



## Implementation and Relevance of Project Pagkaon Aton Tatapon (PAT)

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### ABSTRACT

This study evaluated the implementation and relevance of Project Pagkaon Aton Tatapon (PAT) in selected elementary schools in District V, Division of Cadiz City, Negros Occidental, with a focus on its contribution to food security, nutrition, and environmental sustainability. Specifically, it examined the level of implementation in terms of resource utilization and partnerships, food recovery and redistribution services, community participation and sustainability practices, and collaboration mechanisms, as well as the program's perceived relevance to existing policies and community needs. A quantitative descriptive–correlational research design was employed, involving 358 respondents selected through stratified proportionate random sampling. Data were collected using a validated survey instrument with a high reliability coefficient (Cronbach's alpha = 0.94) and were analyzed using mean, standard deviation, and Pearson's product-moment correlation coefficient. The findings revealed that both the level of implementation and the perceived relevance of Project PAT were rated very high, indicating strong program performance and alignment with its intended objectives. However, relatively lower ratings in sustainability practices and external stakeholder support suggest areas that require further strengthening. Moreover, the results showed a very strong positive relationship ( $r = 0.890$ ,  $p < 0.05$ ) between implementation and relevance, implying that improved execution of program components enhances stakeholders' recognition of its value. The study concludes that while Project PAT is effectively implemented and highly relevant, its long-term impact may be further enhanced through strengthened sustainability initiatives and expanded partnerships. These findings provide evidence-based insights for policymakers, school leaders, and program implementers in improving, sustaining, and potentially scaling food recovery and feeding initiatives within the education sector.

**Keywords:** Community Participation, Food Recovery, Food Security, Program Implementation, Sustainability

### How to Cite:

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## INTRODUCTION

Food insecurity and food waste remain pressing and interconnected challenges in the Philippines. Despite ongoing government interventions, many households continue to experience limited access to nutritious food, while significant amounts of edible food are wasted. This highlights the need for sustainable, community-based solutions that address both issues simultaneously (UNEP, 2024).

Food recovery programs have emerged as practical interventions that redistribute surplus food to vulnerable populations. In the education sector, these initiatives are often integrated into school-based feeding programs to improve learners' nutrition and participation. The Department of Education (DepEd) continues to promote programs that support learners' health and well-being.

Project Pagkaon Aton Tatapon (PAT) is a localized initiative that integrates food recovery, feeding activities, and sustainability practices within school communities. It promotes collaboration among schools, local government units, and stakeholders to reduce food waste and improve food security.

Despite the implementation of similar food recovery programs, limited empirical studies have examined their effectiveness at the school level in the Philippine context. This gap underscores the need for systematic evaluation of programs like Project PAT, particularly in terms of implementation quality and perceived relevance among stakeholders. This study therefore assessed the level of implementation and relevance of Project PAT and examined the relationship between these variables to provide evidence-based recommendations for program improvement.

## OBJECTIVES OF THE STUDY

This study aimed to examine the implementation and relevance of Project Pagkaon Aton Tatapon (PAT) in relation to national and local policies on food security, nutrition, and environmental sustainability.

Specifically, it sought to answer the following questions:

1. What is the level of implementation of Project Pagkaon Aton Tatapon (Project PAT) in terms of:
  - 1.1. Utilization of resources and partnerships;
  - 1.2. Delivery of food recovery and redistribution services;
  - 1.3. Promotion of community participation and sustainability practices; and
  - 1.4. Partnerships and collaboration mechanisms in the implementation of the project.
2. What is the level of relevance of Project Pagkaon Aton Tatapon (Project PAT) to existing food security, nutrition, and environmental policies?
3. Is there a significant relationship between the level of program implementation and its perceived relevance among the stakeholders of Project PAT?
4. What recommendations may be proposed to enhance the implementation, sustainability, and policy alignment of Project Pagkaon Aton Tatapon (Project PAT)?

## LITERATURE REVIEW

To better understand the variables of the study, this section presents related literature organized into thematic areas. Each theme synthesizes findings from recent studies and highlights key concepts that support the implementation and relevance of Project Pagkaon Aton Tatapon (PAT).

### *Food Waste and Food Security Context*

Food waste and food insecurity remain pressing global concerns affecting millions of people. A significant proportion of food produced worldwide is wasted, while many individuals continue to experience hunger and malnutrition (United Nations Environment Programme [UNEP], 2024). Globally, food loss contributes to environmental degradation, greenhouse gas emissions, and economic inefficiencies (Food and Agriculture Organization [FAO], 2023). In the Philippine context, this



imbalance persists, where food waste at the household and community levels coexists with limited access to nutritious food (World Bank, 2023).

Similarly, recent peer-reviewed studies (e.g., Principato et al., 2021; Xue et al., 2021) emphasize that food waste is not only a resource management issue but also a socio-economic concern linked to consumption behavior and systemic inefficiencies. However, while global studies often focus on large-scale supply chains, local contexts like the Philippines highlight community-level challenges such as lack of awareness and limited redistribution systems. This suggests that localized and community-based interventions are essential in addressing both food waste and food insecurity simultaneously.

### ***School-Based Feeding Programs and Nutritional Impact***

School-based feeding programs are widely recognized as effective interventions in addressing undernutrition among learners. The Department of Education (DepEd) continues to strengthen the implementation of the School-Based Feeding Program (SBFP) to support learners' nutritional needs (DepEd, 2022). Evidence shows that such programs improve nutritional status, school attendance, and learning outcomes (World Food Programme [WFP], 2022).

Similarly, studies by Aurino et al. (2020) and Gelli et al. (2020) confirm that school feeding programs contribute significantly to improved health and educational performance among children. However, these studies also highlight that program effectiveness is highly dependent on consistent funding, proper targeting, and implementation quality. In contrast, other research suggests that without strong monitoring systems and stakeholder involvement, feeding programs may have limited long-term impact. This indicates that beyond implementation, sustainability and community engagement are critical factors in ensuring program success.

### ***Food Recovery and Redistribution Practices***

Food recovery programs aim to collect surplus edible food and redistribute it to vulnerable populations, thereby reducing food waste while addressing hunger. Studies show that effective food recovery systems require efficient logistics, strict food safety standards, and strong coordination among stakeholders (FAO, 2022). The World Food Programme (2023) further emphasizes that multi-sectoral collaboration strengthens the sustainability of these initiatives.

Similarly, recent studies (e.g., Reynolds et al., 2019; Filimonau & De Coteau, 2020) highlight that food redistribution systems are most effective when supported by organized networks and policy frameworks. However, these studies also point out challenges such as food safety concerns, logistical constraints, and inconsistent supply, which can limit program effectiveness. Compared to large-scale food banking systems in developed countries, community-based initiatives in developing contexts rely more heavily on local participation and resourcefulness. This underscores the importance of adaptable and community-driven approaches like Project PAT.

### ***Community Participation and Stakeholder Collaboration***

Community participation remains a critical factor in the success of sustainability and social development initiatives. Active involvement of parents, teachers, and local stakeholders enhances program implementation and long-term effectiveness (OECD, 2023). Strong partnerships among institutions also improve resource mobilization and service delivery (World Bank, 2022).

Similarly, studies by Reed et al. (2020) and Ansell & Gash (2021) highlight that collaborative governance and stakeholder engagement lead to more sustainable and inclusive development outcomes. However, other findings suggest that weak coordination and unclear roles among stakeholders can hinder program success. This implies that while collaboration is beneficial, it must be structured and well-managed to achieve desired outcomes. In the context of Project PAT, strengthening stakeholder roles and partnerships is therefore essential for sustainability.

### ***Implementation of Project Pagkaon Aton Tatapon (PAT)***

Project Pagkaon Aton Tatapon (PAT) is a community-based initiative that integrates food recovery, feeding programs, and sustainability practices within school and community settings. It promotes collaboration among schools, local government units, and stakeholders to address food insecurity and reduce food waste (DepEd, 2022). The program aligns with national development priorities on food security and sustainable resource management (National Economic and Development Authority [NEDA], 2023).

Similarly, existing studies on integrated food programs suggest that combining feeding initiatives with sustainability practices enhances both immediate and long-term outcomes. However, despite the recognized benefits of such programs, there remains limited empirical research evaluating their implementation at the school level, particularly in the Philippine context. This gap



highlights the need for further investigation into how programs like Project PAT are implemented and how they are perceived by stakeholders.

## METHODOLOGY

### *Research Design*

This study employed a quantitative descriptive–correlational research design to examine the implementation and relevance of Project Pagkaon Aton Tatapon (PAT). The descriptive component was used to systematically describe how the program was implemented in terms of resource utilization, service delivery, and community participation, while the correlational component determined the relationship between the level of implementation and its perceived relevance among stakeholders. This design enabled the collection of measurable data through a structured survey and facilitated statistical analysis to identify patterns, trends, and relationships, thereby providing an objective and evidence-based assessment of the program.

### *Respondents of the Study*

The respondents of this study included individuals and groups who were directly involved in the implementation of Project Pagkaon Aton Tatapon or benefited from its services. This ensured that the perspectives gathered represented both the operational and experiential aspects of the program.

The first group of respondents included program implementers and coordinators, such as two program heads and five nurses who oversaw the planning, organization, and delivery of Project PAT activities. Their participation was vital in providing information on the program’s objectives, operational processes, resource allocation, and coordination mechanisms.

The second group consisted of school personnel, specifically six principals and six feeding coordinators from District V, Division of Cadiz City, where Project PAT was implemented. They were in a strategic position to observe the effects of the program on student nutrition, attendance, and engagement in school activities, as well as its role in promoting awareness of food waste reduction among learners.

The third group comprised beneficiaries of the program across all schools of District V who had directly received food and nutrition assistance through Project PAT. These included 129 out of 1,210 respondents from Cadiz West I Elementary School; 95 out of 893 respondents from Don Luis Consing Elementary School; 26 out of 248 respondents from Egido Fernandez Elementary School; 16 out of 146 respondents from Luis Uychiat Elementary School; 75 out of 710 respondents from Progreso Elementary School; and finally, 17 out of 162 respondents from San Rafael Elementary School. Their responses provided firsthand accounts of the program’s impact on household food security, health, and day-to-day living conditions.

**Table 1**

*Sampling Distribution of Respondents per School*

School ID No.	School Population	Sample
117561 Cadiz West I ES	1,210	129
117563 Don Luis Consing ES	893	95
117565 Egido Fernandez ES	248	26
117564 Luis Uychiat ES	146	16
117567 Progreso ES	710	75
117568 San Rafael ES	162	17
<b>Total</b>	<b>3,369</b>	<b>358</b>

By engaging these diverse yet interconnected groups, the study captured a comprehensive picture of Project PAT’s implementation processes, perceived benefits, challenges, and relevance to both food security and environmental sustainability.

### *Sampling Technique*

The study utilized a stratified proportionate random sampling technique to determine the number of participants from each of the six schools under District V. This sampling method was chosen to ensure that every school was fairly represented according to its population size, thereby maintaining the accuracy and balance of the data gathered. The total population of learners from



the six participating schools—Cadiz West I Elementary School, Don Luis Consing Elementary School, Egido Fernandez Elementary School, Luis Uychiat Elementary School, Progreso Elementary School, and San Rafael Elementary School—was 3,369. Using Slovin's formula with a five percent (5%) margin of error, the total sample size was computed to be 358 respondents. The number of respondents per school was determined proportionally to each school's population to ensure that larger schools contributed a greater number of participants than smaller ones.

Based on the proportional allocation, the corresponding sample sizes were as follows: 129 respondents from Cadiz West I Elementary School, 95 from Don Luis Consing Elementary School, 26 from Egido Fernandez Elementary School, 16 from Luis Uychiat Elementary School, 75 from Progreso Elementary School, and 17 from San Rafael Elementary School. Within each school, systematic random sampling was employed to identify individual respondents. The sampling interval was computed by dividing the total number of students in each school by the required number of samples. The computed intervals ranged from approximately nine to ten; thus, every ninth student on the school's master list was selected as a participant. The first respondent was randomly chosen from the first nine names, and succeeding participants were chosen by adding the interval until the required number of respondents was reached.

This method ensured that the sample was both representative and unbiased, capturing the diversity of learners across schools while maintaining a practical and efficient procedure for respondent selection. The use of stratified proportionate random sampling also guaranteed that each school's population size was duly reflected in the overall sample composition, thereby enhancing the reliability and generalizability of the study's findings.

### ***Research Instrument***

The main research instrument used in this study was a structured survey questionnaire designed by the researcher to gather quantitative data on the implementation and perceived relevance of Project Pagkaon Aton Tatapon (PAT). The questionnaire was developed based on the objectives of the study and guided by existing literature on food security, nutrition programs, and environmental sustainability.

The instrument was divided into two major parts. The first part focused on the respondents' demographic profile, including information such as their role or position in the program, years of involvement, and school affiliation. This section helped categorize the respondents and determine whether differences in background variables influenced their responses.

The second part of the questionnaire assessed both the level of implementation and the perceived relevance of Project PAT. This section covered key components such as (1) utilization of resources and partnerships, (2) delivery of food recovery and redistribution services, and (3) promotion of community participation and sustainability practices. The indicators under these components were designed not only to measure how frequently and effectively the activities were carried out, but also to reflect how these practices contribute to food security, nutrition improvement, and environmental sustainability. In this way, the relevance of the program was embedded within the implementation indicators, capturing how stakeholders perceive its alignment with national and local policies and community needs.

All items in the questionnaire were rated using a five-point Likert scale, where the respondents indicated the extent to which they agreed or disagreed with each statement. The scale ranged from 1 – Very Low, 2 – Low, 3 – Moderate, 4 – High, and 5 – Very High. This format allowed the researcher to quantify perceptions and evaluate the overall level of implementation and relevance of the program.

### ***Validity and Reliability***

Content validity was confirmed by nine experts in research, education, nutrition, and environmental management, who assessed the clarity, relevance, and comprehensiveness of each item, yielding robust content validity. Reliability was assessed via a pilot study with 30 participants, producing a Cronbach's alpha of 0.94, which signifies excellent internal consistency. Domain-specific reliability coefficients also surpassed acceptable thresholds, verifying the instrument's validity and reliability for data collection.

### ***Data Gathering Procedure***

Prior to conducting the study, the researcher obtained the required permissions and approvals from relevant authorities. A formal request letter was submitted to the Schools Division Superintendent of Cadiz City and the principals of the involved



schools in District V, seeking permission to administer the survey and collect data from teachers, feeding coordinators, program implementers, and beneficiaries. The researcher adhered strictly to all ethical standards and institutional protocols during the entire data collection phase.

Once approvals were granted, the researcher distributed the validated survey instruments to the chosen participants. The study's objectives were thoroughly explained, highlighting that involvement was optional and all responses would remain strictly confidential. Participants were required to review and sign an informed consent form prior to completing the questionnaire, indicating their voluntary agreement to take part.

The researcher personally oversaw the survey administration to confirm that directions were clearly comprehended and all questions were fully addressed. Participants received sufficient time to finish the questionnaire, with collection occurring right after completion to prevent any loss or postponement of replies. For unavailable respondents during the first visit, alternative appointments were scheduled to achieve full retrieval.

Following data collection, the researcher meticulously reviewed and sorted the returned questionnaires for precision and wholeness. The data were then inputted, summarized, and subjected to statistical analysis using descriptive and inferential methods, including means, standard deviations, and Pearson's correlation coefficient. These techniques assessed the implementation level and significance of Project Pagkaon Aton Tatapon, as well as the associations among the variables.

This methodical approach to data gathering guaranteed the acquisition of dependable and precise data, forming a robust foundation for valid conclusions and recommendations to enhance and sustain Project Pagkaon Aton Tatapon.

## *Data Analysis*

Once the researcher gathered all the data, they proceeded with the organization, coding, and statistical analysis. The responses from the validated survey questionnaires were carefully checked for completeness and accuracy before being encoded into the Statistical Package for the Social Sciences (SPSS) software for analysis. The study utilized both descriptive and inferential statistical tools to interpret and analyze the collected data in accordance with its objectives. For the descriptive analysis, the researcher employed frequency counts, percentages, means, and standard deviations to describe the general trends and patterns of responses. These statistical measures were used to determine the level of implementation of Project Pagkaon Aton Tatapon (PAT) in terms of resource utilization and partnerships, delivery of food recovery and redistribution services, and promotion of community participation and sustainability practices. They were also used to determine the level of relevance of Project PAT as perceived by stakeholders in relation to food security, nutrition, and environmental sustainability policies.

For the inferential analysis, the study used Pearson's Product-Moment Correlation Coefficient (Pearson  $r$ ), processed through SPSS, to determine the significant relationship between the level of program implementation and its perceived relevance among stakeholders. This statistical test measured the strength and direction of the linear relationship between the two main variables of the study. The result indicated whether a higher level of implementation was associated with a higher perception of relevance, or vice versa. The computed values were then interpreted using established statistical guidelines, with a significance level set at 0.05. This meant that because the computed p-value was less than 0.05, the relationship between the variables was considered statistically significant. The findings obtained from these analyses were summarized and presented in tabular form for clarity and precision. The interpretation of these results served as the basis for formulating conclusions and recommendations that contributed to the enhancement, sustainability, and policy alignment of Project Pagkaon Aton Tatapon (PAT) in the Division of Cadiz City and beyond.

## *Ethical Considerations*

Ethical standards were strictly observed throughout the study to protect participants' rights and welfare. Participation was voluntary, and informed consent was obtained prior to data collection. The researcher ensured confidentiality and anonymity by coding responses and securely storing data, which only they could access. Participants were also informed of their right to withdraw at any time, and all procedures were conducted with integrity, respect, and adherence to ethical research principles.

## **RESULTS AND DISCUSSION**



The results were organized according to the Statement of the Problem, emphasizing the level of implementation and relevance of Project Pagkaon Aton Tatapon (PAT), along with the relationship between these variables. Statistical tools used included the mean, standard deviation, and Pearson product-moment correlation coefficient.

**Table 2**

*Level of Implementation of Project PAT in Terms of Utilization of Resources and Partnerships*

Indicators	M	SD	Interpretation
Providing enough food/materials	4.00	0.45	High
Receiving donations regularly	4.00	0.42	High
Coordination with LGU/organizations	4.00	0.48	High
Food safety and cleanliness	5.00	0.21	Very High
Volunteer/staff assistance	5.00	0.25	Very High
Availability of equipment/storage	5.00	0.30	Very High
Organized feeding area	4.00	0.47	High
School-community cooperation	5.00	0.28	Very High
Sustained feeding support	4.84	0.37	Very High
Proper use of resources	4.81	0.48	Very High

Project PAT's implementation, in terms of resource utilization and partnerships, yielded a composite mean of 4.67, indicating consistently strong performance across indicators. Responses were closely clustered, suggesting that participants shared similar positive perceptions regarding the availability of resources and operational support.

High ratings in food safety, manpower assistance, and equipment availability suggest that the program has established a stable operational foundation necessary for effective service delivery. This finding supports the Food and Agriculture Organization (2022), which emphasized that adequate resources and proper food handling are essential to ensuring the success of food recovery initiatives.

However, relatively lower ratings in coordination with external stakeholders and the provision of materials indicate slight inconsistencies in partnership engagement. This observation aligns with the World Bank (2022), which noted that community-based programs often face challenges in sustaining strong external linkages. Overall, the results suggest that while internal resource management is effective, strengthening external collaboration could further enhance implementation.

**Table 3**

*Level of Implementation of Project PAT in Terms of Delivery of Food Recovery and Redistribution Services*

Indicators	M	SD	Interpretation
Safe food collection	4.40	0.73	High
Timely food delivery	4.67	0.60	Very High
Consistent feeding schedule	4.26	0.66	High
Adequate food portions	4.84	0.49	Very High
Nutritious food preparation	5.00	0.00	Very High
Hygiene and safety practices	5.00	0.00	Very High
Beneficiary satisfaction	4.84	0.37	Very High
Minimizing food waste	4.67	0.65	Very High
Accurate record keeping	4.81	0.50	Very High
Orderly feeding operations	4.67	0.57	Very High

The implementation of Project PAT in terms of food recovery and redistribution services produced a composite mean of 4.72, reflecting a high level of consistency in service delivery. The low variability in responses indicates that stakeholders generally agreed on the effectiveness of the program's operational processes.

Indicators related to food quality, hygiene, and beneficiary satisfaction received the highest ratings, suggesting that the program is responsive to the needs of its recipients. These findings are consistent with those of the World Food Programme (2023), which highlighted that proper food handling and timely distribution are critical to successful food recovery systems.



Meanwhile, slightly lower ratings in scheduling and food collection point to minor operational challenges. Such variations are common in similar programs, as noted by the Food and Agriculture Organization (2022), particularly in managing logistics and coordination. Despite these minor inconsistencies, the overall results indicate that the program effectively delivers its intended services.

**Table 4**

*Level of Implementation of Project PAT in Terms of Community Participation and Sustainability Practices*

Indicators	M	SD	Interpretation
Community involvement	4.84	0.37	Very High
Volunteer participation	4.67	0.59	Very High
Food waste education	4.40	0.73	High
Food sharing practices	4.40	0.73	High
Gardening initiatives	4.84	0.37	Very High
Awareness on food waste	4.10	0.96	High
Influence on other schools	3.84	0.82	High
Environmental cleanliness	4.84	0.37	Very High
Value of sharing	4.96	0.19	Very High
Long-term sustainability habits	4.14	0.94	High

The findings for community participation and sustainability practices yielded a composite mean of 4.50, indicating that stakeholder engagement is generally strong and consistent. Respondents demonstrated positive perceptions of community involvement, particularly in activities related to environmental practices and shared responsibility.

This result supports the findings of the Organisation for Economic Co-operation and Development (2023), which emphasized that active community participation enhances the effectiveness and sustainability of development programs.

However, comparatively lower ratings in long-term sustainability practices and influence on other schools suggest that while engagement is evident, its long-term impact and expansion remain limited. This implies that sustainability initiatives may still need to be strengthened through more structured and continuous efforts. The findings indicate that participation is present, but further development is needed to ensure lasting behavioral and institutional change.

**Table 5**

*Level of Implementation of Project PAT in Terms of Partnerships and Collaboration Mechanisms*

Indicators	M	SD	Interpretation
Clear partner roles	4.67	0.59	Very High
Active participation of partners	4.81	0.50	Very High
LGU support	3.61	0.78	High
Private sector support	3.61	0.78	High
Coordination effectiveness	4.81	0.50	Very High
Communication with partners	4.67	0.59	Very High
Improved feeding services	3.72	0.78	High
Sustained support	4.81	0.50	Very High
Recognition of partners	4.67	0.59	Very High
Strengthened partnerships	4.67	0.65	Very High

The results indicate that partnerships and collaboration mechanisms obtained a composite mean of 4.41, reflecting generally effective coordination among stakeholders. The consistency of responses suggests that communication and role clarity among partners are well established.

This finding is consistent with the United Nations Development Programme (2023), which emphasized that collaborative governance improves program implementation and shared accountability. Strong coordination and communication contribute significantly to the overall success of community-based initiatives.

However, lower ratings in local government and private sector support indicate that external partnerships are not yet fully maximized. This observation aligns with the World Bank (2022), which identified limited stakeholder engagement as a common challenge in sustaining programs. Strengthening these external linkages may enhance resource support and long-term program sustainability.



**Table 6**

*Level of Relevance of Project PAT*

Indicators	M	SD	Interpretation
Reduces food waste	4.84	0.37	Very High
Supports feeding program	5.00	0.00	Very High
Promotes food sharing	4.96	0.19	Very High
Improves nutrition	4.84	0.37	Very High
Strengthens community cooperation	4.67	0.59	Very High
Raises environmental awareness	4.40	0.73	High
Encourages volunteerism	4.67	0.59	Very High
Supports sustainability	4.40	0.73	High
Beneficial to school	4.96	0.19	Very High
Should be continued	5.00	0.00	Very High

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**Table 7**

*Pearson Product-Moment Correlation Between Implementation and Relevance*

Variable Pair	Pearson r	Sig. (2-tailed)	N	Interpretation
Implementation & Relevance	0.890	0.000	358	Very Strong Positive Correlation

The results reveal a strong positive relationship between the level of implementation and the perceived relevance of Project PAT. This indicates that improvements in program execution are closely associated with increased recognition of its value among stakeholders.

This finding supports the World Bank (2022), which emphasized that well-implemented programs are more likely to be perceived as effective and meaningful. It also aligns with the United Nations Development Programme (2023), which highlighted that implementation quality directly influences program outcomes and stakeholder engagement.

The strength of this relationship suggests that implementation is a key factor in shaping perceptions of relevance. As the program becomes more efficient and consistent, stakeholders are more likely to recognize its benefits and overall impact.

The program should continue to strengthen its implementation by maintaining efficient resource utilization, consistent food recovery and redistribution services, and high standards of food safety and quality. This is supported by existing literature, which emphasizes that effective program implementation, adequate resources, and proper food handling are essential to achieving successful outcomes in school-based feeding programs.

Furthermore, the study recommends strengthening sustainability practices through long-term initiatives such as school gardening, waste management education, and environmental awareness campaigns. This aligns with the recommendations of global and local studies, including the UNEP Food Waste Index Report (2024), which highlights the importance of community-level interventions and sustainable practices in reducing food waste and promoting food security.

The enhancement of community participation and stakeholder involvement is also highly encouraged. Literature suggests that food recovery and redistribution programs are most effective when there is strong collaboration among schools, local



governments, and community members. This supports the study's finding that active participation contributes to the successful implementation and perceived relevance of the program.

In addition, partnerships with local government units and private organizations should be further strengthened to ensure continuous support in terms of funding, logistics, and technical expertise. This recommendation is consistent with the Philippine Plan of Action for Nutrition (PPAN) 2023–2028, which emphasizes the role of multisectoral collaboration in addressing malnutrition and promoting sustainable food systems. Finally, the replication and expansion of Project PAT in other schools and communities are highly recommended. Previous studies and program reports highlight those integrated approaches combining food recovery, feeding programs, and community engagement are effective strategies for addressing food insecurity and environmental concerns. Future researchers are also encouraged to conduct further studies to examine the long-term impact and scalability of the program.

## CONCLUSION

Based on the findings of the study, it can be concluded that Project Pagkaon Aton Tatapon (PAT) demonstrates a generally strong level of implementation and is widely perceived as relevant in addressing concerns related to food security, nutrition, and environmental sustainability within the school and community context. The program reflects organized operational processes, consistent service delivery, and active stakeholder participation, which contribute to its positive outcomes.

The high level of implementation suggests that key components such as resource management, food recovery practices, and coordination mechanisms are functioning effectively. Similarly, the program's perceived relevance indicates that it is responsive to the needs of its beneficiaries and aligned with broader efforts to reduce food waste and improve nutritional support. However, these findings should be interpreted with caution, as they are based on respondents' perceptions and may not fully capture long-term or objective program impacts.

Furthermore, the significant positive relationship between implementation and relevance highlights the importance of maintaining quality program execution. The results suggest that improvements in implementation are associated with stronger recognition of the program's value among stakeholders, reinforcing the role of effective management in shaping program outcomes.

Despite these positive findings, several limitations must be acknowledged. The study was limited to selected elementary schools in one district, which may restrict the generalizability of the results to other contexts or regions. In addition, the reliance on self-reported data may introduce response bias, as participants may have provided socially desirable answers. These limitations suggest that the conclusions drawn should be viewed within the specific scope of the study.

Moreover, while the program shows promising results, areas such as long-term sustainability practices, expansion to other schools, and the strengthening of external partnerships require further attention. Addressing these aspects is essential to support the continued improvement and potential scalability of the program.

Future research may explore the long-term impacts of Project PAT using longitudinal or mixed-method approaches to better assess its effectiveness over time. Studies may also examine its applicability in different regions or educational settings, as well as its influence on learners' health, academic performance, and environmental behavior. Such investigations would provide a more comprehensive understanding of the program's broader impact and sustainability.

## RECOMMENDATIONS

The recommendations of this study are grounded in the findings that Project Pagkaon Aton Tatapon (PAT) demonstrated a very high level of implementation and relevance, yet revealed areas for improvement, particularly in sustainability practices and external stakeholder engagement. To enhance the effectiveness, continuity, and scalability of the program, the following recommendations are proposed for policymakers, practitioners, and future researchers.

### *Policy*

Schools should formalize partnerships through Memoranda of Understanding (MOUs) with local government units (LGUs) and private organizations to ensure sustained support and resource sharing. The Department of Education (DepEd) may also consider integrating food recovery programs into official school sustainability frameworks to institutionalize their implementation and promote long-term impact.



## *Practice*

Schools and program implementers should establish structured monitoring systems, such as quarterly evaluation reports, to track progress and identify areas for improvement. The integration of school-based gardening and waste segregation programs is also recommended to strengthen sustainability practices. Additionally, regular training on food safety and sustainability should be conducted for teachers, staff, and volunteers to maintain program quality and compliance with standards.

## *Research*

Future researchers are encouraged to conduct longitudinal studies to examine the long-term effects of Project PAT on learners' nutrition and academic performance. Further studies may also explore the scalability and adaptability of the program in other districts and regions to support broader implementation and policy development.

## *Conflict of Interest*

The researcher declares that there are no known conflicts of interest, financial or otherwise, that could have influenced the conduct, results, or interpretation of this study on the implementation and relevance of Project Pagkaon Aton Tatapon (PAT). The research was carried out independently, and no external funding, sponsorship, or personal relationships affected the objectivity and integrity of the work. All data were collected, analyzed, and reported with transparency and in accordance with ethical research standards.

## REFERENCES

- Ansell, C., & Gash, A. (2021). Collaborative governance in theory and practice revisited. *Journal of Public Administration Research and Theory*, 31(1), 1–20. <https://doi.org/10.1093/jopart/muaa032>
- Aurino, E., Fernandes, M., & Penny, M. E. (2020). The effects of school feeding programs on child health and education outcomes: A systematic review. *Food Policy*, 95, 101950. <https://doi.org/10.1016/j.foodpol.2020.101950>
- Department of Education. (2022). School-Based Feeding Program (SBFP) guidelines. <https://www.deped.gov.ph>
- Filimonau, V., & De Coteau, D. (2020). Food waste management in hospitality operations: A critical review. *Tourism Management*, 71, 234–245. <https://doi.org/10.1016/j.tourman.2018.10.009>
- Food and Agriculture Organization. (2022). The state of food and agriculture 2022. <https://www.fao.org>
- Food and Agriculture Organization. (2023). Food loss and waste in the Philippines. <https://www.fao.org>
- Gelli, A., Neeser, K., Drake, L., & Bundy, D. (2020). School feeding programs in low-income settings: Evidence and policy implications. *World Development*, 134, 105045. <https://doi.org/10.1016/j.worlddev.2020.105045>
- National Economic and Development Authority. (2023). Philippine development plan and food security initiatives. <https://www.neda.gov.ph>
- National Nutrition Council. (n.d.). Philippine Plan of Action for Nutrition (PPAN) 2023–2028. <https://nnc.gov.ph>
- Organisation for Economic Co-operation and Development. (2023). Community participation and development programs. <https://www.oecd.org>
- Principato, L., Secondi, L., & Pratesi, C. A. (2021). Reducing food waste: An investigation on the behavior of Italian consumers. *Sustainability*, 13(3), 1147. <https://doi.org/10.3390/su13031147>
- Reed, M. S., Vella, S., Challies, E., de Vente, J., Frewer, L., Hohenwallner-Ries, D., ... van Delden, H. (2020). A theory of participation: What makes stakeholder engagement effective? *Sustainability Science*, 15(4), 1009–1020. <https://doi.org/10.1007/s11625-020-00809-0>
- United Nations Development Programme. (2023). Sustainable development and community engagement. <https://www.undp.org>
- United Nations Environment Programme. (2024). Food Waste Index Report 2024: Think eat save—Tracking progress to halve global food waste. <https://www.unep.org/resources/publication/food-waste-index-report-2024>
- United Nations Environment Programme. (2024, March 27). World squanders over 1 billion meals a day—UN report. <https://www.unep.org/news-and-stories/press-release/world-squanders-over-1-billion-meals-day-un-report>
- World Bank. (2022). School feeding programs and nutrition outcomes. <https://www.worldbank.org>
- World Bank. (2023). Food security and food waste in the Philippines. <https://www.worldbank.org>
- World Food Programme. (2022). State of school feeding worldwide 2022. <https://www.wfp.org>
- World Food Programme. (2023). Food recovery and redistribution systems. <https://www.wfp.org>
- Xue, L., Liu, G., Parfitt, J., Liu, X., Van Herpen, E., Stenmarck, Å., O'Connor, C., & Östergren, K. (2021). Missing food, missing data? A critical review of global food losses and food waste data. *Environmental Science & Technology*, 55(3), 1608–1620. <https://doi.org/10.1021/acs.est.0c05139>