

Community-Based Nutrition Intervention by PT Borneo Indo Bara: A CSR Case Study

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Abstract

Stunting continues to be a major public health concern in Indonesia, especially in rural and impoverished areas. According to the 2024 Indonesian Nutritional Status Survey, the frequency of stunting has dropped to 22.9% in South Kalimantan and 19.8% nationwide. To address this persistent issue, PT Borneo Indo Bara (PT BIB) started the CERIA (Cegah Stunting Raih Impian Anak) Cooking Class as a component of its CSR initiative to promote nutritional enhancement in the community. In this study, the CERIA Cooking Class in Teluk Kepayang District, Tanah Bumbu Regency, South Kalimantan, is implemented and its effects on the community are examined. Targeting five ring-1 areas that encircle the working region of PT BIB, the initiative involves 30 participants per district, including local nutritionists, PKK members, and community health workers. The program emphasizes maternal and child nutrition using locally sourced ingredients, in keeping with the national B2SA (Diverse, Nutritious, Balanced, and Safe) food movement. It includes culinary demonstrations and nutrition education created in partnership with Chef Agus Sasirangan and public health experts. In-depth interviews with local government representatives, program organizers, and community members who participated were used to collect qualitative data. The initiative successfully encouraged the use of local food resources, increased knowledge of stunting prevention, and developed multi-sectoral collaboration, according to the results. The study emphasizes how community-driven and culturally appropriate CSR programs can support national nutrition goals.

Keywords: CERIA Cooking Class; Community Nutrition; CSR; Local Food; Stunting Prevention

Introduction

In Indonesia, stunting, a chronic disorder of stunted growth and development in children brought on by inadequate psychosocial stimulation, recurrent illnesses, and poor nutrition, continues to be a major public health concern (Bhutta et al., 2013; Ruel et al., 2013). Stunting prevalence is still higher than the WHO's threshold of public concern (20%) (World Health Organization, 1995), despite significant efforts by the government and other stakeholders. The overall frequency of stunting has dropped to 19.8%, according to the 2024 Indonesian Nutritional Status Survey (SSGI), and South Kalimantan has also improved, with a rate of 22.9% lower than in prior years (Kementerian Kesehatan Republik Indonesia, 2024). The declining

trend, while encouraging, underscores the continued need for focused and innovative interventions, particularly in high-risk and resource-constrained communities where stunting remains a persistent challenge (Habtu et al., 2023; Galasso et al., 2016).

The prevalence pattern of stunting from 2021 to 2024 shows gradual improvement at the national and provincial levels. Nationally, stunting rates declined from 24.4% in 2021 to 19.8% in 2024. South Kalimantan Province experienced a similar decrease, from 30% in 2021 to 22.9% in 2024. In Tanah Bumbu Regency, where the CERIA (Cegah Stunting Raih Impian Anak) Cooking Class program was implemented, the trend fluctuated—starting at 16.2% in 2022, rising to 25% in 2023, and then dropping to 21% in 2024 (Kementerian Kesehatan Republik Indonesia, 2021; 2022; 2023; 2024).

A comprehensive and cooperative strategy is necessary due to the multidimensional nature of stunting, which includes food, cleanliness, parenting styles, and socioeconomic factors (Saleh et al., 2021; Yousafzai et al., 2014). A promising approach that makes use of private sector resources and collaborations is community-based intervention backed by corporate social responsibility (CSR) initiatives. As stated by Irwan et al. (2021), Ekaningrum et al. (2024), and Afandi et al. (2024), in order to improve maternal and child health, particularly in underprivileged mining regions, CSR-driven efforts are increasingly being acknowledged as a supplement to governmental programs (Astuti et al., 2025i; Hardiansyah et al., 2025). The CERIA (Cegah Stunting Raih Impian Anak) Cooking Class initiative was started by PT Borneo Indo Bara (PT BIB), a mining company based in South Kalimantan, as a strategic CSR approach to combat stunting in the communities around it (Aditia & Wisesa, 2025).

Although various interventions have been utilized to prevent stunting—such as food supplementation, micronutrient fortification, and health education campaigns—community-based cooking classes offer a more practical and culturally sensitive approach. They not only increase nutrition knowledge but also enhance food preparation skills using locally available ingredients, which makes the intervention more sustainable and accepted by local communities (Vidgen & Gallegos, 2014; Setyoadi et al., 2023). This strategy empowers caregivers, especially mothers, to actively apply nutritious practices in their daily lives, thereby influencing household food consumption patterns. Supporting this, a quasi-experimental study by Rismayani and Maulani (2024) in Kandang Mas Village found that cooking classes involving health cadres and mothers significantly improved their skills and confidence in preparing

complementary foods (MP-ASI), resulting in stronger application of healthy menus at home to reduce stunting risks.

The CERIA initiative is an example of a multisectoral partnership between municipal governments, the commercial sector, culinary experts, and health professionals. Using locally sourced food components, the project aims to develop a useful cookbook for maternal and child nutrition that covers meals for expectant moms, nursing mothers, and infants and toddlers who require supplemental feeding (Kusumaningtyas et al., 2024). The program combines cooking demonstrations and nutrition instruction under the direction of national culinary icon Chef Agus Sasirangan, with assistance from public health specialists. With 30 participants per location, including Family Welfare Movement (PKK) members, local health workers, and cadres of community health posts (Posyandu), the CERIA Cooking Class is being implemented in five ring-1 districts surrounding PT BIB's operational area. It is intended to support the national B2SA (Diverse, Nutritious, Balanced, and Safe) food movement.

The objective of this paper is to examine the CERIA Cooking Class's implementation process, community involvement, and perceived results. Teluk Kepayang District was one of the initiative's initial trial sites. Through the examination of qualitative data gathered from field observations and stakeholder interviews, the study clarifies how locally based, CSR-based interventions can raise community awareness, improve food literacy, and advance the larger objective of reducing stunting in Indonesia.

Methods

The CERIA Cooking Class is a community-based nutritional education program conducted as part of PT BIB's CSR efforts. This study employed a qualitative descriptive approach to examine the program's implementation process and perceived community impact. Data were gathered through semi-structured interviews, direct observation, and document analysis (Humayrah et al., 2025; Afandi et al., 2023).

Three key informants were interviewed in-depth to collect primary data. The first informant was the sub-district head (Camat) of Teluk Kepayang, who played a pivotal role in facilitating local support and ensuring government alignment with the CERIA program. The second was the health program coordinator from the CSR division of PT BIB, responsible for designing and managing the implementation of nutrition-related activities. The third informant was a culinary expert and public figure, known nationally as a finalist of MasterChef Indonesia,

who developed the cooking modules and nutrition-sensitive recipes for the CERIA Cooking Class. All informants were chosen based on their direct involvement in the planning, execution, and evaluation of the program, ensuring the relevance and reliability of the information obtained.

The interviews were conducted in person in Teluk Kepayang District, Tanah Bumbu Regency, during April 2025. Each session lasted between 15 and 30 minutes and followed a semi-structured format to allow both guided and open-ended responses. Key questions included: "What were the main objectives of the CERIA Cooking Class program?", "How were local ingredients and nutritional themes selected for the training?", and "What changes have been observed in community behavior or awareness since the program began?" All interviews were audio-recorded with the participants' consent and supported by field notes for subsequent thematic analysis.

Along with the interviews, field observations were made during the cooking class activities to record the materials utilized, the teaching strategies, and the participation of the participants. Community health workers, PKK members, and local nutrition officers made up the 150 participants who attended the sessions spread throughout five districts in the company's operational area. Pregnant women, nursing mothers, babies, and toddlers could all benefit from the nutrient-dense, locally sourced recipes in the program's recipe library.

In addition to pertinent academic literature on CSR, stunting prevention, and local food-based interventions (Bhutta et al., 2020; Parasila et al., 2024; Setyoadi et al., 2023), secondary data were collected from government reports, including the 2024 Indonesian Nutritional Status Survey (Kementerian Kesehatan Republik Indonesia, 2024). To find important themes and new trends pertaining to community involvement, program implementation, and nutritional results, all data were subjected to a thematic analysis.

Results and Discussions

PT BIB launched the CERIA Cooking Class as a CSR initiative to promote community-based nutritional improvement and stunting prevention. The program was implemented across five ring-1 districts—Teluk Kepayang, Angsana, Kuranji, Satui, and Sungai Loban in Tanah Bumbu Regency, South Kalimantan. Using a participatory approach, the initiative emphasized nutrition education through practical cooking sessions tailored to the dietary needs of pregnant women, lactating mothers, and toddlers, in alignment with the B2SA movement.

The thematic analysis of interviews and field observations revealed three major findings. First, there was a noticeable improvement in participants' awareness of child nutrition and the use of locally available food resources. Many PKK members and Posyandu cadres reported they had never previously considered using moringa leaves, watermelon rind, or freshwater fish like patin as nutritious ingredients for children's meals. Second, the collaborative design of the program—with involvement from local government, CSR personnel, public health workers, and a national culinary expert—contributed to strong community engagement and enthusiasm. Participants appreciated the inclusion of Chef Agus Sasirangan, who not only conducted demonstrations but also co-developed a recipe book that was easy to follow and culturally appropriate. Third, the program fostered a sense of ownership among participants, as they expressed intent to replicate the meals at home and share the practices with other families.

These findings suggest that the CERIA Cooking Class successfully facilitated food literacy in the community, not only increasing knowledge but also improving skills and motivation to prepare affordable, nutritious meals using familiar ingredients. As one Posyandu cadre noted during the session, "Sekarang kami tahu bahwa makanan sehat itu bisa kita buat dari bahan yang murah, yang ada di sekitar kita." This shift in perception reflects the kind of behavioral change needed to sustain long-term improvements in child nutrition and stunting prevention (Ekaningrum et al., 2024; Syuhana et al., 2024).

Teluk Kepayang district, which served as the prototype site, was where the program formally started. Around 150 people participated in five districts, with 30 delegates from each area. The participants were mostly PKK members, village midwives, community health volunteers (kader Posyandu), and nutrition officers from nearby health centers. With the goal of strengthening local capacity in dietary practices through experiential learning, this wide inclusion reflects a multisectoral approach (Setyoadi et al., 2023; Parasila et al., 2024).

Integrating local food systems with culinary knowledge was one of the program's unique features. Prominent chef and public personality Agus Sasirangan was asked to lead the lessons and co-create a cookbook with dishes tailored for expectant mothers, nursing moms, babies (MP-ASI), and toddlers. Working with nutritionists, each recipe was developed to make sure that the macro- and micronutrient content complied with dietary guidelines for the age ranges it was intended for (Bhutta et al., 2013; Ruel et al., 2013).

For example, because of their high iron content, urap daun kalakai (fern salad) and pepes ikan patin (steamed catfish in banana leaves) were created for postpartum nourishment. Innovative uses of local produce were showcased for young children, such "nuggets" made from chicken and sweet potatoes and porridge prepared from the white portion of watermelon rind, which is high in fiber and frequently thrown away.

In addition to teaching cooking, the program focused on nutritional diversity, health education, and the value of using locally sourced resources to lessen reliance on imported or processed foods. This is in line with the B2SA movement in Indonesia, which promotes the consumption of safe, diversified, balanced, and nutritious foods (Kusumaningtyas et al., 2024). Through this program, community members discovered that healthy meals don't have to be costly and that local protein sources (like freshwater fish, quail, and local poultry) and vegetables (like moringa, cassava leaves, and kalakai) can effectively support the growth and development of children (Syuhana et al., 2024; Lisawanto et al., 2025).

According on preliminary observations, participants and local stakeholders responded favorably. Afandi et al. (2024) found that the district administration said the initiative demonstrated a solid public-private partnership and supplemented existing stunting prevention efforts. From 2021 to 2024, the prevalence of stunting in the region already showed a declining tendency, according to health officers and district authorities. This change was ascribed to persistent interventions at several levels. The CERIA program shows promise as a replicable, community-engaged intervention, despite the difficulty in establishing a causal link between it and the overall prevalence drop (according to the 2024 Nutrition Status Survey, 22.9% in South Kalimantan (Kementerian Kesehatan Republik Indonesia, 2024; Astuti et al., 2025; Hardiansyah et al., 2025).

Furthermore, the CERIA Cooking Class demonstrates how corporate social responsibility may be more than just charitable; it can be a calculated way for business actors to support regional development objectives (Irwan et al., 2021; Ekaningrum et al., 2024). PT BIB's project provides a paradigm for inclusive, sustainable, and participatory development in resource-dependent regions by integrating local knowledge with expert resources and aligning with national stunting reduction targets (Aditia & Wisesa, 2025; Humayrah et al., 2025).

Overall, the CERIA Cooking Class demonstrates that localized, cooperative, and realistically focused nutritional education may effectively address one of Indonesia's most pressing public

health issues. Although longer-term effects require more analysis and longitudinal data, the initial implementation offers a scalable approach that merits replication (Bhutta et al., 2020); (Afandi et al., 2023).

According to these results, district initiatives like the CERIA program run by PT BIB may have helped raise awareness and enhance nutrition practices, especially in high-priority regions, even though local variations still exist. Local government backing, community health workers, and trained cadres' active participation increased the CSR initiative's impact and reach. Table 1 summary the CERIA Cooking Class Activities by PT BIB.

Table 1. Summary of the CERIA Cooking Class Activities by PT Borneo Indo Bara

Aspect	Description
Implementation Locations	5 Ring 1 Districts: Teluk Kepayang, Angsana, Kuranji, Satui,
	Sungai Loban
First Implemented District	Teluk Kepayang
Number of Participants	±150 participants (±30 per district)
Target Groups	Human Development Cadres (KPM), PKK members, Posyandu cadres, healthcare workers
Program Collaborators	PT BIB CSR Team, Tanah Bumbu Government, District Authorities, Puskesmas, Chef Agus Sasirangan
Nutrition Themes	Menus for MP-ASI, pregnant women, lactating mothers, and toddlers using local food
Sample Menus	Bubur from watermelon rind, nugget "kaki naga" from chicken and sweet potatoes, patin fish pepes
Key Resource Persons	Chef Agus Sasirangan (MasterChef Indonesia), community nutritionists
Evaluation Approach	Theoretical material delivered before cooking practices; nutritional values calculated per recipe

Table 1 lists the main tasks completed during the CERIA Cooking Class program, which is a component of PT BIB's CSR program. The target groups, locations, and intervention's theme elements are highlighted in the table. Teluk Kepayang, Angsana, Kuranji, Sungai Loban, and Satui are the five districts that were chosen as the main beneficiaries since they were identified as ring 1 regions that were directly influenced by PT BIB's operations.

About 30 people from each district participated, including local nutritionists, women's groups (PKK), and KPM cadres. Practical demonstrations and talks of menu planning for expectant and nursing moms, MP-ASI for infants, and healthy meals for toddlers were covered

in the cooking class. In keeping with the B2SA nutritional framework, the recipes highlighted the use of locally obtained products such as freshwater fish like patin, kalakai (fern), and kelor (moringa).

In order to guarantee the nutritional sufficiency of every cuisine, a multidisciplinary team comprising nutrition specialists and celebrity chef Agus Sasirangan assisted the implementation. In addition to increasing awareness of stunting prevention, the program sought to equip local communities with useful cooking skills that complement national initiatives to lower malnutrition.

Based on participants' feedback forms and interviews, approximately 85% of attendees reported increased awareness regarding stunting prevention and the utilization of local food resources. Several participants expressed enthusiasm about replicating the cooking practices at home, particularly the use of affordable and nutritious local ingredients such as kelor and ikan patin. This response indicates a growth not only in nutritional awareness but also in practical skills for applying healthy food choices in everyday life. This aligns with the concept of food literacy, which encompasses not only knowledge of nutrition but also the ability to plan, manage, select, prepare, and consume foods that meet health and cultural needs (Vidgen & Gallegos, 2014).

Conclusion

The CERIA Cooking Class program by PT BIB illustrates a promising community-based approach to stunting prevention through CSR. Based on field observations and interviews, the program contributed to strengthening local food literacy, particularly among Posyandu cadres and PKK members, by introducing culturally appropriate, nutrient-dense recipes using local ingredients.

Rather than relying solely on top-down interventions, the CERIA initiative demonstrated the value of engaging multiple stakeholders—including local government, public health experts, and culinary practitioners—in co-developing solutions tailored to community needs. Participants' positive responses and their intention to replicate the practices suggest that such initiatives can promote practical nutrition education and community empowerment.

Although no direct measurement of awareness was conducted, qualitative feedback from participants and stakeholders indicated improved understanding and enthusiasm for utilizing local food sources in daily cooking. To ensure sustainability and broader impact, future

programs should include formal evaluation tools, multi-year implementation, and longitudinal monitoring.

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