



Collaborative Governance for Stunting Reduction: A Qualitative Case Study from Bangka Regency, Indonesia

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INTRODUCTION

Stunting, defined as impaired linear growth resulting from chronic undernutrition, remains a critical developmental and public health challenge in Indonesia. Beyond physical stature, it significantly affects long-term cognitive development, school readiness, labor productivity, and increases the risk of degenerative diseases in adulthood (WHO, 2022; UNICEF, 2020). According to the 2023 Indonesia Health Survey (SKI), 21.5% of children under five were affected by stunting, highlighting that despite a decade of interventions, progress has stalled and the issue persists at scale (Kemenkes RI, 2023).

The urgency to address stunting stems from its multi-dimensional impact, biological, social, economic, and intergenerational. Children who experience stunting before the age of two are more likely to struggle academically, earn lower incomes as adults, and perpetuate cycles of poverty across generations (Mulyani et al., 2025). In Indonesia, stunting is estimated

to contribute to a 2–3% annual GDP loss due to diminished human capital productivity (Kementerian Sekretariat Negara RI Sekretariat Wakil Presiden, 2019). Alarming, interprovincial disparities remain wide, with rural and marginalized communities experiencing higher prevalence rates (Syafrawati et al., 2023). These inequities in access to healthcare, sanitation, nutrition, and education underscore the need for transformative policy action, particularly at the district level.

In response, the Government of Indonesia launched the National Strategy to Accelerate Stunting Reduction, targeting a 14% prevalence by 2024. This strategy emphasizes convergence actions, coordinated and integrated efforts across sectors and stakeholders (BAPPENAS, 2020). This approach necessitates not only inter-ministerial collaboration at the national level but more crucially, localized implementation at the district and village level through multisectoral governance.

Collaborative governance, as defined by Gunawan (2025), refers to the co-creation of public value through structured, inclusive, and deliberative engagement between governmental and non-governmental actors in collective decision-making. In a decentralized system like Indonesia's, where local governments are responsible for executing health and development initiatives, collaborative governance offers a compelling framework to bridge institutional silos and active community participations.

Empirical evidence in Indonesia supports this model's effectiveness. In Bekasi City, a structured pentahelix collaboration reduced stunting prevalence from 18.2% to 3% (Fristiwi et al., 2023). Similar outcomes were achieved in Palopo, Sleman, and East Flores, where convergence strategies involving local government, academia, NGOs, media, and private sector actors enhanced accountability and program outreach (Saleh et al., 2024; Herawati et al., 2022). However, these successful models are still exceptions. In many districts, implementation remains fragmented, with weak coordination mechanisms, limited community engagement, and inadequate monitoring systems (Wijaya et al., 2023)

Bangka Regency in the Bangka Belitung Islands Province presents a relevant case for investigating collaborative governance in a middle-performing region. The local government has formally established a Stunting Reduction Acceleration Team (TPPS) involving government units, health workers, academic institutions, religious organizations, and media partners. Despite this structural framework, anecdotal evidence suggests challenges in role clarity, facilitative leadership, inter-agency communication, and community-level monitoring. These gaps underscore the urgent need to examine how collaborative governance is functioning on the ground and how it can be strengthened.

This study therefore investigates the institutional dynamics, stakeholder interactions, and strategic directions of collaborative governance for stunting prevention in Bangka Regency. Using a qualitative case study design grounded in the Ansell & Gash collaborative governance framework and supplemented by SOAR analysis (Strengths, Opportunities, Aspirations, and Results), this study contributes evidence on how local convergence efforts can be made more adaptive, inclusive, and results-driven.

METHODS

This study employed a qualitative design to explore the dynamics of collaborative governance in stunting mitigation efforts in Bangka Regency, Bangka Belitung Islands Province. A qualitative approach was deemed suitable for capturing the complexity of institutional relationships, stakeholder perceptions, and contextual challenges within local stunting reduction initiatives. Data were collected through in-depth semi-structured interviews with fifteen purposively selected key informants representing five main stakeholder groups: government officials (including personnel from the Health Office, Bappeda, and village midwives); academic experts involved in stunting-related research; private sector actors participating in corporate social responsibility programs; media professionals engaged in public health communication; and community leaders or civil society representatives active in maternal and child health advocacy.

Interviews were conducted between February and April 2025, using thematic prompts focused on initial conditions, collaborative processes, institutional design, and leadership roles. All interviews were audio-recorded with informants' consent, transcribed verbatim, and anonymized to ensure confidentiality.

Thematic content analysis was applied to identify recurring patterns and key narratives across the interview data. Coding was performed manually and iteratively, with emergent themes organized into higher-order categories aligned with the study's conceptual framework. Data credibility was reinforced through triangulation across stakeholder groups and member checking with selected informants to validate key interpretations. To ensure the trustworthiness, the study followed established criteria of credibility, dependability, transferability, and confirmability, supported by detailed field notes, reflective memos, and a structured audit trail maintained throughout the research process.

RESULTS

This study explores the dynamics of collaborative governance in stunting prevention in Bangka Regency, Bangka Belitung Islands Province, using the framework developed by Ansell and Gash, which comprises four key dimensions: initial conditions, the collaboration process, facilitative leadership, and institutional design. The Bangka Regency government has formalized a multi-stakeholder collaborative structure through Regent Decree No. 188.45/253/DP2KBP3A/2022, establishing the Stunting Reduction Acceleration Team (TPPS). This team utilizes a pentahelix model, involving representatives from government, academia, media, the private sector, and community-based organizations.

Structurally, the Regent serves as TPPS Director, with strategic oversight from the Regional Leadership Coordination Forum. The daily operations are led by the Regional Secretary, Head of Bappeda, and the Chairperson of the Family Welfare Movement (TP PKK). Functional coordination is further divided across sectors. For example, the Health Office leads specific and sensitive interventions, supported by relevant agencies such as the Social Office, the Food and Agriculture Office, and professional health associations such as IBI (Indonesian Midwives Association) and IAKMI (Indonesian Public Health Association). Meanwhile, behavior change and family assistance programs are coordinated by the Office of Population Control and Family Planning, in collaboration with various sectoral and civil society actors.

Findings from the field revealed several key insights. First, most stakeholders acknowledged the urgency of collaborative efforts to address stunting; however, the application of differing data sources and indicators (e.g., SSGI, SKI, and e-PPGBM) has created inconsistencies in planning and monitoring. Second, while joint forums such as mini-workshops and stunting workshops have produced strategic action plans, implementation varies widely across institutions. Some actors demonstrate proactive engagement, while others remain passive or disconnected from operational roles. Third, facilitative leadership has not fully reached peripheral or underserved areas, often due to competing priorities at the village level, though several local leaders have shown potential to address these gaps. Fourth, although the formal institutional framework is in place, many team members have yet to fulfill their roles effectively, with limited integration of religious and community-based networks in behavior change initiatives. Additionally, early marriage remains prevalent despite existing legal regulations, indicating a disconnect between formal policy and community practice. Fifth, the current collaborative model lacks a comprehensive system for monitoring and evaluation, limiting the ability to measure progress and apply adaptive improvements.

To address these challenges, a strategic framework was developed using SOAR (Strengths, Opportunities, Aspirations, Results) analysis, which emphasizes positive capabilities and forward-looking actions. Internal strengths include strong political commitment, competent human resources, financial support, full accreditation of primary healthcare facilities, open defecation-free (ODF) status, and supportive regional regulations on sanitation (STBM) and non-smoking areas (KTR). External opportunities include partnerships with private sector actors through CSR programs, engagement with NGOs and professional associations (IDI, IAKMI, HAKLI, IBI), and mobilization of community forums such as the Forum for Religious Harmony (FKUB) and the Healthy Bangka Regency Forum.

Aspirational goals that emerged from focus group discussions (FGDs) include improving the clarity and performance of convergence teams, ensuring that all members actively contribute to planned activities, setting measurable performance targets, expanding premarital health screening for all brides-to-be regardless of religion, enhancing environmental sanitation services, and addressing behavioral risk factors such as smoking and bathing in contaminated water sources. An important emphasis was placed on identifying and intervening with pre-stunted children before the condition progresses.

The integrated strategy was then translated into a series of intervention areas, including both sensitive and specific approaches. Sensitive interventions focus on improving access to clean water and sanitation, ensuring food security, expanding early childhood education, strengthening social protection, and promoting parental education and awareness. Specific interventions target reproductive and maternal health, such as health services for adolescent girls (rematri), brides-to-be (catin), pregnant women, mothers during childbirth, and children under five.

The full strategy incorporates a multi-dimensional, multi-actor approach that aligns stakeholder roles with measurable outcomes. Among the prioritized strategies are Expanding health education and promotion on stunting prevention; Establishing a dedicated monitoring and evaluation team for TPPS performance; Enhancing coordination and accountability mechanisms for convergence actors; Improving sanitation services, including waste management and Fecal Sludge Treatment Plants (IPLT); Promoting behavioral change campaigns on handwashing, non-smoking areas, and environmental hygiene; Increasing targeted interventions for pre-stunted children; Mobilizing CSR and NGO support for food assistance and supplementary feeding; Engaging FKUB and other community-based groups in premarital and maternal health initiatives; Ensuring consistent and equitable access to essential health services across the reproductive and child health continuum.

In conclusion, the collaborative governance model in Bangka Regency shows strong foundational elements but requires further refinement in implementation, coordination, and evaluation mechanisms. The SOAR-based strategy provides a practical roadmap for strengthening intersectoral synergy and accelerating stunting reduction in a sustainable and inclusive manner.

1. Initial Conditions

"Although we acknowledge the importance of cross-sector collaboration, the use of varying indicators such as SKI, SSGI, and e-PPGBM has led to inconsistencies, posing significant challenges during program evaluation." — (Informant 03, Head of Health Office)

2. Collaborative Process

"Although the mini-workshops successfully produced action plans, the implementation across agencies has been uneven. While certain departments demonstrate strong engagement, others show minimal participation, with some attending only once and disengaging thereafter." — (Informant 07, Bappeda official)

3. Facilitative Leadership

"We acknowledge that not all villages are within our reach. At times, local leadership attention is diverted by other competing priorities; nevertheless, we strive to deliver our efforts to the best of our capacity."
— (Informant 02, Village Midwife Coordinator)

4. Institutional Design

"Although the TPPS has been formally established, in practice, not all members fully understand or fulfill their respective roles. Furthermore, socialization and outreach activities have yet to engage religious and traditional community groups." — (Informant 05, NGO representative)

5. Monitoring and Evaluation Gap

"A comprehensive monitoring system is not yet in place. While program activities are being implemented, the outcomes are not clearly communicated to all stakeholders, and there is little evidence of their use for informing improvements in subsequent implementation cycles."
— (Informant 10, Academic from STISIPOL Pahlawan 12)

6. Aspirations and Future Strategy

"It is essential that all prospective brides, including those of non-Muslim backgrounds, receive standardized premarital health services. Early detection of conditions such as anemia or other pregnancy-related risks is critical to ensure timely intervention and prevent adverse maternal and child health outcomes."
— (Informant 09, Office of Religious Affairs)
"As representatives of the Forum for Religious Harmony (FKUB), we are committed to supporting public education initiatives and enhancing the role of religious leaders in raising community awareness about the importance of stunting prevention."
— (Informant 14, Forum for Religious Harmony)

Table 1. SOAR Matrix - Stunting Prevention Strategy

Strengths	Opportunities	Aspirations	Results-Oriented Strategies
Strong political commitment	CSR partnerships	Clearer convergence team roles	Stunting education and campaigns
Competent human resources	NGO collaboration	Active participation of all stakeholders	Monitoring TPPS performance
Accredited health facilities	Health professional associations (IDI, IAKMI, etc.)	Premarital health screening for all	Enhanced sanitation infrastructure
ODF (Open Defecation Free) status	Forum for Religious Harmony (FKUB)	Improved sanitation services	Targeted interventions for pre-stunted children
Regulations on Community-Based Total Sanitation (CBTS) and Smoke-Free Area (SFA)	Healthy Bangka Regency Forum	Behavioral change for stunting prevention	Equitable maternal-child health services

The SOAR matrix highlights key elements of the stunting prevention strategy in Bangka Regency. Internally, the initiative is underpinned by strong political commitment, competent human resources, accredited health facilities, and established local regulations on community-based sanitation (CBTS) and smoke-free areas (SFA). Externally, strategic opportunities emerge from partnerships with CSR networks, NGOs, professional health associations (e.g., IDI, IAKMI), and community forums such as FKUB and the Healthy Bangka Regency Forum.

Stakeholder aspirations center on enhancing the performance of convergence teams, expanding premarital health screening for all brides-to-be, improving sanitation services, and advancing behavior change in hygiene and nutrition practices. These aspirations inform a set of results-oriented strategies, encompassing intensified health promotion efforts, performance monitoring, improvements in environmental sanitation, targeted support for pre-stunted children, and equitable access to maternal and child health services. This structured framework facilitates the development of integrated and sustainable interventions tailored to the local context, reinforcing cross-sectoral synergy and long-term impact.

DISCUSSION

This study examined the implementation of collaborative governance in stunting mitigation in Bangka Regency using the Ansell and Gash framework, complemented by a SOAR (Strengths, Opportunities, Aspirations, Results) lens. The findings provide actionable

insights into how institutional design, leadership, stakeholder engagement, and monitoring systems influence public health outcomes within decentralized contexts.

Although the formal establishment of the Stunting Reduction Acceleration Team (TPPS) reflects strong political will, significant discrepancies in data systems—such as SKI, SSGI, and e-PPGBM—undermine integrated planning and evaluation. This echoes findings by Herawati et al., (2022) and Okunuga (2025), who argue that fragmented data architecture undermines district-level convergence and compromises coordination efforts across sectors. Without a unified data platform, convergence teams lack a common baseline for aligning strategies and tracking performance indicators, resulting in inefficient planning and inconsistent interventions.

While mini-workshops and strategic forums generated formal action plans, implementation remained uneven. Some stakeholders engaged actively, while others disengaged following initial participation. This gap between planning and execution mirrors the experiences documented in Palopo and Sleman where institutional participation and accountability varied across actor groups (Wirawati et al., 2025). It suggests that convergence forums must be coupled with clear role delineation, continuous engagement, and performance accountability to translate plans into sustained action.

The absence of a comprehensive monitoring and evaluation (M&E) system emerged as a critical bottleneck. Program outcomes were neither systematically communicated nor used to inform adaptive governance (Mohamed et al., 2023). Argue that integrated and real-time M&E systems are essential to foster accountability and enable course-correction (Mulyani et al., 2025). Similarly, Syafrawati et al., (2023) identified the absence of clear M&E as a limiting factor in sustaining stunting reduction in West Sumatra. For TPPS to be responsive and effective, developing standardized indicators and feedback loops is imperative.

The SOAR analysis identified strong internal assets, including political commitment, accredited health infrastructure, and supportive regulations on sanitation (CBTS) and smoke-free areas (SFA). External opportunities include CSR partnerships, collaboration with NGOs and professional health associations (IDI, IAKMI), and community forums such as FKUB and the Healthy Bangka Regency Forum. These findings align with UNICEF's emphasis on multisectoral resource mobilization and localized action. Translating these strengths into impactful strategies requires operationalizing CSR-supported nutrition programs, standardizing premarital health screenings, and implementing behavior change campaigns mediated by religious and community leaders (Rahayu et al., 2024; Sukanti et al., 2021).

Stakeholder aspirations identified through FGDs reflect a desire for improved clarity in convergence roles, universal premarital health services, enhanced sanitation infrastructure, behavioral interventions, and robust monitoring of pre-stunted children. These aspirations align with national priorities in *Stranas Stunting 2021–2024*, which emphasize inclusive governance and intersectoral coordination (BKKBN, 2021). Implementing these aspirations requires institutional mechanisms that standardize service delivery (e.g., premarital screening protocols) and align stakeholder incentives with measurable health outcomes.

One of the most critical insights is the need to integrate sensitive interventions (e.g., WASH, food security, social protection, parental education) with specific health services (e.g., maternal, adolescent, and child health services). This integrated approach has been echoed in successful convergence models in Bekasi and Palopo where cross-sector coordination facilitated comprehensive package delivery to families at risk (Lautt et al., 2024). The interplay between structural governance, behavioral strategies, and service delivery underscores the importance of adaptive planning and interdepartmental synchronization.

Sustainability of collaborative governance rests on continuous stakeholder engagement, performance monitoring, and institutional learning. As noted in *Emphasized by UNICEF (2023)*, leadership structures that incentivize performance, maintain stakeholder commitment, and build adaptive capacity are crucial for long-term success. In Bangka Regency, institutionalization of convergence mechanisms, capacity building for the TPPS, and integrating M&E within local governance processes emerge as priority areas to ensure sustainability.

Theoretically, this study affirms Ansell & Gash's collaborative governance model and demonstrates its applicability in district-level public health interventions in LMIC contexts. The addition of SOAR analysis enriches the model by connecting institutional realities to stakeholder aspirations and measurable results, offering a structured path from vision to action. Practically, the findings suggest key policy imperatives: Develop a unified data platform to harmonize SKI, SSGI, and e-PPGBM for shared performance tracking; Institutionalize clear role frameworks and continuous capacity building for TPPS members; Expand outreach strategies to include faith-based and traditional community leaders; Establish an integrated M&E system with adaptive feedback loops; Align CSR and NGO engagement with local health goals through formal convergence modalities.

CONCLUSIONS

This study demonstrates that the collaborative governance model implemented in Bangka Regency provides a strong foundation for stunting prevention by engaging multi-sectoral stakeholders within a formal institutional structure. Political commitment, regulatory frameworks, and available health resources constitute core strengths; however, challenges persist in coordination, role consistency, and the integration of monitoring and evaluation systems. The application of the SOAR framework has revealed both the potential and the limitations of current efforts, highlighting the importance of aligning stakeholder aspirations with measurable outcomes. Overcoming these challenges calls for a more coherent operational approach that prioritizes inclusive participation and performance accountability across all involved actors

To enhance the effectiveness of stunting reduction initiatives, local governments should strengthen the capacity of convergence teams through ongoing training and clear role delineation. Integrated health education programs especially those targeting brides-to-be and mothers should be institutionalized at community and religious levels. A standardized data system must be adopted to harmonize planning and evaluation efforts across sectors. Moreover, the establishment of an independent monitoring and feedback mechanism is essential to ensure transparency, enable adaptive strategies, and improve intersectoral coordination. Finally, leveraging external partnerships with private, civil society, and faith-based organizations can amplify both resource mobilization and community engagement. Together, these strategies can reinforce the sustainability and equity of stunting prevention efforts in decentralized governance settings

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