

Performance Assessment of the PhilRice Farm Service Center: An Analysis of Service Quality and Profitability

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Abstract: The Farm Service Center (FSC) caters the farm service needs of the Central Experiment Station (CES) and its extension areas. It provides custom farm services for research and seed production, focusing on land preparation, crop establishment, and harvesting. The FSC helps optimize farming practices, save time and costs, and enhance efficiency through mechanized equipment and efficient techniques. The FSC's organizational structure comprised four sub-units and employed a total of 24 personnel. A study was conducted to evaluate the performance of the PhilRice Farm Service Center by assessing its service quality and financial performance. Through a combination of qualitative and quantitative approaches, data were collected and analyzed at the Philippine Rice Research Institute Central Experiment Station in Maligaya, Science City of Muñoz, Nueva Ecija. Purposive sampling was utilized to select respondents, including service providers and clients who had availed FSC services from 2021 to 2022. The study employed interviews, customer satisfaction surveys, and document analysis as data collection methods. Qualitative feedback from clients was gathered to evaluate service quality, while quantitative analysis focused on profitability. Results from the customer satisfaction survey revealed positive feedback across various service quality categories, with clients expressing high levels of satisfaction regarding reliability and quality, responsiveness, assurance and integrity, outcome, and access to facilities. These satisfaction ratings remained consistently high for both 2021 and 2022. Regarding financial performance, the FSC experienced net losses in both years. However, subsidies resulted in a positive capital. The FSC's generated revenue increased from 2021 to 2022, accompanied by a rise in operating expenses. The performance assessment of the PhilRice Farm Service Center provides valuable insights, emphasizing positive feedback on service quality and the significance of achieving financial sustainability. The results serve as guide to strategize and enhance the current center operations to become profitable and sustainable.

Key Words - PhilRice, Farm Service Center, Service Quality, Profitability.

I. INTRODUCTION

Mechanization of farming operations has become a major cornerstone of current policy in agriculture. The enactment of two major legislations namely RA 8435 also known as the

Agriculture and Fisheries Modernization Act (AFMA) and more recently RA 10601 or the Agriculture and Fisheries Mechanization (AFMech) Law has led to the increasing use of mechanized technology in agricultural programs.

As such, DA Memo No.49 Series of 2017, IRR, Article III, Section 9, Rule 9.1.3 "Establishment of Agricultural and Fishery Machinery Service Centers" states that "The DA, through PhilRice, in collaboration with AIs, private sector, and other concerned DA agencies, shall establish model of farm mechanization service centers at PhilRice branch and satellite stations or other appropriate sites throughout the country for adoption by interested and qualified farmer associations or cooperatives or rural entrepreneurs".

Manuscript revised May 30, 2023; accepted May 31, 2023. Date of publication June 02, 2023.

This paper available online at www.ijprse.com

ISSN (Online): 2582-7898; SJIF: 5.59

As support PhilRice issued Memorandum No. 2021-022 transferring the Farm Operation and Management (FOM) Unit of the Physical Plant Division to the Rice Engineering and Mechanization Division (REMD) effective June 1, 2021. This allowed the centralization of management and servicing of all rice farm machinery and equipment such as handtractor, mechanical transplanter, 4WD tractor, and rotavator within the central experiment station. In addition, during this centralization process, the organization rebranded the Field Operations Management (FOM) unit to Farm Service Center (FSC). This rebranding aimed to reflect the expanded range of services provided by the unit which now offers a diverse array of services, including land preparation, crop establishment, and harvesting, across a substantial total area of 110 hectares dedicated to rice production. Furthermore, the FSC has expanded its scope of service to include research and development sector areas, demonstrating its commitment to innovation and progress in the agricultural field.

Additional services were also added such as milling and drying. These new services contribute to enhancing the overall value chain of rice production and support the organization's goal of providing comprehensive agricultural solutions to its clients.

Finally, to ensure the quality of service for the operations, FSC established particular responsibilities to complete the organizational structure, which is made up of four (4) sub-units: Repair & Maintenance, Field Operation, General Maintenance, and Marketing & Promotion (Financial) as shown in Figure 1.

II. LITERATURE REVIEW

Service quality is a critical aspect of farm service centers, as it directly impacts customer satisfaction and overall performance. A study by Parasuraman et al. (1988) introduced the SERVQUAL model, which has been widely used to measure service quality across various industries. The model identifies five dimensions of service quality: reliability, responsiveness, assurance, empathy, and tangibles. These dimensions can be adapted to assess the quality of service provided by farm service centers.

Profitability is a key indicator of the financial performance of a farm service center. In assessing the profitability of farm service centers, studies commonly analyze financial statements, revenue generation, and cost management practices. Mehta and Chavas (2008) conducted a study on Indian farm service centers, emphasizing the significance of efficient cost

management and service diversification for maintaining profitability.

III. METHOD AND PROCEDURES

3.1 Statement of the Problem

This study focus on the performance assessment of the PhilRice Farm Service Center. Specifically, it aims to:

- Assess the quality of service of the farm service center;
- Evaluate the financial performance; and
- Determine the strengths and weaknesses of the service center.

3.2 Research Design

This study adopted both the qualitative and quantitative approach. The qualitative approach was used to assess the quality of the service, organization and management of PhilRice Farm Service Center. The researchers gathered valuable insights thru the feedback provided by clients who availed the services. The consolidated feedback was used to assess various areas, including customer service, responsiveness to customer needs, and overall satisfaction levels of the center. The quantitative approach was used to assess the financial performance of the center for 2-year operations.

3.3 Locale of the Study

The study was conducted at the Philippine Rice Research Institute Central Experiment Station in Maligaya, Science City of Muñoz, Nueva Ecija.

3.4 Sampling Technique

Purposive sampling was implemented in this study. The respondents to the interview are service providers on agri-machinery custom service provision. Additionally, the data used on this study were the consolidated feedback of clients who availed the services of the FSC from 2021 to 2022.

3.5 Respondents of the Study

The respondents of the study were the PhilRice staff who availed the FSC services. Also, the selected service providers across Science City of Muñoz.

3.6 Research Instruments

The data were gathered through feedback forms and from submitted project terminal report.

3.7 Data Collection

The specific tools used for data collection are described as follows:

3.7.1 Interviews

The researchers used the Key informant interview (KII) with selected service providers within the locality to assess if the rates employed by the FSC is aligned with the prevailing rates offered by other service providers while delivering the same services with high quality output.

3.7.2 Customer Satisfaction Survey

The customer satisfaction survey employed a structured questionnaire to gather feedback from clients in a multi-level rating scale to assess customer satisfaction on various categories such as Reliability & Quality, Responsiveness, Assurance & Integrity, Outcome, and Access & Facility. Each category was rated as 1.00-1.8 "Poor" to 4.21 to 5.00 "Excellent" as shown in Table 1.

Table.1. Satisfaction rating scale

Rating	Range
Poor	1.00-1.8
Fair	1.81-2.6
Satisfactory	2.61-3.40
Very Satisfactory	3.41-4.20
Excellent	4.21-5.00

3.8 Data Analysis

Project terminal report was reviewed and relevant information were extracted. The result of feedback was validated and supplement the data obtained from interviews and surveys, providing a more comprehensive understanding of the case.

IV. RESULTS AND DISCUSSION

4.1 Farm Service Center Organizational Structure

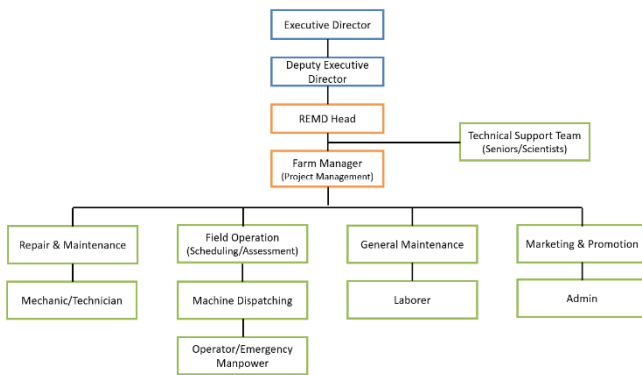


Figure 1. The organizational structure of the PhilRice-FSC.

Figure 1 shows sub-units with its functions as follows: (i) The Field Operation which caters to field operation activities and ensures smooth operation; (ii) the Repair and Maintenance ensures that farm equipment and machinery are reliably available, including the longevity of assets. This section also serves as inspector, coordinator, and custodian of various agricultural farm equipment, tools, and facilities; (iii) the General Maintenance upkeeps the cleanliness of the farm roads, irrigation, and drainage canal; and (iv) Marketing and Promotion which administers and organize facilitation of financial and admin matters.

The PhilRice-FSC is composed of 24 personnel consist of two permanent staff and 22 service contracts. The Division Head is responsible in overseeing the overall operations, strategic planning, and activity coordination within the FSC while the Farm Manager is responsible in overseeing the farm planning & operations, supervision of farm activities, as well as budgeting & reporting.

4.2 Service Quality Assessment

The results of a two-year customer satisfaction survey provide significant insights into the assessment of the service quality provided by PhilRice-FSC. The survey gathered responses from 109 respondents in 2021 and 43 respondents in 2022, collecting their perceptions of different service quality categories such as reliability and quality, responsiveness, assurance and integrity, outcome, and access to facilities.

4.2.1 Demographic Profile

The majority of the 152 total respondents in 2021 and 2022 as shown in Table 2, were male accounting to 97% and 88%, respectively while female respondents accounted only 1% in 2021 and 12% in 2022.

Respondents above the age of 41 are much higher at 61% in 2021 and 67% in 2022 compared to those between 31 and 40 years old, who are 31% in 2021 and slightly lower at 30% in 2022. The youngest responders, aged 20 to 30, will account for 8% in 2021 and 2% in 2022.

In terms of number of years with PhilRice, 72% in 2021 and 81% in 2022 have been with the institute for 11 years or more, 17% in 2021 and reduced to 12% in 2022 with 6 to 10 years, and 10% in 2021 and 7% in 2022 with 5 years or less.

In terms of employment status, 94% in 2021 and 88% in 2022 are service contracts, while 6% in 2021 and 12% in 2022 are permanent staff.

Table 2. Demographic profile of clients.

Item Descriptions	Category	2021		2022	
		Frequency	%	Frequency	%
Sex	Female	1	1%	5	12%
	Male	106	97%	38	88%
	No	2	2%		
	Answer				
Age	20-30	9	8%	1	2%
	31-40	34	31%	13	30%
	41-above	66	61%	29	67%
Years in service	≤ 5	11	10%	3	7%
	6-10	19	17%	5	12%
	11- Above	78	72%	35	81%
	No	1	1%		0%
Employment Status	Permanent	6	6%	5	12%
	Service Contract	103	94%	38	88%

4.2.2 Satisfaction Rating

Table 3 shows clients' satisfaction ratings for both years 2021 and 2022. The center regularly exceeded high standards for reliability and quality, obtaining average ratings of 4.96 in 2021 and 4.84 in 2022. Additionally, an average rating of 4.94 in 2021 and 4.86 in 2022, for promptness in addressing issues and concerns. Same rating was acquired for assurance and integrity for both years. This indicated high moral standards and dependability of the center. Furthermore, the center received 4.94 in 2021 and 4.84 in 2022 for the outcome, which indicated that clients were very satisfied with the prompt completion of services, reasonable service fee charges, and overall service satisfaction. Finally, on accessibility and facility the center received an average rating of 4.95 in 2021 and 4.88 in 2022. Overall, the satisfaction rating of the center was excellent as rated by its clients.

Table.3. Clients' satisfaction rating

Category	Average Category		Respondents	
	2021	2022	2021	2022
Reliability & Quality	4.96	4.84	109	43
Responsiveness	4.94	4.86	109	43
Assurance & Integrity	4.94	4.86	109	43
Outcome	4.94	4.84	109	43
Access & Facility	4.95	4.88	109	43

4.3 Financial Analysis

Table below shows the financial performance of Farm Service Center for CY 2021-2022. The data gathered was based from the project terminal report.

Table.4. Financial performance of Farm Service Center, CY 2021-2022.

ITEM DESCRIPTION	2021	2022
A. Revenue	4,304,011.57	7,653,934.45
B. Operating Expenses	5,617,425.60	8,424,441.22
C. Net Income (A-B)	-1,313,414.03	-770,506.77
D. Subsidy	3,023,649.00	3,710,234.97
E. Capital (C+D)	1,710,234.97	2,939,728.20

Table 4 shows the financial performance of the Farm Service Center for the calendar years 2021 and 2022. In 2021, the FSC was able to generate a total revenue of PHP 4,304,011.57, primarily derived from chargebacks of services from equipment rental, fuel, irrigation fee, and farm custom services provided by the center. This amount represents the total revenue earned during that year. However, the operating expenses of the center for the same period amounted to PHP 5,617,425.60 which exceeded its collections showing a negative net income of PHP 1,313,414.03. PhilRice provided PHP 3,023,649.00 subsidy to FSC as capital for its operation.

In 2022, the revenue significantly increased to PHP 7,653,934.45 which indicated a substantial revenue growth from 2021. After verification with the PhilRice FSC, it is confirmed that payables of 2021 were accounted to 2022. It was explained that during the later months of the year, the billed amount was carried over the following year due to the document processing which is then finalized and processed on the first quarter of 2022, hence the amount was accounted as revenue in 2022.

In addition, increased in revenue shows proportional increase of operating expenses at PHP 8,424,441.22 which attributed mainly from the increased number of personnel from 15 in 2021 to 22 in 2022. Moreover, an additional subsidy of PHP 2,000,000.00 was provided by the management in 2022 that augment its starting capital for the year to PHP 3,710,234.97. However, with a negative income for that year (-PHP 770,506.77), its remaining capital has decreased to PHP 2,939,728.20. While this figure is higher than the previous year, it is important to recognize that it is a combination of the negative income and the subsidy. Thus, despite the positive remaining balance, the FSC still experienced financial

challenges due to higher operational expenses than the revenue generated.

Table.5. FSC services offered and custom rates

SERVICES OFFERED	RATE, PHP
Rotavation	3,700.00
Re-rotavation, <i>ha</i>	3,700.00
1 st harrowing, <i>ha</i>	1,200.00
2 nd harrowing, <i>ha</i>	1,000.00
Final levelling and harrowing, <i>ha</i>	1,500.00
Scraping, <i>h</i>	1,000.00
Machine only	6,800.00
Mechanical transplanting (with seedling prep), <i>ha</i>	10,875.00
Combine harvesting, <i>ha</i>	12,500.00
Hauling, <i>cav</i>	5.00
Road Maintenance (per season)	369,294.18
Bleacher service, <i>h*</i>	500.00

*fixed at P1,500.00 if more than 3 hours

Table 5 shows custom rates of FSC for the services provided and served as the basis for the computation on the payment, indicating the specific charges for various services offered by the center.

Table.6. Non-PhilRice custom rate

ACTIVITY	SERVICE PROVIDER 1	SERVICE PROVIDER 2*	SERVICE PROVIDER 3
A. Rotavation, <i>ha</i>	3,500.00	3,400.00	4,000.00
B. Combine harvesting**	15%	12%	11% for DS 12% for WS

*package rate for A&B; **total harvest

Key informant interview (KII) was conducted with other service providers in terms of custom rates specifically in rotavation and combine harvesting. This is to assess if the rates employed by the FSC is aligned with the prevailing rates offered by other service providers while delivering the same services of high-quality output. The rotavation rate of FSC as compared with other service providers has no significant difference. As for the combine harvesting, it is noted that FSC rate is higher compared to service provider 3 (Table 3). Despite higher rates of the FSC, it can be justified for reasons of providing employment to its workers that help sustain its operation and ensuring the provision of high-quality service to its clients.

4.3 Strength and Weaknesses Identified

4.3.1 Strength

- i. FSC provides excellent services to its clients.
- ii. Centralized management on dispatch of equipment and repair and maintenance.
- iii. Skilled workers.
- iv. Receives subsidy fund from the management.

4.3.2 Weaknesses

- i. High operating expenses than its revenue generated.
- ii. Limited service area.

V. CONCLUSION

The financial status of the Farm Service Center for its two years of operation highlights the importance of managing expenses and finding ways to increase revenue to achieve financial stability. Collection increased significantly by 56% from PHP 4,304,011.57 to PHP 7,653,934.45, indicating a positive growth in revenue for the Farm Service Center in 2022. However, the Operating Expenses also increased by 67% from PHP 5,617,425.60 to PHP 8,424,441.22, surpassing the revenue amount collected. As a result, the net income for 2022 showed a negative value of PHP 770,506.77. This indicates the need for strategic planning that cuts down expenses without compromising the good quality of service being provided.

In 2022, FSC has higher operating capital of PHP 3,710,234.97 with the subsidy it received from the management. Although this figure indicates a higher positive balance compared to the previous year, it should be noted that FSC still faced financial difficulties as the working capital is depleting each year. This financial data shows a concerning trend. In both years, the center incurred financial deficits despite receiving subsidies to alleviate the financial challenges. The management with its plan to cut the subsidy by 2025, FSC should have to implement strategic efforts to manage expenses while finding ways to increase revenue generation, with the goal of eventually achieving a positive financial balance.

Clients' satisfaction rating show that respondents in 2021 and 2022 expressed high levels of satisfaction in all categories. In terms of reliability and quality, responsiveness, assurance and integrity, outcomes, and facility access, the center has performed admirably. Although, average ratings for some categories decreased slightly in 2022 the overall satisfaction

levels remained high. Hence, the center has performed with continued excellence meeting the expectations of its clients.

RECOMMENDATIONS:

It is recommended to conduct benchmarking to evaluate and compare the performance, processes, and practices with other service providers. Also, re-assess the structure and functions of the sub-units for strategic management of resources. Finally, an assessment on the current condition, performance and effectiveness of the equipment employed by the Farm Service Center in its operation.

ACKNOWLEDGMENT:

Deep appreciation and gratitude for the help and support are extended to the persons who have contributed in making this study possible. To all the researchers and technical advisors for their unwavering support, guidance, and constructive feedback throughout the study implementation. Also, to the Rice Engineering and Mechanization Division and office of the deputy executive director for research for allowing us to publish the result of this study.

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