BMF CP77: Improving community engagement by creating jobs and income-generating opportunities through the School Meals Program

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August 6, 2024

"It has been a very difficult fishing season. If we want to be full, we have to create a joint venture."

—In "Joint Venture"; *The Kingfisher Story Collection*.

[**COLLABORATIVE PROJECT**]

1. Project Description

1.1. Background

The school meals program plays a crucial role in addressing food insecurity among school-aged children in terms of undernutrition and micronutrient deficiencies. This initiative operates within the broader context of the global commitment to achieving Sustainable Development Goal 2 – Zero Hunger, aligning with global priorities to address poverty, inequality, and socio-economic disparities. The program focuses on reaching learners from low-income households, rural areas, and historically disadvantaged communities [1]. The school meals program is not just a government initiative but also a community-driven effort. Its implementation faces various challenges, from supply chain issues to food serving

processes, necessitating support from community-driven food banks to address food insecurity among children effectively [2].

Various community groups, including nutritionists, farmers, and private sector professionals, play a crucial role in the success of the school meals program. A previous study demonstrated that the involvement of nutritionists, farmers, and the private sector significantly enhances the connection between food banks and the school meals program. However, the impact of community engagement by parents and other groups on this linkage remains ambiguous [3].

The current study aims to examine community engagement in the school meals program by analyzing its focus on creating jobs and income-generating opportunities for different community groups. Strengthening community engagement may improve the connection between the school meals program and food banks, effectively combating food insecurity among children.

1.2. Materials

The granular interaction thinking of mindsponge theory [4] was used in study conceptualization, and Bayesian Mindsponge Framework (BMF) analytics [5] was employed in statistical analysis on a dataset of 126 Ministry officers who managed large-scale school meal programs in 126 countries. This dataset originated from the 2021 Global Surveys, which can be accessed publicly at the GCNF Global Survey of School Meal Programs database [6]. The bayesvl package, aided by the Markov chain Monte Carlo (MCMC) algorithm, was employed in statistical analysis. For more information on BMF analytics, portal users can refer to the following documents [7]. Data and code snippets of this initial analysis were deposited at https://zenodo.org/records/13220994.

1.3. Main Findings

Preliminary analysis revealed that the school meals program's purposeful focus on creating jobs and income-generating opportunities for women in the community significantly enhances community engagement, thereby supporting the linkage between the program and food banks. In contrast, providing jobs and income-generating opportunities for youth and other community groups had an ambiguous effect on community engagement with the school meals program (see Figure 1). It is highly recommended to formulate strategies that empower women, fostering their involvement and engagement in the implementation of the school meals program.
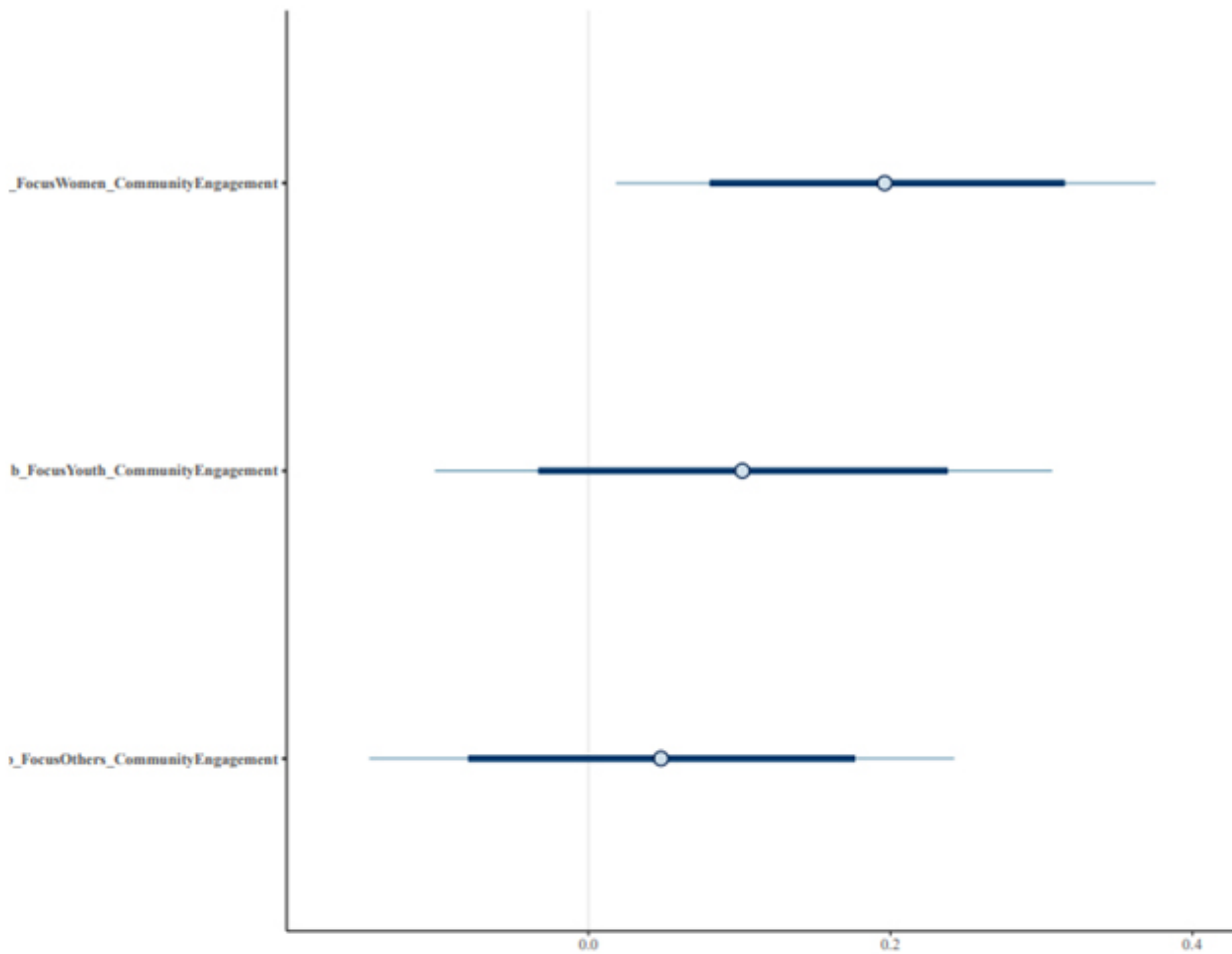
Figure 1: Estimated coefficients

2. Collaboration procedure

Portal users should follow these steps for registering to participate in this research project:

1. Create an account on the website (preferably using an institution email).
2. Comment on your name, affiliation, and desired role in the project below this post.
3. Patiently wait for the AISDL mentor to give the formal agreement on the project.

If you have further inquiries, please get in touch with us at aisdl_team@mindsponge.info.

If you have been invited to join the project by an AISDL member, you are still encouraged to follow the above formal steps.

All the resources for conducting and writing the research manuscript will be distributed upon project participation.

Project coordinator: ***Ni Putu Wulan Purnama Sari***.

The AISDL mentor for this project is Minh-Hoang Nguyen.

Other members who have joined this project: Quan-Hoang Vuong.

The research project strictly adheres to scientific integrity standards, including authorship rights and obligations, without incurring an economic burden at participants' expenses. Our philosophy embraces the fostering of humanistic values in conducting empirical investigations for sustainable and feasible solutions to real-world problems.

References

[1] Devereux S, Roelen K. (2015). Evaluating the impacts that impact evaluations do not evaluate. In: *Mixed Methods Research in Poverty and Vulnerability* (pp. 149–170). Palgrave Macmillan. https://link.springer.com/chapter/10.1057/9781137452511_7

[2] Bazerghi C, McKay FH, & Dunn M. (2016). The role of food banks in addressing food insecurity: A systematic review. *Journal of Community Health*, **41**(4), 732–740. https://doi.org/10.1007/s10900-015-0147-5

[3] Sari NPWP. (2024). BMF CP76: Synergy between school meals program and food banks to combat food insecurity. https://mindsponge.info/posts/329

[4] Vuong QH, Nguyen MH. (2024). *Better economics for the Earth: A lesson from quantum and information theories*. AISDL. https://www.amazon.com/dp/B0D98L5K44/

[5] La VP, Vuong QH. (2019). bayesvl: Visually learning the graphical structure of Bayesian networks and performing MCMC with 'Stan'. *The Comprehensive R Archive Network*. https://cran.r-project.org/web/packages/bayesvl/index.html

[6] Global Child Nutrition Foundation. (2022). *Global survey of school meal programs database*. GCNF: Seattle. https://gcnf.org/global-reports/

[7] Vuong QH, Nguyen MH, La VP. (2022). *The mindsponge and BMF analytics for innovative thinking in social sciences and humanities*. Walter de Gruyter GmbH. https://www.amazon.com/dp/8367405102/

[8] Vuong QH. (2022). *The Kingfisher Story Collection*. https://www.amazon.com/dp/B0BG2NNHY6