



Training Needs Assessment on Management of Stunting Reduction Program in Indonesia

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Abstract

Background: Stunting has become a priority in Indonesia's development agenda that national and sub-national teams are established with multi-sectoral involvement to tackle the problem. However, coordination hurdles, particularly at the mid-level, underscore the need for understanding frontline workers' capacity, prompting a study to conduct a training needs assessment (TNA) to bolster local governments' commitment to stunting and nutrition promotion.

Methods: The TNA was conducted from July to November 2021 employing online quantitative survey and series of focus group discussions (FGDs) among central and local government officers. Quantitative data were about knowledge on stunting, attitudes toward program management, performance assessment, and capacity building needs. The FGDs focused stunting reduction program management and implementation capacity.

Results: The present study highlighted the personal and organizational aspects of the management of stunting reduction program in Indonesia. The findings from both aspects were used to understand the needs and gaps revealed so that a relevant and appropriate training/capacity building program can be proposed.

Conclusions: Capacity building is required to enhance local governments' commitment to stunting and nutrition promotion programs, particularly focusing on middle management to improve communication and foster multi-sectoral collaboration. Such efforts necessitate a team-based training program to develop skills in coordination and interprofessional collaboration.

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INTRODUCTION

Stunting has received the highest attention in the national development agenda following the issuance of the Presidential Regulations number 72 in 2021 with the Head of National Family Planning Coordinating Board appointed as the executing coordinator of the Stunting Reduction Program in Indonesia (Government of Indonesia, 2021). The program in the frontline highly involved Posyandu (Pos Pelayanan Terpadu - Integrated Health Post) with which during Covid-19 pandemic only 18% functioned (Ministry of Health Republic of Indonesia, 2020). With the national target of stunting prevalence set at 14% by 2024 (Government of Indonesia, 2021) and the strike of Covid-19 pandemic, there are still many things to be done.

Therefore, the formation of national team (Tim Percepatan Penurunan Stunting - TPPS) to lead and coordinate the management of stunting alleviation program was established in the National Action Plan of Stunting Reduction (Rencana Aksi Nasional Percepatan Penurunan Angka Stunting 2021-2024 - RAN PASTI) issued by the Head of National Family Planning Coordinating Board (Badan Kependudukan dan Keluarga Berencana Nasional/BKKBN) number 12 in 2021. RAN PASTI was established to govern the coordination, synchronization and integration of national and sub-national government agencies and other related stakeholders in the decentralized implementation of the Stunting Reduction Program. It states the priority activities on improving data quality by auditing stunting cases, provision of assistance for key targets, as well as program monitoring and evaluation for its accountability. The chief executive of the provincial TPPS is the Vice Governor and the chief executive of the local TPPS at the district level is the Vice of District Head (National Family Planning Coordinating Board (BKKBN), 2021).

As stunting reduction program involves not only nutrition-specific but also nutrition-sensitive interventions, it requires multi-sector and multi-party involvements. To implement such a complex program, leadership (Nisbett et al., 2015) and commitment (Baker et al., 2019) are essential. Strong leadership has been

highlighted as a common element of success within countries that have made rapid progress in tackling undernutrition problems (Bach et al., 2020; Nisbett et al., 2015).

One essential driver of commitment is the functioning nutrition actor network (NAN) consisting of individuals and organizations who share a common interest in improving nutrition and who act collectively to do so (Baker et al., 2019). However, to work collaboratively, studies found that program coordination is often challenging (Karyadi et al., 2022; Sugihantono et al., 2020). Such a challenge often lies in the disagreements over interventions and strategies that occur primarily among mid-level actors and are primarily the product of structural factors such as organizational mandates, interests, and differences in professional perspectives (Baker et al., 2019; Pelletier et al., 2011). In addition, capacity continues to be a critical limiting factor for the scale-up, in both coverage and impact, and sustainability of programs. This capacity requires training on program implementation including monitoring, evaluation, and reporting of capacity development outcomes (Fanzo et al., 2015), as well as multisectoral collaboration (Sugihantono et al., 2020).

We lack an understanding of the relationship between the capacity of the frontline workers or program managers with their organizations and the policy environments where top commitment on stunting reduction exists. Therefore, the objective of this study is to understand the results of a training needs assessment (TNA) on the commitment of local government agencies in Indonesia for mainstreaming stunting and nutrition promotion.

METHODS

The TNA was carried out through collection of data using quantitative and qualitative approaches in parallel, conducted in July-November 2021. The quantitative study was conducted using a cross-sectional survey design, while the qualitative study using phenomenological approach.

The quantitative data was obtained through a pre-tested, expert-reviewed, and validated structured questionnaire (48 questions with true/false, yes/no, and 1-6 Likert scale) in

Bahasa Indonesia and collected online using LimeSurvey. The questionnaire consisted of 1) knowledge related to stunting, 2) attitude on the stunting reduction program management, 3) attitude on the performance assessment and challenges in stunting reduction program management, and 4) attitude on capacity building needs assessment. The survey was conducted by distributing the questionnaire link to the local government staff through various channels and fora. The quantitative data were analyzed using Microsoft Excel 2019 and IBM SPSS version 29, and presented in descriptive statistics with proportion (n, %) for categorical data and median for continuous data.

The qualitative data was obtained through focus group discussions (FGDs) comprising 4 Central Government groups and 5 Local Government groups coming from health, education, religious affairs, national/sub-national planning bodies, and other relevant sectors. The FGD was designed to understand the management of stunting/nutrition programs, the roles and capacity of the program implementers at sub-national level. The informants invited were purposively selected based on variation in sectoral involvement in the stunting/nutrition program planning and management to ensure well-balanced views and insights from various types of organizations and sectors at central and local levels. The final list of variation of the FGD participants is presented in the Results section (Table 1). The FGDs were conducted separately between the informants from the central level and the local level to achieve more specific and coherent

information about the topics being discussed. Two research team members who are also the authors of this paper served as the moderator and the assistant moderator assisted with a note-taker. Meeting series of the two members were conducted to align and consolidate the findings emerging from the FGDs. The topics covered in the FGD were 1) enabling factors and barriers in achieving national target for stunting reduction, 2) roles and responsibilities of various sectors in stunting reduction program, 3) key factors in stunting reduction program factors at district and province level, 4) core competencies and skills required for the government actors, both in central and local levels, 5) essential activities to achieve the national target for stunting reduction, and 6) the needs for capacity building.

Due to the Covid-19 pandemic, all FGDs were conducted virtually using a video conference platform and recorded with the informants' consent. Interviews were performed using Bahasa Indonesia, then recorded and transcribed. All transcripts and notes were thematically coded by a trained research assistant.

Figure 1 shows the scope of the TNA addressed in the survey and FGD which is mapped to key topics and objectives of the paper. Data display is arranged based on topics studied in the quantitative survey and themes emerged from the FGDs following the framework shown in Figure 1.

This study was approved by the Ethics Committee of Faculty of Medicine, Universitas Indonesia (Ethical Approval No. KET-422/UN2.F1/ETIK/PPM.00.02/2022).

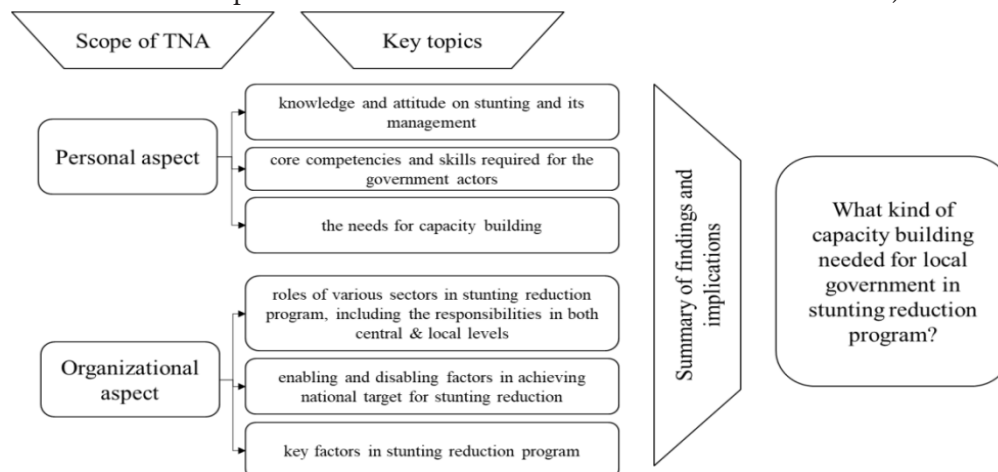


Figure 1. Scope of Training Needs Assessment (TNA)

RESULTS AND DISCUSSIONS

Personal Aspect

Responses of 104 respondents from the quantitative survey and 24 participants from the qualitative FGD were analyzed in this study. The survey sufficiently covered respondents having structural position, functional job, and academicians, also those in the government

and non-government agencies and various key sectors in the stunting reduction program such as education, health, family planning, which shared similar characteristics with the FGD participants. Table 1 shows the details of respondents' characteristics involved in both methods of data collection.

Table 1. Respondents' Characteristics

Characteristics	Quantitative Survey (n=104) n (%)	FGD participants (n=24) n (%)
Position		
Director General/Deputy (Echelon I)	0	2 (8.3)
Director/Deputy Assistant (Echelon II)	0	1 (4.2)
Coordinator/Head of Division (Echelon III)	0	2 (8.3)
Head of Agency (<i>Kepala Dinas/Badan</i>)	3 (2.9)	3 (12.5)
Head of Department (<i>Kepala Bidang/Bagian</i>)	4 (3.8)	4 (16.7)
Head of Sub-department (<i>Kepala Subbidang/ Subbagian/ Seksi</i>)	14 (13.5)	4 (16.7)
Functional staff	30 (28.8)	3 (12.5)
Academicians/Lecturers	28 (26.9)	1 (4.2)
Others	25 (24.0)	4 (16.7)
Organization level		
Government agencies		
Central	7 (6.7)	7 (29.2)
Local	59 (56.7)	12 (50.0)
Non-government institutions		
College/University	28 (26.9)	3 (12.5)
Others	10 (9.6)	2 (8.3)
Organization type		
Government agency	69 (66.3)	18 (75)
College/University	28 (26.9)	3 (12.5)
UN development partner	0	1 (4.2)
Professional organization	0	1 (4.2)
Non-profit organization	0	1 (4.2)
Others	7 (6.7)	0
Sectors		
Education	33 (31.7)	1 (4.2)
Family Planning	15 (14.4)	2 (8.3)
Health	28 (26.9)	10 (41.7)
Nutrition	6 (5.8)	4 (16.7)
Religious Affair	4 (3.8)	1 (4.2)
Food Security	0	2 (8.3)
Development Planning	0	1 (4.2)
Community and Rural Development	0	2 (8.3)
Others	18 (17.3)	1 (4.2)

Respondents in the quantitative survey demonstrated strong knowledge (median, min-max: 9, 5-10, with 61.2% scoring \geq median), particularly in understanding stunting definitions and causes, though they showed less familiarity with its signs and impacts. FGDs concentrated on enhancing stunting knowledge through situational analysis mastery, community knowledge mapping, and standardized program implementation. A capacity gap was found among middle structural officials, lacking effective communication skills with leaders.

The survey also reveals that most respondents (93%) received directions from their respective head of the agency for managing stunting reduction programs. The majority (95%) also agreed that a specific appointment is needed to ensure coordination. About 50% allocated a budget for stunting, but one-fourth believed it was not necessarily due to budget limitations and different prioritization in their respective agencies.

Local government actors require a range of competencies, including technical and management skills, understanding agency roles, and effective communication. FGDs emphasized the critical role of leadership, encompassing commitment, vision, active listening, and delegation, which should be supported by a robust legal framework and institutional structure. Informants stressed the

significance of socio-cultural understanding, demographics, local context, and laws in delivering tailored programs to village beneficiaries.

The survey found that 43% of the participants had attended a specific training course on stunting. Among them, they received training from Ministries (50%), NGO (34%), and WHO Training Center (29%). The rest of respondents who had not attended any stunting training courses were because the stunting program was not their focus in their respective office/agency. However, the demand for stunting training was high as 97% of the respondents were interested in enrolling in a capacity building related to stunting. Figure 2 reveals a slight technical training gap in stunting, but a wide gap in managerial aspects such as effective advocacy, multi-stakeholder coordination, and program planning management.

FGD participants emphasized the necessity of capacity building for local governments to bolster support for stunting programs. They proposed training topics covering basic nutrition and stunting knowledge, leadership, program management including action plan development, data management, advocacy, communication, and health promotion. A combination of active learning incorporating more discussion and practical sessions assisted by training facilitators was recommended.

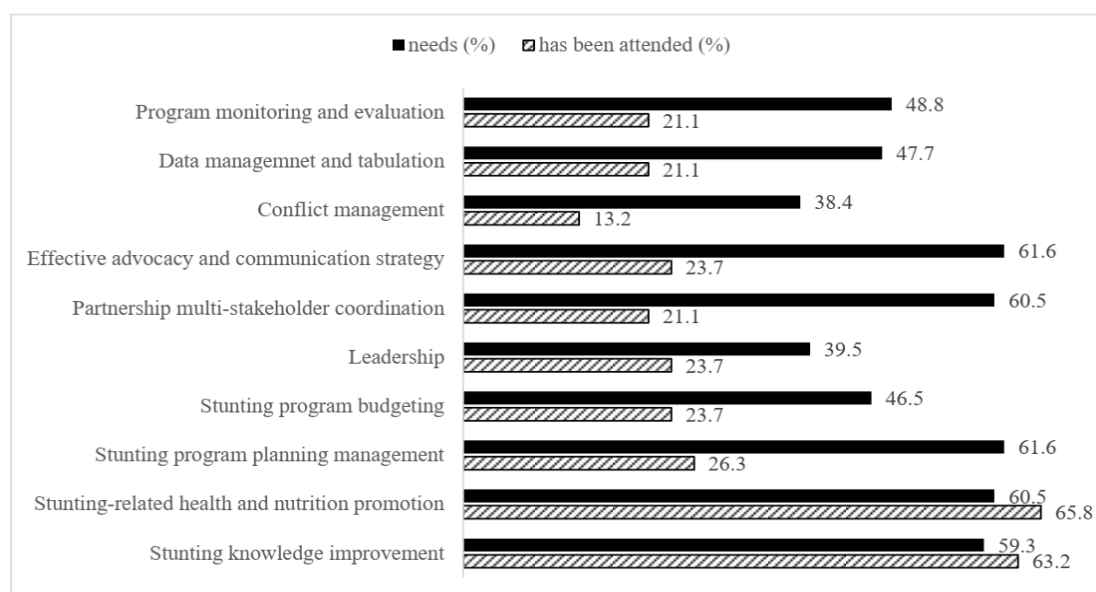


Figure 2. Training Topics Needed and Attended on Stunting-related Matters

This study stressed the importance of equipping local government officials with comprehensive knowledge of both technical and managerial aspects of the stunting reduction program. It highlighted the necessity of technical and management skills, particularly in understanding the roles and responsibilities of each agency and sector involved. These skills included coordination with respective agencies, collaboration with health workers, utilizing regulations for planning, budgeting, and evaluation, identifying funding resources, and employing analytical and innovative thinking for intervention programs. The head of the planning division/sub-division (Kepala Sub-bagian/Kasubag Perencanaan) played a crucial role in developing action plans and integrating them into detailed work plans with stunting indicators. There was a significant knowledge gap in managerial aspects, confirmed by discussions in FGDs with officials from central government agencies. Knowledge is vital for understanding roles, upholding common goals, and providing client-centered services in addressing stunting. The roles and responsibilities of government agencies should be formalized to ensure commitment and program achievement. Generating political commitment for nutrition goes beyond mere attention to the issue and its inclusion on the government agenda, as highlighted in the literature (Baker et al., 2019; Ministry of National Development Planning Republic of Indonesia, 2018; Sulistyaningsih et al., 2023; Susilaningrum et al., 2020; The National Team for the Acceleration of Poverty Reduction, 2018).

Organizational Aspect

Most respondents indicated that local government held greater responsibility for managing the stunting reduction program compared to the central government. They also confirmed coordination among local government agencies, institutions, and community organizations. Figure 3 illustrates respondents' opinions on the roles and responsibilities of various departments/agencies/institutions in the local government's

stunting reduction program. During the FGDs, sub-themes widely discussed included the roles of the central and local government, specific sector/agency roles, and involvement of various sectors and stakeholders. The majority of FGD participants were government employees or had experience working with government agencies in health and nutrition. At the central level, at least five sectors were involved as leading sectors in the stunting agenda, mainly Ministry of State Secretariat, Ministry of National Development Planning/National Development Planning Agency (Bappenas), Ministry of Health (MoH), Ministry of Home Affairs (MoHA), and Ministry of Villages, Development of Disadvantaged Regions, and Transmigration (MoV). These agencies were part of the institutional framework for the stunting reduction program.

Since the early 2000s, Indonesia has embraced decentralization, assigning specific roles to local governments based on their authority levels: provincial, district, and village. Despite this, the Ministry of Home Affairs (MoHA) holds considerable power, influencing local governments and even having the authority to discharge local leaders. At the local level, the Local Development Planning Agency (Bappeda) is tasked with coordinating all agencies, centralizing authority for effective implementation.

Lessons learned from focus group discussions (FGDs) highlighted enabling and disabling factors in achieving stunting reduction targets. National coordination for stunting reduction, led by BKKBN in 2021, faced concerns due to changes in central government coordination. Similarly, concerns arose at the sub-national level, where family planning sectors were intertwined with other sectors. Regular coordination meetings were seen as crucial for achieving stunting targets. However, the effectiveness of venues like "Rembuk Stunting" (rembuk in Bahasa Indonesia means to discuss) was questioned. Challenges ranged from program planning to data management, necessitating Sub-national House of Representatives support and synchronized data management.

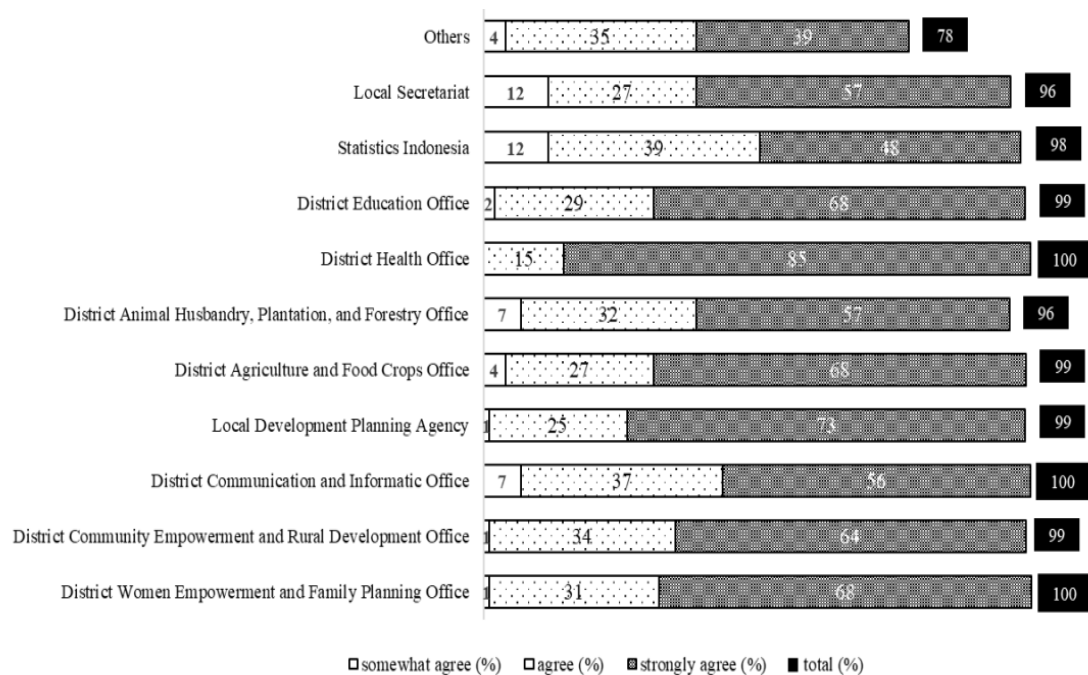


Figure 3. Perceived Multi-sectoral Roles and Responsibilities at Local Level

At the local level, turnover in personnel raised doubts about program implementation. Multisectoral intervention programs lacked integration at grassroots levels, hindering their effectiveness. Moreover, discrepancies in training materials for different community workers, i.e. community workers from health sector (e.g., Posyandu cadres), family planning sector (e.g., PKK/Empowerment of Family Welfare, PLKB/Family Planning Field Officer) and village development sector (e.g., Human Development Worker), posed implementation challenges.

Most respondents (92%) highlighted the importance of commitment in program management for achieving stunting reduction targets, which was closely related to multi-sectoral committees and key agency appointments. Most of the FGD informants representing local governments stated that the leaders (i.e., Regent/Mayor) were committed to being involved in a stunting reduction program. The commitments of these local leaders were then translated into various forms, such as public statement during routine meeting with all sectors, holding a ceremonial event involving multi sectoral stakeholders to give their signatures as a commitment proof, and further, making stunting as one of the priority agendas, creating a regulation (i.e., Peraturan

Daerah/Peraturan Gubernur/Peraturan Bupati) as the legal framework for all stunting-related activities, including for the specific team established to work together for the stunting reduction program. Bappeda was identified as the key agency for coordinating planning and budgeting. For instance, a local food program included in the regulation and the local nutrition action plan by Bappeda had result in the decreasing number of undernutrition in West Sumbawa (Nida et al., 2020). This shows that commitment is essential to stimulate concrete actions.

The majority agreed that the monitoring and evaluation system for all intervention programs human an upgrade, both at the central and local level, along with capacity building for the human resources so they would be able to interpret the result correctly on the magnitude of the problem, the progress and program achievement. The effort to perform monitoring and evaluation among the local government was carried out through regular meetings. These meetings aimed to describe the progress, obstacles, and generally evaluate the implementation of the program in the district and province. One of the central government informants claimed that the local government had not been able to manage and utilize well despite the budget being available and

earmarked for stunting programs.

The key factors identified in the stunting reduction program from an organizational perspective in the study were leader commitment, mindset change, legal framework for monitoring and evaluation, regular coordination, and resource and funding utilization across different levels. Leaders need exposure to population health importance, local regulations, and performance indicators to prioritize health as a local issue and translate it into outcome-oriented planning and budgeting, rather than just focusing on budget realization (Seaton et al., 2018). Multisectoral approaches are crucial, influenced by historical roots and current political, financial, and institutional landscapes (Michaud-Létourneau & Pelletier, 2017). Organizational development, capacity building, and formative evaluation methods are vital for collaborative intersectoral approaches to address nutrition and public health problems, as well as shifting the perspective of health promotion to beyond health sector (De Jong et al., 2023). Governance at all levels is critical for the success of national nutrition plans, as seen in Ethiopia (Bach et al., 2020; Kennedy et al., 2015). In Indonesia, renewed commitments are crucial for political support in mainstreaming stunting and nutrition promotion (Government of Indonesia, 2021; World Bank, 2018).

The study identified hindrances in the stunting reduction program implementation, including challenging coordination, unequal organizational capacity, staff competence among implementing agencies, and lack of standardized/synchronized data management. Coordination failures in nutrition programs at scale are well-documented, involving coordination within and across sectors and administrative levels (Michaud-Létourneau & Pelletier, 2017). In Indonesia, coordination is facilitated through meetings like "Rembuk Stunting" at national, sub-national, and village levels, serving as channels to gather stakeholders, declare commitments, and establish task forces (Ministry of National Development Planning Republic of Indonesia, 2018; The National Team for the Acceleration of Poverty Reduction, 2018; World Bank, 2018). Addressing gaps in organizational capacity

and staff competence is crucial, as seen in initiatives in Maharashtra and Odisha focusing on capacity building at state and ground levels (Kohli et al., 2017; Nisbett & Barnett, 2017). The Stories of Change initiative emphasizes key prerequisites like commitment, coherence, accountability, leadership, and finance to fuel progress in high-burden countries (Gillespie et al., 2017). Challenges in nutrition program management in Indonesia span governance, resources, and implementation capacity, requiring improvements in service delivery, regulations, spending efficiency, and personnel coordination (World Bank, 2018).

The insights from the present study shed light on the complexities of delivering stunting programs. These findings align with a Health Sector Review by the Ministry of National Development Planning/Bappenas RI, providing background for the 2020-2024 National Mid-term Development Plan. The report outlines policy options to address weaknesses in the nutrition development agenda, including 1) advocacy for decision makers; 2) capacity building for technical human resources; 3) capacity building for personnel at the sub-national level to use data and information for planning, managing, and monitoring the program; 4) campaign, advocacy, and behavior change communication for the society; and 5) mapping of existing policies and resources to identify support from the multisectoral agencies (Ministry of National Development Planning Republic of Indonesia, 2019). Sugihantono et al. (Sugihantono et al., 2020) emphasize multisectoral collaboration for food and nutrition action plans in Central Java, highlighting coordination and communication as key factors. Interprofessional collaboration, crucial for consistent care, requires understanding of roles and professional identities (Bainbridge et al., 2010; Bridges et al., 2011). Training programs should facilitate this understanding and provide opportunities for education and practice across disciplines (Bainbridge et al., 2010). Effective collaboration in health promotion programs relies on understanding member characteristics, organizational commitment, clear roles, and trusted communication (De Jong et al., 2023;

Seaton et al., 2018).

CONCLUSION

The recent training needs assessment found that local government agencies, particularly at the district level, are crucial for implementing the stunting reduction program. These agencies operate in coordinated teams under the local development planning agency, guided by appointment letters for effective monitoring. While local officials generally grasp basic stunting information, they lack managerial skills for program implementation, highlighting a capacity gap. This deficiency hinders their ability to advocate for necessary resources and activities. Additionally, a top-down convergence policy creates confusion in multi-sectoral coordination, emphasizing the need for capacity building. Middle management officials are targeted for training to enhance communication and collaboration, aiming for effective nutrition interventions at the local level. Such capacity building should adopt a team-based approach to develop coordination and interprofessional collaboration skills.

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