

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2024, Vol. 5, No. 11, 4413 – 4421

<http://dx.doi.org/10.11594/ijmaber.05.11.11>

Research Article

Evaluating the Pilot Implementation of the DSWD Walang Gutom Program: A Case Study on Its Impact in Addressing Involuntary Hunger in Tondo

Carmelito C. Arcinas^{1*}, Vincent Patrick L. M. Jimenez¹, Lemuel Joeb N. Mitra¹, Ferdinand R. Paredes¹, Bernardino P. Malang², Jocelyn DS. Malang¹

¹World Citi Colleges, Cubao, Quezon City, Philippines

²Bulacan State University, Philippines

Article history:

Submission 31 October 2024

Revised 07 November 2024

Accepted 23 November 2024

*Corresponding author:

E-mail:

carmelito.arcinas@gmail.com

ABSTRACT

The Department of Social Welfare and Development (DSWD) launched the Walang Gutom (No Hunger) Program to address involuntary hunger among vulnerable populations in the Philippines. This study evaluates the pilot implementation of the program in Tondo, Manila, focusing on its impact on hunger and the lives of beneficiaries. The program combines direct financial assistance through an Electronic Benefit Transfer (EBT) system with social interventions like job training, nutritional workshops, and community engagement. While the program shows promise in addressing hunger and empowering beneficiaries, challenges such as eligibility criteria, limited funding, and digital literacy barriers need to be addressed. The study recommends strategies to enhance the program's effectiveness and sustainability, including strengthening outreach efforts, improving digital literacy, and expanding the program's reach to more vulnerable communities. Evaluations of effectiveness have yielded favorable results, with notable improvements in food security observed among beneficiaries. The progress in food security for household beneficiaries is encouraging, and focused interventions can further enhance these positive outcomes. Ongoing assessments allow the program to adjust to the evolving needs of participants, ensuring sustained effectiveness. Beneficiary feedback emphasizes the program's responsiveness and the high quality of services, indicating overall success in achieving its goals.

Keywords: DSWD, Walang Gutom Program, Involuntary hunger, Food insecurity, Tondo Manila, Philippines

Introduction

The Department of Social Welfare and Development (DSWD) launched the "Walang

Gutom" (No Hunger) Program as a pioneering effort to address the urgent issue of involuntary hunger among vulnerable populations in

How to cite:

Arcinas, C. C., Jimenez, V. P. L. M., Mitra, L. J. N., Paredes, F. R., Malang, B. P., & Malang, J. D. S. (2024). Evaluating the Pilot Implementation of the DSWD Walang Gutom Program: A Case Study on Its Impact in Addressing Involuntary Hunger in Tondo. *International Journal of Multidisciplinary: Applied Business and Education Research*. 5(11), 4413 – 4421. doi: 10.11594/ijmaber.05.11.11

the Philippines. As part of its mission to uplift marginalized communities, DSWD's Walang Gutom initiative takes an innovative approach, combining direct financial assistance through an Electronic Benefit Transfer (EBT) system with broader social interventions. Tondo, an area in Manila that faces some of the country's highest rates of poverty and food insecurity, was selected as one of the key pilot sites for this program. The initiative is expected to tackle food scarcity in households directly by providing a monthly credit of Php 3,000, exclusively dedicated to purchasing food essentials. This study seeks to evaluate the pilot implementation of the Walang Gutom Program, focusing on its impact in Tondo, to assess how well it has addressed hunger and improved the lives of beneficiaries.

The DSWD Walang Gutom Program was structured not only to provide immediate relief to low-income households but also to serve as a blueprint for future social welfare initiatives aimed at hunger reduction across the Philippines. The program embodies a whole-of-nation strategy, involving partnerships with community organizations, small businesses, supermarkets, and local food markets. This collaboration enables beneficiaries to access necessary resources conveniently. Furthermore, the program integrates digital solutions, streamlining food credit distribution and management via EBT cards, which can be used at specific vendors to ensure transparency and accountability. Through this approach, DSWD intends to not only alleviate hunger but also engage the community, mobilize resources effectively, and create sustainable pathways to improve food security.

The structure of the Walang Gutom Program also includes several components designed to address the broader socio-economic factors contributing to hunger. Besides the financial support through food credits, the program provides job training and employment opportunities to empower beneficiaries. In alignment with this goal, beneficiaries are encouraged to attend nutritional workshops that teach skills related to food preparation and budget management. This emphasis on skill development and economic independence aims to transform the support recipients into

productive citizens who can eventually contribute back to the community. By focusing on both immediate hunger relief and long-term empowerment, the program addresses the root causes of poverty and food insecurity.

Despite its potential, the Walang Gutom Program faces several challenges that could impact its effectiveness. Strict eligibility criteria, for instance, may prevent some genuinely needy families from participating. This criterion, while necessary for resource allocation, risks creating barriers that inadvertently exclude some of the program's intended beneficiaries. Additionally, limited funding resources could restrict the program's ability to expand to cover more households, thus potentially reducing its impact on hunger alleviation in high-poverty areas like Tondo. Given these constraints, it becomes essential to evaluate the pilot implementation to ensure that the program reaches its goals and serves as a sustainable model for hunger intervention.

The program's design also includes a digital platform for delivering social interventions, aiming to streamline access to food resources and promote financial transparency. However, digital literacy levels vary widely among the target population, which could hinder beneficiaries' ability to maximize the program's offerings. Similarly, awareness of the program itself remains limited, particularly in more isolated or underserved communities, possibly reducing enrollment and participation. The absence of sufficient promotional efforts may thus impact the program's visibility, necessitating a more targeted outreach strategy to bridge gaps in awareness and access.

This research will assess several key dimensions of the Walang Gutom Program in Tondo. Firstly, it will evaluate the beneficiaries' demographic profiles, including household size, education, occupation, and marital status, to understand the unique challenges faced by diverse groups within the community. Additionally, the study will look into the hunger levels experienced by beneficiaries before joining the program, examining how effectively the intervention has managed to reduce hunger among them. Feedback from beneficiaries will also be collected on various service parameters, including responsiveness, efficiency,

quality, effectiveness, and relevance. This information will help identify strengths and weaknesses in the program's implementation, thus allowing for necessary adjustments to improve its efficacy.

Given the scale and complexity of food insecurity in the Philippines, understanding the effectiveness of the Walang Gutom Program in Tondo could provide valuable insights for policy-makers, implementers, and social welfare advocates. The findings from this study could serve as a foundation for legislative action and policy reform aimed at enhancing food security and reducing poverty. Moreover, the evaluation could help identify opportunities to refine the program, thereby ensuring it aligns better with beneficiaries' needs. This analysis also holds broader implications for similar interventions in other communities, particularly those grappling with food insecurity and poverty.

Electronic Benefit Transfer (EBT) Cards shall be utilized to transfer the digital provision of food credits to eligible household-beneficiaries through monetary-based assistance. The EBT cards were used to purchase various food items in partner retailers. Only food items included in the program's "food basket" which was recommended by the Food and Nutrition Research Institute (FNRI) may be purchased based on the pre-approved food items (50% carbohydrates, 30% Proteins and 20% Fats, Oils and Dietary Fiber). In contrast to the Pantawid Pamilyang Pilipino Program (4Ps), the financial aid provided to the beneficiaries is being spent on inappropriate purposes.

According to Gallegos, D., Eivers, A., Sondergeld, P., and Pattison, C. (2021), food and nutrition security is a fundamental human right defined as a condition in which all individuals, at all times, have physical, social, and economic access to safe and nutritious food that meets their dietary needs and preferences for a healthy, active life. Alarming, nearly two billion people—over a quarter of the global population—lack consistent access to sufficient and nutritious food. While the prevalence of food insecurity is significantly lower in high-income countries, it still affects approximately 8–11% of populations in nations such as Australia, Canada, Denmark, and the United States, with

the highest rates among disadvantaged or marginalized groups.

Consistent to Keith-Jennings, B., Llobrera, J., and Dean, Stacy (2019), the Supplemental Nutrition Assistance Program (SNAP) is an essential initiative that plays a crucial role in promoting the health and well-being of the nation. Its entitlement funding model allows the program to provide benefits to all individuals who meet eligibility criteria, enabling SNAP to swiftly adapt to rising demand during times of need. Research indicates that SNAP significantly alleviates poverty for millions, enhances food security, and is associated with better health outcomes. Formerly known as the Food Stamp Program, SNAP is the most significant food assistance program in the United States, supporting nearly 40 million Americans in accessing a nutritious diet each month. Almost 90% of SNAP recipients belong to families with children, elderly individuals, or people with disabilities.

Confirming to Nestle, M. (2019), SNAP has a relatively flexible policy for participants, allowing them to use Electronic Benefits Transfer (EBT) cards to purchase a wide range of food items, beverages, seeds, and plants. However, funds cannot be used for alcoholic drinks, tobacco products, pet food, dietary supplements, hot foods, or non-food items, which must be purchased with personal funds. The USDA mandates that retailers authorized to accept SNAP benefits stock certain categories and quantities of staple foods. A significant majority of SNAP funds—approximately 82%—are spent at supermarkets or superstores, making these retailers the primary beneficiaries and staunch defenders of the program. A smaller portion, around 15%, is used at convenience stores and small grocery shops, while a mere 0.02% is spent at farmers markets, despite extensive promotional efforts. In 2019, a pilot program by the USDA allowed participants in New York State to use SNAP benefits for online shopping through retailers like Amazon, Walmart, and ShopRite, with plans for other states and retailers to follow suit.

Similar to Josling, T. (2011), food stamps—vouchers that can be used to purchase food—provide a direct means of empowering targeted groups without requiring the establishment of

a public distribution system. This approach promotes dietary diversity, as the vouchers are not tied to specific food items. Food stamps benefit both consumers and producers, with the flexibility to expand or reduce the program as necessary. However, challenges exist, particularly in effectively identifying needy families and ensuring robust administration to prevent misuse. The fundamental purpose of these programs is to transfer purchasing power to eligible consumers rather than providing actual goods. Several issues can complicate the effectiveness of food stamp programs. Eligible consumers might be unaware of the program's existence, while ineligible individuals may access the funds. Additionally, some of the allocated funds may become "lost" within the system, failing to reach intended recipients. While there are partial solutions to these challenges, the inherent difficulties associated with any cash transfer system remain. A closer look at various food stamp programs can shed light on these problems and potential solutions, illustrating the complexities involved in administering such initiatives effectively.

Food insecurity is recognized as a significant stressor for families, carrying substantial negative consequences for child health and development. These impacts can affect various aspects of development, including physical, social, cognitive, and behavioral growth, independently of poverty. Given the ongoing nature of this issue, there is an urgent need to investigate how food insecurity affects child development in order to inform strategies that can effectively minimize and alleviate its associated risks.

This case study on the Walang Gutom Program's pilot implementation in Tondo has far-reaching implications for social welfare policy in the Philippines. It not only highlights the importance of a coordinated, multi-sectoral approach to combating hunger but also underscores the need for continuous evaluation to ensure programs remain effective, responsive, and relevant. As food insecurity continues to challenge marginalized communities across the country, the success of the Walang Gutom Program could pave the way for more comprehensive, community-driven solutions to hunger. By examining the program's strengths, limitations,

and areas for improvement, this research aims to contribute to the ongoing dialogue on sustainable development and poverty reduction, fostering a society where all citizens have access to basic needs and opportunities for growth.

Top of Form

Bottom of Form

Methodology

Research Design

This study employed a mixed-methods approach using both quantitative and qualitative techniques to evaluate the pilot implementation of the Walang Gutom Program (WGP) in Tondo, Manila. The evaluation framework used was the Relevance, Effectiveness, Efficiency, and Sustainability (REES) Framework, which provides a comprehensive assessment of the program's alignment with target beneficiaries' needs, the effectiveness of service delivery, efficiency in resource allocation, and sustainability for future integration. Each component of the REES framework informed the data collection and analysis processes, allowing for a holistic understanding of the program's impacts.

- **Relevance:** The relevance of the program was assessed by analyzing how well the initiative aligns with the specific needs of food-insecure households in Tondo. This involved reviewing data on the socio-economic conditions of the target population, examining national and international guidelines, and assessing the program's responsiveness to the needs of vulnerable households.
- **Efficiency:** To evaluate efficiency, the study reviewed the allocation of resources, the timeliness of service delivery, and the overall operational effectiveness of the WGP. This component involved examining input, activity, and output levels to determine how effectively the program delivered assistance.
- **Effectiveness:** The effectiveness of the program was measured by examining the output and outcome levels, focusing on the tangible impacts of program interventions. This included tracking changes in hunger levels, nutrition access, and beneficiaries' satisfaction with program components.

- **Sustainability:** The study assessed the program's potential for long-term sustainability by examining its integration into existing DSWD initiatives and the capacity of stakeholders to continue program elements beyond the pilot phase.

Participants of the Study

The study sample consisted of 1,298 verified and registered WGP pilot beneficiaries in Tondo, Manila. From this pool, a random sample of 297 participants was selected using a sample size calculator, ensuring statistical representativeness for a robust and reliable evaluation. The random sampling method was chosen to eliminate selection bias, allowing for a more accurate and generalized understanding of the program's impact across various household demographics.

Ethical considerations were integral to the selection and participation process. All participants were fully informed about the study's purpose, and their involvement was entirely voluntary. Consent was obtained through clear, verbally and written consent within the questionnaire forms that outlined the objectives, procedures, and potential risks of the study. Participants were assured that their responses would remain confidential and that their personal information would be protected throughout the research process. The study adhered to ethical guidelines, ensuring that all individuals' rights were respected and that no participant faced harm or coercion as a result of their involvement.

By selecting a diverse cross-section of beneficiaries, the study aimed to capture a broad range of experiences and perspectives, ensuring that the findings would reflect the varied impacts of the program on different demographic groups. This approach not only enhanced the study's representativeness but also upheld the ethical principles of fairness, transparency, and respect for participants' autonomy.

Data Gathering Instrument

A Perception Survey Tool was specifically designed for this evaluation, aimed at capturing the perspectives of beneficiaries on the program's relevance, effectiveness, efficiency, and

sustainability. The tool utilized a structured questionnaire based on a Likert scale, allowing beneficiaries to rate various aspects of the program from "strongly disagree" to "strongly agree." The survey included both quantitative and qualitative elements, with open-ended questions designed to capture in-depth feedback on specific program components, such as service quality, accessibility, and areas needing improvement.

Data Gathering Procedure

The survey was conducted in a community assembly setting, supported by the DSWD Field Office National Capital Region - Walang Gutom Regional Program Management Office. Google Forms was used as the primary platform for data collection, facilitating ease of response and accuracy in data recording. The assembly provided an opportunity to explain the survey's purpose and ensure that respondents could complete the survey with clarity and understanding. DSWD representatives provided guidance to participants, ensuring accurate and reliable responses.

Data Analysis

The survey data were tallied, tabulated, and analyzed through quantitative measurement of responses on the Likert scale. The quantitative analysis involved calculating mean scores, frequencies, and percentages for each survey item to identify patterns in beneficiaries' perceptions of the program. Additionally, thematic analysis was employed to examine responses to open-ended questions, capturing nuanced feedback on program elements that were particularly impactful or in need of refinement. Results from the Likert scale provided insight into the program's overall performance based on beneficiary experiences, while qualitative responses offered a more in-depth perspective on areas for potential program enhancement.

Ethical Considerations

This study adhered to ethical guidelines by ensuring voluntary participation, informed consent, and confidentiality of participant information. Before participation, beneficiaries were informed of the study's objectives and their right to withdraw at any time. The data

were anonymized to protect participants' identities, and findings were reported in aggregate to prevent any potential identification of individuals.

Results and Discussions

Based on the demographic profile of respondents, more than half of the respondents have household size that ranges from 5-8 household members. Meanwhile, 30% of the respondents have at least 9 members and the

remaining 5% of the respondents have a household size ranging from 1-4 household members. The average household size of the sample is six (6) members.

In terms of educational attainment of respondents, most respondents who participated in the survey are high school graduates (40%). Those who have attained elementary level are 25%, high school level are 20% while 10% are elementary graduates.

Table 1. Sources of Income

Sources of Income	# of Respondents	%
Employment	227	76.4%
Livelihood	44	14.8%
Remittance/s	0	0
Grants from the Government	15	5.1%
Unemployed	11	3.7%
TOTAL	297	100%

Majority or 76.4% of the respondents derive income from employment activities, while 14.8% get earnings from livelihood activities. The remaining respondents either rely on grants from the government (5.1%) or have no sources of income (3.7%). The table below displays the sources of income of the respondents.

Experience of Hunger

The bar graph below provides insights into the frequency of food insecurity experiences among households. The data is distributed across six different questions, with responses categorized into five levels: "Always," "Often," "A few times," "Rarely," and "Never." Each question explores varying degrees of food scarcity, hunger, and coping mechanisms due to a lack of resources.

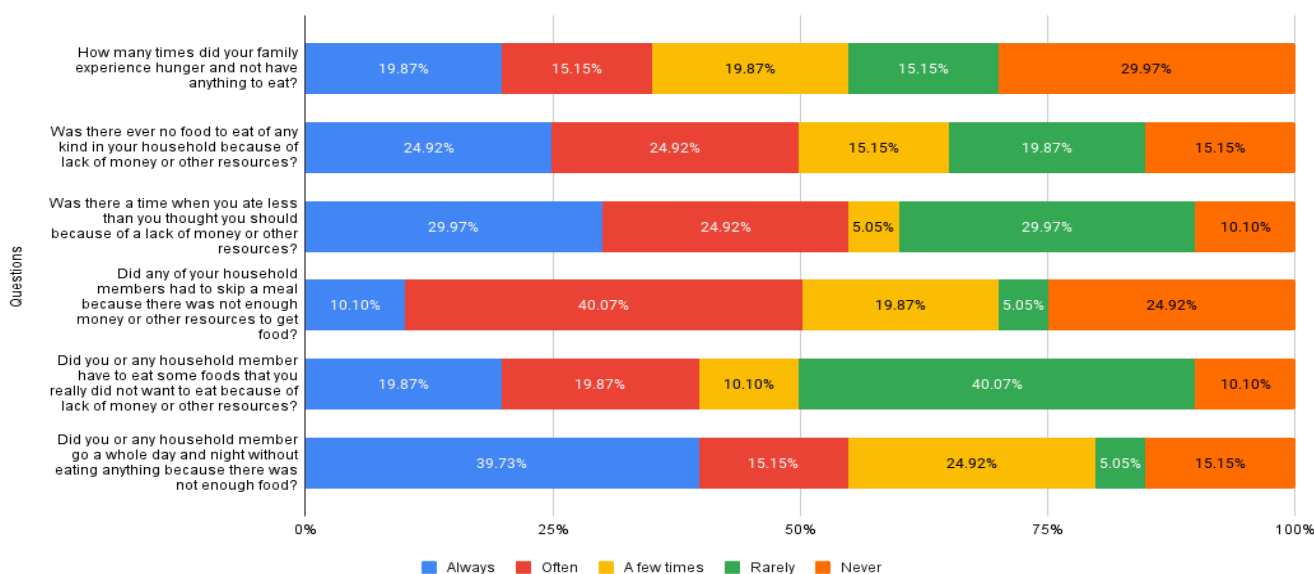


Figure 1. Pre Program Situation

Based on Figure 1, the following results were obtained:

Hunger Experience: About 35% of households experienced hunger frequently ("Always" or "Often"), while around 30% indicated they never encountered such situations.

Household Food Shortages: Half of the respondents (49.84%) reported a consistent lack of food in their households ("Always" or "Often"), driven by insufficient money or resources.

Reduced Food Intake: Over 50% of individuals reported regularly eating less than they felt necessary due to financial constraints, indicating widespread food rationing.

Skipping Meals: More than half of the households had members who skipped meals often, with 50.17% stating it was a frequent occurrence. Only a quarter of respondents never skipped meals.

Eating Unwanted Food: Close to 40% of respondents either "Always" or "Often" had to consume food they did not prefer, a clear

indication of compromised dietary choices due to limited resources.

Extended Hunger: A significant 54.88% reported going a full day and night without food on a regular basis, demonstrating severe food insecurity in many households.

Overall, the graph illustrates that a large portion of the surveyed population regularly struggles with hunger, food shortages, and the need to ration or skip meals, highlighting the severity of food insecurity in the community.

Table below presents the responses/agreement levels of the interviewed clients on a series of questions relative to the following themes: responsiveness, efficiency, quality, effectiveness, and relevance of interventions received from the DSWD under the Walang Gutom Program.

Overall, the respondents provided very high agreement levels on the responsiveness, quality, effectiveness, and relevance of interventions. However, relatively lower ratings were recorded on efficiency of services.

Table 2. Service quality

SERVICE DELIVERY	WEIGHTED MEAN	STDDEV	VERBAL INTERPRETATION
The services or assistance I received from DSWD/DSWD Staff are suitable for my needs	4.75	86.68	SA
The response to my needs/request is slow	2.44	68.33	A
The Walang Gutom Program has addressed my needs.	4.60	74.50	SA
The staff who processed the assistance I requested treated me well.	4.70	84.61	SA
For me, the staff did not fulfill their duties well.	2.05	50.33	D
I felt the care of the staff who assisted me.	4.50	71.46	SA
The location where I was attended to or interviewed by the staff is appropriate.	4.40	63.55	SA
The service provided to me by the program is sufficient.	4.45	66.95	SA
Average Weighted Mean	3.99		Strongly Agree

The table above presents the evaluation of various aspects of service delivery under the DSWD (Department of Social Welfare and Development) and its associated programs. The weighted mean, standard deviation (STDEV), and verbal interpretation provide insight into how beneficiaries perceive the quality of services provided.

The SCOPE was used to send necessary information between the DSWD and local merchants to facilitate the food credit transfers and documents for reporting. The EBT cards of the eligible beneficiaries were enabled with food credits with a monetary value amounting to

Three Thousand Pesos (P3,000.00) per month to be used for the purchase of food commodities to the partners merchants/retailers.

The partner retailers successfully utilized Point of Sale (POS) devices in Tondo, Manila. When beneficiaries tapped their card to the POS devices, the amount of the purchased food commodities was debited to their EBT card. Partner retailers verified the beneficiary identity through the biometrics and fingerprints stored on the cards at the time of purchase to ensure that only an authorized person is using the card.

The evaluation results indicate a generally positive perception of the DSWD's service delivery. Respondents expressed satisfaction with the staff's conduct, particularly their care and professionalism. The Walang Gutom Program was also perceived as effective in addressing the needs of the beneficiaries. However, the survey also highlighted a concern regarding the slow response time to requests. To improve service delivery, the DSWD should focus on streamlining processes, increasing staffing levels, or utilizing technology to expedite response times. Additionally, continuous monitoring of program effectiveness and seeking regular feedback from beneficiaries are crucial to identify areas for improvement and maintain high service quality.

Conclusions

The evaluation of the Walang Gutom Program (WGP) pilot implementation in Tondo, Manila, has demonstrated that the program has made substantial strides in alleviating hunger and improving food security among vulnerable populations. By combining direct financial assistance through Electronic Benefit Transfer (EBT) cards with socio-economic interventions like job training, nutritional workshops, and community engagement, the program has significantly improved food access, nutrition, and the overall well-being of its beneficiaries. Beneficiaries have expressed satisfaction with the program's responsiveness, service quality, and its alignment with their needs, underscoring the potential of a comprehensive, community-driven approach to tackling hunger.

However, despite these positive outcomes, the study reveals several critical areas that must be addressed to enhance the program's effectiveness, scalability, and long-term sustainability. To ensure greater inclusivity, it is essential that the eligibility criteria be revisited to avoid excluding some of the most vulnerable households. Expanding the reach of the program is also constrained by limited funding, necessitating the mobilization of additional resources—potentially through partnerships with the private sector, international organizations, or local government units—to broaden the program's scope and impact. Digital literacy remains another significant barrier,

and thus, tailored interventions such as digital literacy training, assistance with EBT card use, and on-the-ground support should be implemented to ensure full accessibility for all beneficiaries.

Moreover, while the positive outcomes in food security and beneficiary satisfaction are encouraging, greater efforts are needed to strengthen program visibility and outreach, particularly in remote or underserved communities. A more aggressive and targeted awareness campaign would help increase enrollment, reduce information gaps, and ensure that more vulnerable households can access the support they need. This could include partnerships with local community leaders, outreach through barangay networks, and leveraging social media platforms to reach younger and tech-savvy demographics.

To ensure the long-term sustainability and scalability of the WGP, ongoing monitoring and adaptive management are critical. Program evaluations should be continuous and dynamic, using real-time data to adjust interventions and resource allocation based on the evolving needs of beneficiaries. The lessons learned from the Tondo pilot should be applied to expand the program to other high-poverty areas across the country, with careful consideration given to local contexts, community dynamics, and the specific barriers faced by each region.

Additionally, strengthening the integration of the WGP with existing social protection programs and national poverty reduction strategies will be essential. By aligning the Walang Gutom Program with initiatives such as the Pantawid Pamilyang Pilipino Program (4Ps) and other food security measures, synergies can be created that amplify the program's impact, reduce duplication, and ensure a more holistic approach to poverty alleviation.

Finally, policymakers and program implementers must prioritize a long-term vision for the program, ensuring that it is not merely a temporary intervention but a transformative solution that addresses the root causes of hunger and poverty. This could include enhancing beneficiaries' economic independence through vocational training, financial literacy, and the promotion of sustainable livelihoods. As the program continues to evolve, its role in shaping

broader national policies on food security, social welfare, and poverty reduction will be vital to creating a food-secure and equitable society.

In conclusion, while the Walang Gutom Program has demonstrated promise and potential, its future success hinges on addressing the identified challenges and strengthening its operational framework. By scaling up the program, enhancing its inclusivity, improving digital literacy, and fostering greater community engagement, the Walang Gutom Program can evolve into a powerful tool for reducing food insecurity and empowering vulnerable populations across the Philippines. With continued evaluation and adaptation, this program could become a cornerstone of the country's efforts to build a more food-secure, resilient, and equitable society for all.

References

- Asian Development Bank. (n.d.). *Food stamp program focuses aid on poorest families in Mongolia*. Asian Development Bank. Retrieved November 6, 2024, from <https://www.adb.org/results/food-stamp-program-focuses-aid-poorest-families-mongolia#:~:text=The%20food%20stamp%20program%20was,not%20become%20malnourished%20or%20hungry>
- Food and Agriculture Organization. (2019). *Understanding the IPC scales* [Brochure]. IPC. https://www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/communication_tools/brochures/IPC_Brochure_Understanding_the_IPC_Scales.pdf
- Food and Agriculture Organization. (2021). *The state of food security and nutrition in the world 2021: Transforming food systems for affordable healthy diets*. FAO. <https://www.fao.org/3/cb9997en/cb9997en.pdf>
- Food and Agriculture Organization. (2022). *World food and agriculture: Statistical pocketbook 2022*. FAO. <https://openknowledge.fao.org/server/api/core/bitstreams/4099040d-785b-419b-a966-55377508c274/content>.
- Food and Agriculture Organization. (n.d.). *Hunger*. FAO. <https://www.fao.org/hunger/en/>
- Ministry of Health Malaysia. (2023). *National recommendations on nutrition intake (RNI)*. <https://hq.moh.gov.my/nutrition/wp-content/uploads/2023/12/FA-Buku-RNI.pdf>
- Poverty Action Lab. (n.d.). *Electronic food vouchers and poverty reduction in Indonesia*. J-PAL. <https://www.povertyactionlab.org/evaluation/electronic-food-vouchers-and-poverty-reduction-indonesia>