if the government remains normative and rigid, it won't be very productive." (WK, Mayor of Batu, interview, April 2026).

This layered leadership architecture positions the regional head as the top leader and the Regional Secretary as the "conductor," offering an operational picture of how facilitative leadership functions within Indonesian local government.

"What's needed is a leader at the second-leader level, and in local government that second leader is the Regional Secretary. He or she becomes something like a conductor, able to harmonize different viewpoints and levels of commitment, and to provide the interpretation needed to implement the vision." (WK, Mayor of Batu, interview, April 2026).

In the context of Batu City, which sits at the crossroads between traditional-communal societies in its agricultural villages and the more individualistic communities in its tourism areas, the effectiveness of this leadership-driven approach is likely to vary across regions.

d. Collaborative Process

Analysis of the collaborative process reveals a multi-layered picture. Meaningful face-to-face dialogue occurs more frequently during informal visits to target families than during formal coordination meetings. Barriers to trust-building occurred at two levels: psychological barriers among target families (denial of the stunting diagnosis clinically communicated by pediatricians) and perceptual barriers among actors (PKK members felt their networks were merely being exploited). RSDEA developed an innovative approach to trust-building through positive reinforcement and healthy competition among families, while Posyandu cadres strategically avoided using the term "stunting" during the first visit. Commitment to the process eroded in quantifiable terms: of the 10 toddlers in the RSKH group, only 5 remained until the end of the program (a 50% dropout rate). A gap in shared understanding regarding the program's success parameters remained a fundamental, unresolved barrier.

"Formally and informally, whenever there's an opportunity, I try to reach out to all of Batu's community. Come, let's think about this problem together, so that we can work our way out of it together. Because this problem cannot be shouldered by just one group, one segment of society alone." (DR, Community Leader of Batu City, interview, April 2026).

The most meaningful face-to-face dialogue in this program did not take place in formal coordination meetings, but rather in informal conversations during village visits and in the direct mentoring of target families.

e. Outcomes

The transformation from BAAS to ANANDA BERGIZI is a concrete example of the reinforcement cycle described by Ansell & Gash (2008): positive intermediate outcomes drive expanded participation. However, this expansion occurred without a corresponding strengthening of the institutional design. The 66 actors in Cycle 2 produced far more incomplete monitoring data than the 40 OPD actors in Cycle 1. This phenomenon, referred to in this study as "over-scaling without consolidating," confirms the proposition by Emerson et

al. (2012) that adding actors without strengthening the capacity for joint action actually weakens the quality of collaboration.

"Alhamdulillah, when we look at it, there does seem to be a change. Before, the child would eat chips almost every day—that was the case when we first visited. That eventually changed; the child started being given eggs and other food. Afternoon naps used to be difficult, but that changed too." (Representative of PT Selecta Management, interview, May 1, 2026).

Qualitative behavioral changes recorded in the monitoring reports—such as the shift from a snack-based diet to animal protein, improved nap schedules, and reduced use of formula milk—represent intermediate outcomes not captured by weight-for-height (BB/TB) indicators, but which mechanistically predict long-term change in nutritional status.

"Of the 5 toddlers who participated in the ANANDA BERGIZI program through to the end, only 1 successfully exited stunting status. The indicator used was the interpretation of weight and height data from the final measurement, using the anthropometric tables of the Indonesian Ministry of Health." (RSKH, Director of RSUD Karsa Husada Batu, interview, April 9, 2026).

Triangulating data from these two informants—an approximately 80% rate of weight gain across the broader population (academic informant) versus 1 out of 5 exiting stunting status within the hospital-monitored group (RSKH)—reveals not a contradiction, but rather two different measures obtained using two different instruments. Weight gain is a process-level parameter more sensitive to short-term intervention, whereas a change in stunting status is an endpoint parameter that requires a longer time horizon. This distinction underscores the need to differentiate evaluation parameters in program design deliberately.

2. Program Effectiveness in Reducing Stunting

a. Based on Dunn's Evaluation Criteria (2017)

The effectiveness dimension shows varying patterns depending on the parameters used. In Cycle 1 of BAAS, out of 40 children, 23 (57.5%) experienced weight gain, 28 (70%) experienced height gain, and 1 (2.5%) successfully exited stunting status. The low stunting exit rate does not indicate a program failure but a biological inevitability—the changes in height and age that form the basis of a stunting diagnosis require a cumulative timeframe far longer than 12 weeks. RSDEA in Cycle 2 recorded height increases in 9 out of 9 children (100%) using a structured multidisciplinary support methodology.

The efficiency dimension reveals a paradox: the program successfully mobilized resources outside the local government budget (positive leverage ratio), yet coordination efficiency among the 66 actors was very low, as evidenced by the significant incompleteness of monitoring reports. The adequacy dimension was hampered because, of the 1,260 children registered in Cycle 2, only 14 had complete monitoring data (a documentation rate of 1.1%). The responsiveness dimension faces obstacles due to the absence of a protocol for screening for comorbidities—data confirm three cases of significant comorbidities in Cycle 1 (TB, Hirschsprung's disease) that went undetected before the program began.

Table 1

Summary of Measurable Outcomes of the BAAS and ANANDA BERGIZI Programs

Outcome Indicators	BAAS Cycle 1 (n=40)	ANANDA BERGIZI Cycle 2 (n documented=20)
Weight Gain	23/40 (57.5%)	RSDEA: 5/9 (56%); PKK: 4/5 (80%)
Height Gain	28/40 (70%)	RSDEA: 9/9 (100%); PKK: 3/5 (60%)
Exit from Stunting Status	3/40 (7.5%)	Cannot be analyzed

Changes in Eating Behavior	Almost all reports were positive	Recorded throughout available data
Monitoring Equipment	Data is available for all 40 children	Only 14 out of 1,260 children (1.1%) had complete data

1) Effectiveness

Program effectiveness was rated good on intermediate indicators (weight and height gain), although the rate of exiting stunting status was very low (2.5% in Cycle 1). This is biologically inevitable, since height is a long-term impact indicator (lagging indicator).

"Height is an endpoint parameter, and the process is slow—unlike weight. Don't use an endpoint parameter to assess the program; it will be judged a failure even though the process is actually working." — Prof. ACA (Academic, Faculty of Public Health, Airlangga University, interview, April 2026)

"It has a very significant impact. Out of 10 stunted children, even if 2 drop out, we can still help lift 7 to 8 children out of stunting." — DR (Community Leader of Batu City, interview, April 2026)

"Fairly effective, but there needs to be step-by-step evaluation and monitoring. Sustainability is the key to the success of this collaboration." — WK (Mayor of Batu, interview, April 2026)

2) Efficiency

The financing model was efficient, as it mobilized non-regional-budget (non-APBD) resources—including CSR funds, hospital involvement, and the social capital of community cadres. However, clinical efficiency was judged not yet commensurate with results when measured solely by the rate of exiting stunting status, and inaccurate targeting of assistance was also identified.

"The resources invested are not yet proportional to the results, since only 1 toddler successfully exited stunting. Further assessment is needed regarding toddlers' physical condition and risk factors." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"Budget-wise, it's sufficient. The problem lies in targeting accuracy—for example, all infants are given milk assistance without selection based on diagnosis." — Informant, Batu City Regional Development Planning, Research and Development Agency (Bappelitbangda), interview, May 2026

"The main point of this program is to empower the community and various stakeholders to take part, so that addressing stunting does not depend solely on the regional budget (APBD)." — Secretary of the Batu City Health Department, interview, May 2026

3) Adequacy

In terms of nominal coverage, the program already spans all 24 villages/sub-districts (desa/kelurahan). Substantively, however, coverage remains inadequate, given the very low level of monitoring data documentation (only 1.1% in Cycle 2).

"The principle of governance is sustainability. Monitoring and mentoring programs must not shift or stop from year to year." — WK (Mayor of Batu, interview, April 2026)

"The dynamics on the ground keep evolving—two children may graduate out of stunting, but three new ones appear. So this program cannot run for just one period alone." — DR (Community Leader of Batu City, interview, April 2026)

4) Equity

Geographic coverage was evenly distributed, but intervention quality varied among mentoring actors (for example, RSDEA's multidisciplinary approach produced a 100% rate of height gain, whereas reports from other parties were not well documented).

"The program has been distributed fairly across all regions and community groups." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

5) Responsiveness

The program's responsiveness remained constrained by the absence of initial screening for comorbid conditions (such as tuberculosis and Hirschsprung's disease), the lack of specialized handling for complex cases (children with special needs/parenting-pattern issues), and an unclear reporting pathway (feedback loop).

"The program has not yet addressed real needs, because further physical and environmental examinations to identify comorbid conditions have not been carried out." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"When a severe case arises in the field, the reporting pathway isn't always clear—whether it should go to the Puskesmas or the Health Department. In the end, it relies more on personal relationships than on the system." — Head of Working Group II, Batu City Family Welfare Movement (TP PKK), interview, May 2, 2026

6) Appropriateness

The collaborative governance approach is conceptually appropriate. However, target accuracy and the selection of evaluation indicators still need improvement, so that the misuse of endpoint parameters does not obscure the success of the collaboration.

"The approach would be more accurately targeted if further physical and environmental examinations were carried out, and if more parties were brought on board." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"Choosing the right parameters is very important. This collaboration, which is already working well, must not be judged a failure simply because the wrong evaluation parameter was used." — Prof. ACA (Academic, Faculty of Public Health, Airlangga University, interview, April 2026)

b. Based on Stufflebeam's CIPP Model

1) Context Evaluation

The program was designed on an evidence-based foundation, focusing on community behavior change as the root cause of stunting. Nevertheless, an operational relevance gap remains, as the program has not yet integrated clinical screening protocols for comorbid conditions.

"The main basis at that time wasn't an economic or educational issue, but a behavioral one. However, intensive mentoring from cadres or Puskesmas staff alone was clearly not sufficient." — Prof. ACA (Academic, Faculty of Public Health, Airlangga University, interview, April 2026)

"The program was designed based on a comprehensive analysis of the stunting problem, but its objectives are still not fully aligned with the actual needs on the ground." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

The mismatch between the initial design and actual needs points to a gap between theory and implementation. Although behavioral education is fundamental, neglecting clinical

factors (such as comorbid conditions) means the program's objectives have not yet fully addressed the more complex root causes of children's health problems.

2) Input Evaluation

The main limitations on the input side include the absence of formal regulation, budget constraints, and the lack of a standardized onboarding and briefing system for implementing actors (PKK and private-sector partners). This absence of guidance has affected the synchronization of targets across OPDs (regional government agencies), an issue only recently addressed through the development of a roadmap.

"The biggest shortcoming on the input side is the limited budget." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"There needs to be strong briefing and assistance, because understanding among both targets and field implementers is still inadequate." — Head of DP3AP2KB (Batu City Women's Empowerment, Child Protection, Population Control, and Family Planning Agency), interview, March 2025

"Socialization often fails to reach the lower levels. Leadership gets briefed, but different people are sent into the field, so the briefing is insufficient and implementers don't understand the objectives." — PKK Informant, Batu City, interview, May 2026

"At first we were directly asked to consult with cadres and village midwives to identify the specific needs of stunted children, and only then did the private sector prepare accordingly." — Selecta/PHRI Informant, interview, May 2026

"Coordination among OPDs had previously overlapped. Starting mid-2025, we aligned the programs and the division of roles so they wouldn't operate independently of one another." — Nutrition Program Officer, Batu City Health Department, interview, May 2026

The weakness in inputs is not simply a matter of funding, but also concerns knowledge transfer and coordination mechanisms. Without a systematic briefing module and formal regulation, the goodwill of external parties (such as the private sector and cadres) becomes suboptimal, as they proceed without a uniform operational standard.

3) Process Evaluation

Program implementation at the referral service level (RSKH) has proceeded in accordance with standard operating procedures (SOPs), whereas other mentoring actors experienced a trial-and-error process. The most prominent process barriers included sudden refusals from toddlers' parents, communication that did not match cadres' capacity, and a high rate of incomplete monitoring reports.

"The implementation of examinations and interventions has followed SOP. The main recurring obstacle is the sudden refusal from toddlers' parents when staff attempt to carry out an examination." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"We can't possibly go down and check on every single case in the field ourselves. The Health Department needs to be more proactive in reminding the various actors to keep monitoring going." — Nutritionist, Batu City Health Department, interview, April–May 2026

The differences in performance among actors reflect internal capacity disparities. Modern medical facilities such as RSKH tend to comply closely with SOPs. In contrast, field-level implementers face social barriers (community refusal) and a weak monitoring network, resulting in inconsistent performance data collection.

4) Product Evaluation

The program has been shown to produce a significant positive impact on weight and height gain as well as behavior change. However, the program was discontinued after Cycle 2 due to shifting bureaucratic priorities and institutional capacity constraints, rather than because of an evaluation of program failure. RSKH emphasized the importance of a feedback loop and a longer-term evaluation horizon (6–12 months).

"Following the hospital's intervention, there was an increase in weight and height. Recording difficulties typically occur when a child is unwell at the time of remeasurement." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"There needs to be a systematic feedback loop from the Health Department to monitor whether the pediatric specialist intervention, over the following 6–12 months, genuinely reduces stunting cases." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

"In the first cycle, weight gain over 3 months reached nearly 80%, even though the rate of exiting stunting status was below 1%. The program was discontinued after the second cycle not because it failed, but because other tasks took priority." — Prof. ACA (Academic, Faculty of Public Health, Airlangga University, interview, April 2026)

Clinically and behaviorally, the program produced positive results on intermediate indicators (weight/height). Its sudden discontinuation underscores a classic bureaucratic problem—unsustainability driven by shifting political agendas and internal dynamics—rather than an objective evaluation of outcomes.

3. Driving and Hindering Factors

a. Key Supporting Factors

1) Cross-Sectoral Collaboration and Active Community Participation

The program succeeded in mobilizing social capital and non-regional-budget (non-APBD) resources through the active involvement of various parties, such as hospitals' multidisciplinary medical teams, women's organizations (PKK), and private-sector/CSR contributions.

"The new element of this program is that we're empowering the community to play a role in reducing stunting—so it doesn't depend solely on the regional budget (APBD)." — Secretary of the Batu City Health Department, interview, May 2026

Cross-sectoral involvement offset the limitations of the regional budget while extending interventions to the family level through an inclusive partnership approach.

2) Leadership Commitment and Regional Policy Support

The political commitment of regional leadership, together with the involvement of community figures, served as a key driver in mobilizing collective awareness for the consistent handling of stunting.

"Yes, it's fairly effective, but with the caveat I mentioned earlier—it's not just about everyone completing it as a mandatory obligation... So sustainability becomes the key to the success of this collaborative stunting-handling program." — WK (Mayor of Batu, interview, April 2026)

Leadership support provided strong legitimacy for the program's implementation on the ground, thereby facilitating inter-institutional consolidation and the mobilization of citizen participation.

3) Positive Impact on Intermediate Growth Indicators (Weight and Height)

Structured mentoring and nutritional interventions were shown to produce direct physical improvements, particularly in terms of weight and height gain among toddlers under two years old (baduta).

"In the first cycle, it was actually quite good—weight gain over the 3 months reached nearly 80 percent of children showing an increase." — Prof. ACA (Academic, Faculty of Public Health, Airlangga University, interview, April 2026)

Success on this intermediate indicator demonstrates that the medical and nutritional interventions were, at their core, effective, even though changes in final stunting status require more time.

b. Key Inhibiting Factors

1) Resistance and Denial Among Target Families

The emergence of denial, feelings of shame, and low parental awareness regarding independent nutritional management constituted the main psychosocial barriers encountered during intervention.

"The most frequent and recurring obstacle is the sudden refusal that comes from the parents of stunted toddlers at the point when staff attempt to carry out examinations and interventions..." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

Physical/nutritional interventions cannot be optimal without preceding counseling and psychological education to build readiness and acceptance among the family.

2) Absence of Initial Screening for Comorbid Conditions

The program generalized its approach to all stunted toddlers by providing only nutritional assistance, even though some children had complex underlying medical conditions (such as tuberculosis or congenital disorders) that had not yet been detected.

"The program has not yet addressed the real needs of families with stunted toddlers, because certain activities related to further examination... to determine whether the cause of stunting is a comorbid condition or not, have not yet been carried out." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

Without a comprehensive medical examination at the outset, nutritional supplements are poorly targeted because the child's underlying clinical problems are not addressed first.

3) Incomplete Monitoring System and Feedback Loop

Reporting data from field-level mentors was extremely minimal and unintegrated, meaning that actors (such as hospitals or private-sector partners) received no feedback on the progress of the children they were mentoring.

"The hospital does not receive the data. As a result, the hospital cannot monitor whether, after the intervention was carried out... there has been any change in the toddlers/children under two." — RSKH (Director of RSUD Karsa Husada Batu, interview, April 9, 2026)

Breakdowns in data and information flow (the feedback loop) hamper evidence-based evaluation and diminish collaborative partners' motivation to sustain their involvement.

Discussion

Implementasi Collaborative Governance Program ANANDA BERGIZI

The implementation of collaborative governance in the ANANDA BERGIZI Program in Batu City reflects an effort to address stunting as a wicked problem through multi-actor engagement.

However, the research findings indicate that this expansion of participation has not been matched by robust collaborative governance. In the starting conditions dimension, disparities among actors manifest not only in financial resource gaps but also in administrative capacity, as evidenced by the low coverage of complete monitoring data (1.6%). The weakness of the institutional design—stemming from the absence of binding formal regulation and standardized knowledge-transfer instruments—means that the effectiveness of mentoring is highly dependent on the individual capacity of each institution, consistent with Bingham et al.'s (2005) view on the importance of formal rules of engagement in ensuring public accountability.

Meanwhile, the facilitative leadership that emerged remains hierarchical and figure-dependent, with political leadership operating through formal instructions and personal influence rather than facilitating genuinely horizontal dialogue (Purdy, 2012). This condition has affected the collaborative process, which exhibits symptoms of "over-scaling without consolidating"—that is, an expansion in the number of actors (from 40 to 66) without a corresponding strengthening of institutional consolidation, thereby increasing coordination burdens (transaction costs), a consequence of the limited capacity for joint action (Emerson et al., 2012). As a result, the outcomes produced thus far remain confined to shared motivation at the normative level and have not yet developed into an institutionalized, sustainable collective capacity (Innes & Booher, 2010; Ansell & Gash, 2007).

1. Evaluation of the Effectiveness of the ANANDA BERGIZI Program

An assessment of the ANANDA BERGIZI Program's effectiveness through the CIPP product evaluation model reveals partial achievement: the intervention generated activity outputs and intermediate outcomes but has not yet achieved a significant, sustained impact in reducing stunting. The program's success is reflected in improvements to intermediate anthropometric indicators, such as weight gain among 57.5% of toddlers under two (baduta) and height gain among 70% of baduta, indicating that specific and sensitive nutritional interventions have been operationally effective. Nevertheless, the rate of exiting stunting status—reaching only 2.5%—confirms that the program has not yet achieved meaningful effectiveness across the target population. As emphasized in recent public health policy evaluation literature, short-term stunting interventions often show a gap between temporary biological gains and aggregate impact, particularly when program duration is limited and not supported by a sustained data-monitoring system (Ariawan et al., 2026; Susilawati et al., 2026).

2. Facilitating Factors for Collaborative Governance

Two main supply-side factors drove the initial success and achievement of intermediate indicators in the ANANDA BERGIZI Program. First, local political leadership functioned as a facilitative leader, driving efficiency and accelerating cross-sectoral engagement in the early stage; however, this leadership operated through a pattern of hierarchical mandated collaboration and the exemplary conduct of public figures, rather than through genuinely deliberative, dialogical leadership (Hermawan et al., 2026). Second, grassroots mentoring was largely underpinned by the social capital of Posyandu cadres. The social embeddedness of cadres' positions within the community functioned as a safety net that sustained service continuity even as formal participation by regional government agencies (OPDs) declined by as much as 35% toward the end of the program cycle (Hastika, 2025).

3. Inhibiting Factors for Collaborative Governance

However, the program's effectiveness and sustainability were hampered by both structural factors and grassroots resistance. First, suboptimal capacity for joint action stemmed from the absence of an integrated monitoring information system, resulting in data

fragmentation and difficulty measuring toddlers' progress in real time (Sufri et al., 2024). Second, reliance on Posyandu cadres created a paradox of participation asymmetry: the actors bearing the heaviest workload received the least incentive and institutional support—a situation that, over the long term, risks eroding cadres' intrinsic motivation (Calzada, 2025; Hastika, 2025). Third, on the demand side, the program faced barriers in the form of resistance and low readiness among target families. This finding underscores the importance of integrating the concept of pre-engagement—that is, an initial intervention aimed at building the cognitive, affective, social, and relational readiness of beneficiaries—prior to the formal launch of a program, in order to prevent the failure of stunting interventions due to resistance within the household (Ariawan et al., 2026; Manalu, 2025).

Strengthening collaborative governance in local stunting reduction requires a strategy that goes beyond expanding the number of participating actors; it demands effective technical interventions, a structured division of roles, and strong multi-stakeholder commitment. Lessons from various regions demonstrate that collaborative success hinges on integrating digital information systems to monitor child development in real time, thereby enabling precise program convergence (Sufri et al., 2024). Furthermore, engaging non-governmental sectors—such as optimizing Corporate Social Responsibility (CSR) initiatives—and diversifying local food sources are crucial instruments for strengthening joint action and securing household nutritional resilience (Safira & Salomo, 2024; Setiawan & Choirunnisa, 2023). However, persistent challenges such as fragmented authority, uneven institutional capacity, and weak inter-organizational communication across sectoral agencies frequently constrain joint action unless countered by active facilitative leadership (Hermawan et al., 2026; Rahayu et al., 2024). Without clear institutional rules of engagement, transformative leadership, continuous cross-sectoral communication, and equitable incentives for frontline actors, collaborative frameworks risk degenerating into bureaucratic formality rather than delivering significant, sustained reductions in stunting prevalence (Absor & Ratriana, 2024; Oktaviyanti et al., 2024).

Conclusion

The ANANDA BERGIZI Program demonstrates the potential of collaborative governance in addressing stunting in Batu City, but its implementation remains institutionally fragile. Power and data asymmetries favored the Health Department, institutional design lacked binding regulation for most actors, and leadership operated in a largely hierarchical rather than deliberative manner. The expansion from 40 to 66 actors without corresponding institutional consolidation—termed "over-scaling without consolidating"—weakened coordination rather than strengthening it.

The program achieved clear success on intermediate indicators (57.5% weight gain, 70% height gain). However, the rate of formal exit from stunting status remained low (2.5%), reflecting the longer timeframe height-for-age requires to change. Cross-sectoral participation, leadership commitment, and cadre social capital were key strengths, while family resistance, the absence of comorbidity screening, and a fragmented feedback system were the main constraints.

In sum, the program generated shared motivation and short-term gains but has not yet become an institutionalized, self-sustaining model. Strengthening binding regulation, integrated monitoring, early screening, and cadre support is recommended to consolidate these gains.

References

- Absor, U., & Ratriana, K. (2024). Enhancing stunting reduction through collaborative governance: Concepts and implementation in Brebes Regency. *Jurnal Keluarga Berencana*, 9(1), 24–37. <https://doi.org/10.37306/jkb.v9i1.298>

- Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*, 18(4), 543–571. <https://doi.org/10.1093/jopart/mum032>
- Apriska, Y., Febriani, A., & Melina, M. (2022). Peran Bappenas dalam percepatan penanganan stunting di Indonesia melalui strategi konvergensi. *Jurnal Kebijakan Kesehatan Indonesia*, 11(2), 85–94. <https://doi.org/10.22146/jkki.v11i2.72140>
- Ariawan, I., Jusril, H., Afifa, Z. I., & Herawan, A. (2026). Intervention levers for stunting reduction in Indonesia: Evidence from the 2023 Indonesian Health Survey data. *Kesmas: Jurnal Kesehatan Masyarakat Nasional*, 21(2), 125–134. <https://doi.org/10.7454/kesmas.v21i2.2686>
- Balla, A., Coulibaly, A., & Diallo, M. (2021). Global trends and income disparities in childhood stunting reduction from 1990 to 2015: A cross-country analysis of 174 nations. *BMC Public Health*, 21(1), Article 1420. <https://doi.org/10.1186/s12889-021-11456-9>
- Calzada, I. (2025). The political economy of Web3 platformization: Innovation systems and participation asymmetry in polycentric governance. *Systems*, 5(4), 62–81. <https://doi.org/10.3390/systems13040062>
- Damayanti, R., Nurfadhilah, N., & Utami, S. (2021). Kolaborasi multisektoral dalam pencegahan dan penanganan stunting di Indonesia: A systematic review. *Jurnal Kesehatan Masyarakat Indonesia*, 16(3), 162–170. <https://doi.org/10.26714/jkmi.v16i3.8201>
- Dunn, W. N. (2017). *Public policy analysis: An integrated approach* (6th ed.). Routledge.
- Hastika, N. (2025). Collaborative governance reducing stunting in Bandung City. *Mimbar: Jurnal Penelitian Sosial dan Politik*, 14(1), 45–58. <https://doi.org/10.32663/mimbar.v14i1.4774>
- Hermawan, A., Rifdan, Nurussyariah, & Yamin, M. N. (2026). Developing a collaborative governance model for stunting reduction in Jeneponto Regency. *Journal of Indonesian Scholars for Social Research*, 6(1), 24–30. <https://doi.org/10.59065/jissr.v6i1.259>
- Kementerian Kesehatan RI. (2025). *Laporan eksekutif Survei Kesehatan Indonesia (SKI) 2024: Capaian dan tantangan percepatan penurunan stunting nasional*. Badan Kebijakan Pembangunan Kesehatan, Kementerian Kesehatan Republik Indonesia. <https://www.kemkes.go.id/>
- Kesehatan, B. K. P. (2023). *Hasil Survei Status Gizi Indonesia (SSGI) 2023*. Kementerian Kesehatan Republik Indonesia. <https://www.badankebijakan.kemkes.go.id/>
- Manalu, P. (2025). Evaluating the implementation of the stunting prevention program at the Regional Technical Unit of Binjai Estate Health Center. *Contagion: Scientific Periodical Journal of Public Health and Coastal Health*, 7(1), 88–101. <https://doi.org/10.30829/contagion.v7i1.24225>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage Publications.
- Oktaviyanti, A., Taufiq, A., & Suhindarno, H. (2024). Collaborative governance in efforts to reduce stunting in Bojonegoro Regency. *Jurnal Noken Ilmu-Ilmu Sosial*, 10(2), 481–493. <https://doi.org/10.33506/jn.v10i2.3822>
- Putri, S. A., Rahmadani, W., & Wardani, K. (2025). Stunting as a global public health threat: Determinants and intervention challenges in developing countries. *International Journal of Health Sciences and Research*, 15(1), 45–56. <https://doi.org/10.52403/ijhsr.20250106>
- Rahayu, S., Mahsyar, A., & Fatmawati. (2024). Collaborative Governance in Overcoming Stunting in Bantaeng Regency. *International Journal of Science and Society*, 6(2), 134–145. <https://doi.org/10.54783/ijssoc.v6i2.1118>
- Safira, H. R. W., & Salomo, R. V. (2024). Collaborative governance in accelerating stunting reduction through Corporate Social Responsibility. *Santhet (Jurnal Sejarah Pendidikan dan Humaniora)*, 8(1), 1122–1130. <https://doi.org/10.36526/santhet.v8i1.3948>

- Sentongo, P., Ssentongo, A. E., Ba, D. M., Ericson, J. E., Na, M., Gao, X., Kjerulff, K. H., & Chinchilli, V. M. (2021). Global geographical distribution and temporal trends of stunting, wasting, and underweight in children under 5 years of age: A systematic review and meta-analysis. *eClinicalMedicine*, 39, Article 101052. <https://doi.org/10.1016/j.eclinm.2021.101052>
- Setiawan, H., & Choirunnisa, C. (2023). Intervensi diversifikasi pangan lokal dalam menurunkan prevalensi stunting di Kabupaten Batang: Analisis kajian politik keamanan non-tradisional. *Salus Cultura: Jurnal Pembangunan Manusia dan Kebudayaan*, 3(2), 78–90. <https://doi.org/10.55480/saluscultura.v3i2.112>
- Stufflebeam, D. L., & Coryn, C. L. (2014). *Evaluation theory, models, and applications* (2nd ed.). Jossey-Bass.
- Sufri, S., Nurfalalah, R., & Rachman, A. (2024). Implementation outcomes of convergence action policy to accelerate stunting reduction in Indonesia. *International Journal of Environmental Research and Public Health*, 21(3), 312–328. <https://doi.org/10.3390/ijerph21030312>
- Sufri, S., Nurfalalah, R., & Rahmawati, E. (2024). Integrasi sistem informasi monitoring kesehatan balita berbasis digital dalam mendukung konvergensi percepatan penurunan stunting. *Jurnal Kebijakan Kesehatan Indonesia*, 13(2), 105–118. <https://doi.org/10.22146/jkki.v13i2.88210>
- Susilawati, M., Purnaweni, H., & Sujatmiko, E. (2026). From routine to results: How digitalizing Posyandu and cross-sector convergence accelerate stunting reduction in rural Indonesia. *Al-Kharaj: Jurnal Ekonomi, Keuangan & Bisnis Syariah*, 8(1), 115–128. <https://doi.org/10.47467/alkharaj.v8i1.8593>
- UNICEF, & Kementerian Kesehatan RI. (2023). *Ringkasan kajian lanskap gizi ibu dan anak di Indonesia: Dampak stunting jangka panjang terhadap pembangunan sumber daya manusia*. United Nations Children's Fund. <https://www.unicef.org/indonesia/id/laporan/>
- Widaryanti, R. (2019). Analisis perbandingan prevalensi stunting Indonesia dengan negara-negara berkembang berpendapatan menengah. *Jurnal Kebijakan Kesehatan dan Kebidanan*, 7(1), 12–21. <https://doi.org/10.22146/jkkk.v7i1.48912>