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"An Evaluation of the Perceived Needs and Investment for the Implementation of the Philippine Agricultural and Fisheries Extension System (PAFES) in LGU-Guimaras"

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ABSTRACT

The Philippine Agricultural and Fisheries Extension System (PAFES) plays a pivotal role in enhancing the productivity, sustainability, and economic stability of the agricultural and fisheries sectors in the Philippines. This study evaluates the perceived needs and investments for the successful implementation of PAFES in the Local Government Unit (LGU) of Guimaras, focusing on the areas that require immediate attention to ensure its effective execution. The research highlights key needs identified by local agricultural offices, including the provision of service vehicles for transportation, additional technical personnel, and increased funding to sustain and expand PAFES activities. The study also explores investment patterns over three years (2021-2023), revealing a consistent prioritization of operational and personnel-related expenses, with notable fluctuations in capital outlay. The increase in funding over the years reflects an emerging recognition of the need for infrastructure development and personnel retention.

Keywords – extension support, agricultural program, funding sources, collaboration strategies, technical preparation, local government

INTRODUCTION

The Philippine Agricultural and Fisheries Extension System (PAFES) has evolved as a pivotal framework for supporting the agricultural and fisheries sectors in the Philippines, aiming to enhance productivity, sustainability, and economic stability for local communities.

Historically, the need for agricultural extension services emerged in response to the challenges faced by farmers and fisherfolk in adapting to modern technologies, market demands, and environmental changes. Over the years, PAFES has become integral in providing training, advisory services, and resources to enhance the skills of agricultural workers and facilitate their transition to more sustainable practices.

According to Maulu et al. (2021), a well-structured extension system is essential for fostering the adoption of new technologies, while Narine et al. (2019) emphasize the importance of engaging local communities in the decision-making process for successful technology adoption. The role of extension services has been critical in addressing regional disparities in agricultural development, with tailored training and resource allocation aimed at meeting the unique needs of local farmers and fisherfolk (Kresna & Hanifa, 2023). Despite these efforts, there remain significant research gaps in understanding the specific perceived needs, investments, and training activities required to implement PAFES effectively in various Local Government Units (LGUs), including Guimaras.





While previous studies have explored the general effectiveness of agricultural extension programs, limited attention has been given to the local-level implementation challenges, particularly in terms of resource allocation and the customization of training programs to suit regional contexts.

This research seeks to bridge these gaps by evaluating the specific needs and investments within the LGU of Guimaras, thereby addressing the broader question of how PAFES can be tailored to maximize its impact on local agricultural and fisheries development.

Objectives of the Study

- 1. To evaluate the needs and investment of LGU-Guimaras for the implementation of PAFES.
- 2. To propose strategies for effective implementation and management of the PAFES in Guimaras based on the findings of the evaluation.

Legal and Conceptual Framework

This study was anchored to the "OneDA Reform Agenda" of the Department of Agriculture based on consolidation, modernization, industrialization, professionalization, and science-based vital strategies to make the agriculture sector competitive. This reform agenda includes strategies such as farm mechanization and infrastructure investments, climate change adaptation and mitigation measures, global trade, export development and promotion, education and training, agribusiness management, youth and women engagement, ease of doing business, and transparent procurement. Province-led Agriculture and Fisheries Extension System (PAFES) was identified as one of the eighteen (18) key strategies for the implementation of the abovementioned agenda.

Significance of the Study

The result of this evaluation is beneficial as baseline data on the needs and investment for the establishment of Province-led Agriculture and Fisheries Extension System (PAFES) by the LGU-Guimaras.

METHODOLOGY

The Office of the university's Vice President for Research, Extension, Training, and Innovation managed the project. The team comprised a project leader, assistant project leaders, and project coordinators.

Activities were implemented and closely monitored based on the Approved Work and Financial Plan. The inception meeting was conducted at the start of the project and ended with the presentation of the output before its submission to DA Region VI.

Both primary and secondary data were collected through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) using blended strategies (face-to-face and/or virtual interviews). Secondary data and other relevant documents and materials were taken from the Provincial Office for Agricultural Services, Local Government Units, and the Provincial Government of Guimaras.

The respondents of the study include the LGU personnel (provincial and municipal) legislators in charge of agriculture and fisheries, PPDCS and budget officers, and those who are engaged in the agriculture and fisheries sectors. An evaluation instrument crafted by GSU based on the objectives of the DA-ATI was utilized to gather relevant data to assess LGUs' needs and investment for the implementation of PAFES.

RESULTS AND DISCUSSIONS

Evaluation of Perceived Needs of Agricultural Office

The data on the needs of the Agriculture office of the provincial LGU of Guimaras reveals key areas that must be addressed to ensure the effective implementation of the Philippine Agricultural and Fisheries Extension System (PAFES). A primary concern is the need for service vehicles/transportation (82.35%), which highlights





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the challenge of reaching remote communities for the timely delivery of extension services. This is closely followed by the need for additional agri-technical personnel/manpower (76.47%), indicating a shortage of trained extension workers to provide the necessary technical support. Additional budget/funding (73.53%) is also crucial for sustaining PAFES activities, enabling investments in infrastructure, technology, and research. The need to strengthen technical training/workshops for extension workers (52.94%) suggests that existing programs may not be sufficient, and ongoing professional development is needed to enhance service delivery. While access to modern technology (35.29%) is important, it is ranked lower in priority, reflecting the increasing role of technology in improving agricultural practices but also pointing to more immediate needs. The absence of demand for additional facilities and equipment (0.00%) and load allowance (0.00%) suggests these are less critical at the moment, but their absence may reflect a focus on operational aspects over other support structures. Addressing these priorities—especially transportation, manpower, and funding—will significantly improve PAFES' reach and effectiveness, leading to better outcomes in agricultural and fisheries productivity in the province.

As discussed by Liu et al., (2021), the implementation of an effective agricultural and fisheries extension system in the Philippines necessitates a comprehensive understanding of local needs, challenges, and the integration of various management strategies. Particularly, perceived needs in the agricultural office relate to management efficiency, improving governance, enhancing resource and addressing marginalization.

Table 1. Perceived needs of Provincial LGU Agriculture Office.

Needs	Province	
	F	%
Service Vehicle/ Transportation	28	82.35
Additional Agri-Technical Personnel/ Manpower	26	76.47
Additional Budget/Funding for Agriculture and Fisheries	25	73.53
Strengthen technical Training/ Workshop of Extension Workers	18	52.94
Access to modern technology/devices/ gadgets/equipment	12	35.29
Additional Facilities & equipment	0	0.00
Load Allowance	0	0.00

Total Direct Investment for Agriculture and Fisheries of the Province

The investment data for the years 2021, 2022, and 2023 highlights the allocation of funds across various expense classes, providing valuable insights into the financial support for the implementation of the Philippine Agricultural and Fisheries Extension System (PAFES).

In 2021, the total investment amounted to ₱30,791,103.00, with the highest allocation directed towards the Maintenance and Other Operating Expenses (MOOE) at ₱15,946,755.00, followed by Personal Services (PS) at ₱14,644,348.00, and a minimal investment of ₱200,000.00 for Capital Outlay (CO). The investment focus on MOOE indicates the prioritization of operational needs, such as training, workshops, and other essential services that would directly support extension workers and beneficiaries.

In 2022, the total investment increased to ₱45,626,445.00, with significant growth in both MOOE (₱24,742,000.00) and CO (₱5,750,000.00), alongside a relatively modest rise in PS (₱15,134,445.00). The jump in MOOE reflects the emphasis on strengthening operational activities, possibly supporting larger-scale





component of PAFES.

less reliant on external funding.

training programs and field activities. The increase in CO suggests a commitment to enhancing infrastructure and acquiring equipment or technology necessary for more efficient delivery of extension services, a critical

For 2023, the total investment was ₱33,088,331.00, with the distribution slightly shifting. PS remained the largest category at ₱15,926,831.00, but there was a noticeable decrease in MOOE to ₱13,756,500.00 and CO dropped to ₱3,405,000.00. This could reflect a more focused effort on improving the salary and benefits of personnel, which could enhance workforce motivation and retention, while slightly reducing the emphasis on operational costs and capital investments. The decrease in MOOE may suggest that, while still crucial, the operational demands for extension activities may have been better streamlined or optimized by 2023, making it

Overall, the financial data illustrates a trend of prioritizing personal services to ensure a qualified and motivated workforce, while operational and capital investments fluctuated based on the evolving agricultural and needs. The gradual increase in CO in 2022 highlights an effort to bolster infrastructure and technology, supporting the expansion of agricultural and fisheries extension services. In 2023, the emphasis appeared to shift slightly towards enhancing personnel compensation and streamlining operations, ensuring long-term sustainability and efficiency in PAFES implementation.

This was supported by (Salqaura et al., 2019), that the role of local government units (LGUs) in the investment and implementation of agricultural and fisheries extension systems in the Philippines is crucial for enhancing food security and economic resilience. As added by Bueno (2014), the Local Government Code of 1991 underscores the importance of LGUs in responding to public policies in agriculture and fisheries, particularly in areas such as enterprise development and sustainable resource management. A strong governance framework at the local level is essential for the effective allocation of resources, which can significantly drive economic growth in the agriculture and fisheries sectors.

Investment from local government units has shown a direct correlation with productivity in these sectors. For instance, fiscal policies that allocate sufficient funding to agriculture can result in increased gross regional domestic product (GRDP) from agricultural activities, positively impacting local economies (Salqaura et al., 2019). LGUs have a critical role in ensuring that financial resources are directed toward improving infrastructure, research, and development initiatives that can foster agricultural productivity and sustainability (Burlakoti & Nettle, 2024). Moreover, the establishment of web-based information systems aimed at facilitating coordinated governance in coastal and agricultural zones indicates LGUs' commitment to improving management capabilities through technology, resulting in better service delivery and stakeholder engagement (Balilo et al., 2020).

Table 2. Investment for the year 2021.

Year	Expense Class	Total Investment
2021	PS	14,644,348.00
	MOOE	15,946,755.00
	СО	200,000.00
	Total	30,791,103.00

Table 3. Investment for the year 2022.

Year	Expense Class	Total Investment
2022	PS	15,134,445.00



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I N	MOOE	24,742,000.00
C	CO	5,750,000.00
Т	Γotal	45,626,445.00

Table 4. Investment for the year 2023.

Year	Expense Class	Total Investment
2023	PS	15,926,831.00
	MOOE	13,756,500.00
	СО	3,405,000.00
	Total	33,088,331.00

CONCLUSIONS

The evaluation of the perceived needs and investments for the implementation of the Philippine Agricultural and Fisheries Extension System (PAFES) in Guimaras highlights several critical areas that must be addressed for its successful implementation. The primary needs identified include service vehicles for transportation, additional agricultural technical personnel, and increased funding, all of which are essential to improve service delivery, enhance workforce capabilities, and ensure sustainability. The investment data from 2021 to 2023 shows a trend of prioritizing personnel services and operational expenses, with a notable increase in funding over the years, reflecting the importance placed on strengthening infrastructure, training, and human resources. However, challenges remain in balancing the need for modern technology and infrastructure with more immediate operational and workforce demands. Based on these findings, it is recommended that LGUs increase investments in service vehicles to improve access to remote areas, enhance recruitment and training of agricultural personnel, and further invest in infrastructure and capital outlay to support the expansion of PAFES. Additionally, strengthening the monitoring and evaluation frameworks, focusing on climate resilience, and integrating technology into agricultural practices are crucial strategies to ensure the program's success and long-term sustainability. By addressing these needs, the LGU of Guimaras can strengthen its agricultural and fisheries sectors, improve food security, and enhance the livelihoods of local farmers and fisherfolk, contributing to the overall success of PAFES in the region.

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