

International Journal of Advanced Engineering, Management and Science (IJAEMS)

Peer-Reviewed Journal

ISSN: 2454-1311 | Vol-8, Issue-9; Sep, 2022 Journal Home Page: https://ijaems.com/

Article DOI: https://dx.doi.org/10.22161/ijaems.89.1



Financial Resource Management Towards Sustainable Operations of RCEP-funded Farm Machinery Enterprises in Science City of Muñoz

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Received: 10 Aug 2022; Received in revised form: 27 Aug 2022; Accepted: 02 Sep 2022; Available online: 09 Sep 2022

Abstract – This descriptive study looked at the financial resource management of Rice Competitiveness Enhancement Program (RCEP)-funded farm machinery firms in the Science City of Muñoz. To obtain data, a survey questionnaire with a consent form was employed. The data gathered were analyzed using frequency counts and percentages. All of the Rice Farmers Associations (RFAs) who were chosen purposively as respondents of this study own and operate four-wheel tractor services in the form of an enterprise. Findings of the study show that the preparedness of most respondents was attributed to the existence of a financial and operational plan. Also, using tools for up-to-date recordkeeping of financial transactions was an indicator of sustainable operations. On the other hand, financial dilemmas such as the lack of operating capital and incorrect allocation of funds, so as the inability to collect unpaid obligations and delayed payments from farmers, consequently led to unsustainable operations.

Keywords— Financial resource management, sustainable operations, rice farmers' associations, rice farm machinery enterprise.

I. INTRODUCTION

Agriculture is one of the prime movers of the Philippine economy. However, farming is still not considered profitable in the country due to the low mechanization level of the farmers. Thus, the Philippine government strives to develop and promote the use of agricultural machinery and other mechanized technologies, which led to the creation of the RA 11203 or the Rice Tarrification Law (RTL), The RTL, specifically the Rice Competitiveness Enhancement Fund (RCEF), is set to provide critical interventions to support Filipino farmers and enhance their competitiveness and profitability through farm mechanization and other technologies.

Philippine farmers' awareness of farm mechanization and land reformation appears to be very low, and they also have financial problems when they consider adopting farm mechanization and land reformation (Bautista et al., 2017). Financial problems are one of the major concerns why most rice farmers, specifically the Rice Farmers' Associations (RFAs), fail to patronize the use of farm machinery. With the help of RCEF, 100 million pesos is given to PHilMech to provide extension services such as training and workshops on farm machinery operation, management and enterprise development. A number of RFA recipients were trained and taught how to handle their farm machinery services as an enterprise. In these trainings, PHilMech focuses on managing the RFAs' financial resources.

The Financial Management Theory states that the way a manager makes decisions results in either the success or failure of any organization (Brigham & Ehrhardt, 2013).

The lack of an efficient and effective financial management system is a core problem area among the RFAs. Thus, it is essential that the management team of the RFAs will undergo training in financial management in order to better handle their finances towards sustainable operations.

The Rice Farm Machinery Enterprise requires knowledge and skills in the effective operation of farm machinery as well as managing a business. To address this, training materials and capacity strengthening in improved agronomy, operation, and maintenance of machines, as well as business skills for service providers, were provided. (Van Loon et al., 2004). The Philippine government intervention does not stop the provision of farm types of machinery. Interventions such as training on operations and management and institutional enterprise and sustainability are conducted to ensure that the farm machinery is optimally utilized. According to a study conducted by Philippine Center for Postharvest Development and Mechanization (PHilMech), to be sustainable, all businesses operating as an enterprise through the use of four-wheel tractors will need to allocate Php 42,000.00 for depreciation costs for every cropping, Php 21,000.00 for repair and maintenance for every cropping, at least Php 1,000.00 for administrative costs for every cropping, and at least Php 1000.00 for contingency for every cropping. Therefore, in order for the RFA's business to survive, for every cropping season, considering the fluctuating price of fuel/diesel (Php 80.00 per liter x 19 liters per hectare) and the operator's honorarium (Php 400.00), their enterprise would need an operating capital at around Php 200,400.20.

In line with this, this study is of great importance because this will help the RFAs in the Science City of Muñoz assess whether their financial resources are well-managed for sustainable operations or not. In addition, this study recommended solutions to address the current issues faced by the RFAs in the Science City of Muñoz.METHODOLOGY

The study is descriptive in nature and focuses on determining how the RFAs, operating as FMEs in the Science City of Muñoz manage their financial resources. The instruments utilized were survey questionnaires with a consent form and purposive sampling. The respondents were chosen based on the classification of their organization and based on where they operate in Science City of Muñoz, Nueva Ecija.

The list of RFAs operating as farm machinery enterprises in the Science City of Muñoz was requested from the Enterprise Development Division (EDD) of the Philippine Center for Postharvest Development and Mechanization (PHilMech). From the list provided by PHilMech, a total of 8 RFAs were chosen purposively through the following criteria (Subia, 2018): The 8 RFAs are from different barangays, namely, Brgy. Bagong Sikat (2), Brgy. Balante (1), Brgy. Villa Cuizon (1), Brgy. San Andres (1), Brgy. Rizal (1), Brgy. Pandalla (1), and Brgy. Gabaldon (1) in Science City of Muñoz, Nueva Ecija. They are among the barangays where RFAs operating as FMEs are recorded by EDD. A total of 8 respondents were gathered with data. Basic descriptive statistics such as frequency count and percentages were used.

II. RESULTS AND DISCUSSION

- 1. Financial Resource Management Towards Sustainable Operations of RCEP-funded Farm Machinery Enterprises in Science City of Muñoz
 - 1.1 Current Practices/Preparedness of the Respondents in Managing Financial Resources

Table 1. Current Practices/Preparedness of the Respondents

Statement	Frequency	Percentage
	(f)	(%)
1. We have an operational plan.	8	100
2. We have a financial plan.	8	100
3. We use a tool for a record-keeping system.	8	100
4. We keep up-to-date records of all our financial transactions.	8	100
5. We have the right funding source for our farm machinery enterprise.	0	0

Table 1 shows the results from the responses of the respondents regarding their current practices and/or preparedness in managing the financial resources of their Farm Machinery Enterprise (FME): 100% of the respondents have an operational plan with a financial plan included in it; 100% of the respondents uses a tool for a record-keeping system; 100% of the respondents keep an up-to-date record of all their financial transactions, and 0% of the respondents has a suitable source of funding/beginning fund for their farm machinery enterprise.

The finding shows that all of the respondents are utilizing an operational plan for their operations and management of farm machinery services. This is advantageous as the operational plan provides a comprehensive guide to the day-to-day operations of the FME to achieve its long-term goals. Having a tool used for record-keeping system and using it to update all their financial transactions also make a good

start as an enterprise. However, the majority of the respondents do not have adequate funding.

"Unfortunately, too many entrepreneurs were never taught about basic financial literacy" (Laney, 2013). The importance of having the right source of funds is to not mix the farm machinery enterprise's income with the income of their other source of fund.

1.2 Issues Encountered by the Respondents in Managing Financial Resource

Table 2. Issues Encountered by the Respondents

Statement	Frequency	Percentage
	(f)	(%)
1. With issue on poor management	0	0
of the fund.		
2. With issue on unpaid	1	12.5
collectibles.		
3. With issue on delayed	1	12.5
payments.		
4. With issue on operating capital.	2	25
5. We have other issues	0	0
encountered aside from those		
mentioned above.		

Table 2 shows the results from the responses of the respondents regarding their issues encountered in managing the financial resources of their Farm Machinery Enterprises (FME): 0% of the respondents have an issue when it comes to poor management of funds; 12.5% of the respondents have an issue when it comes to unpaid collectibles; 12.5% of the respondents have an issue when it comes to delayed payments from clients; 25% of the respondents has an issue when it comes to operating capital, and none of the respondents has other issues aside from those mentioned firsts. The findings show that the minority of the respondents has an issue with unpaid collectibles, delayed payments, and operating capital. Butzer, Mundlak and Larson (2010) pointed out that capital is a fundamental component of agricultural production, and that the accumulation of capital is key to growth in agriculture. For maintaining continuity of business operations, the RFAs, therefore, have to have a fixed source of operating capital. As such, the net income from the first operations of their farm machinery services can be used as a beginning fund for the next cropping/operation. As to unpaid collectibles and delayed payments, the RFAs must set policies with regard to the mode of payment to be imposed for all of their farmer-clients to avoid such issues.

Table 3. Fund Allocation for the Operation of Farm Machinery Enterprise (FME)

Statement	Frequency (f)	Percentage (%)
1. We allocate funds for depreciation costs.	1	12.5
2. We allocate funds for repair and maintenance.	7	87.5
3. We allocate funds for administrative costs.	0	0
4. We allocate funds for contingency use.	0	0
5. We allocate funds for fuel/diesel.	8	100
6. We allocate funds for an honorarium.	7	87.5

Table 3 shows the results from the responses of the respondents on where they allocate their funds for the operation of their FME: 12.5% of the respondents allocate funds for the depreciation cost of their farm machinery; 87.5% of the respondents allocate funds for repair and maintenance; 0% of the respondents do not allocate funds for both administrative costs and contingency use; 100% of the respondents allocate funds for fuel/diesel, and 87.5% of the respondents allocate funds for an honorarium. Most of the time, the RFAs forgot to allocate funds to what they see as unimportant. "These financial dilemmas have a major impact on one's ability to raise capital and make smart decisions about running a business" (Laney, 2013). Moreover, saving and allocating funds for depreciation costs and repair and maintenance of their farm machinery must start from the beginning of the first operation of their FME. With this, the RFAs will be able to save enough money when the time comes that their farm machinery needs repair or maintenance, as well as save enough money to buy a replacement of their farm machinery when the time comes that their current farm machinery has reached the end of its useful life. It is also essential that the RFAs allocate funds for both administrative costs and contingency use. Administrative costs are where the RFAs will get funds to buy office supplies and load allowances for their operators or their manager. Administrative costs can also be used to pay electricity and water bill as these are essentials for the operation of the FME. On the other hand, it is equally vital that the RFAs allocate funds for contingency use as the money being allocated for depreciation cost, repair and maintenance, administrative costs, and fuel may not be enough, especially now that fuel prices continue to fluctuate

III. CONCLUSIONS AND RECOMMENDATIONS

The following conclusions were drawn from the abovementioned results of the study:

- 1. There is a high level of preparedness among the selected (Subia, Mangiduyos, Turgano, 2020) respondents to operate as an enterprise through the utilization of an operational plan as their guide for their operation and management of farm machinery services and having an effective tool for an up-to-date record-keeping system of financial transactions.
- 2. The cited financial dilemmas encountered by respondents indicate a level of incapability for sustainable enterprise operations.
- The operational plan and record-keeping tool provided organization for the RFAs in the operations of their FMEs, leading to fewer issues in financial resource management.

Based on the findings and conclusions, the following were recommended:

- PHilMech, as the capability-building resource and implementer, should intensify its monitoring system with regard to the RFA's management of financial resources.
- Reiteration of the importance of saving up for administrative costs, contingency, repair and maintenance, especially for the depreciation cost of their farm machinery.
- 3. Operational policies on the mode of payment for the provision of farm machinery services must be imposed to be able to avoid the challenges encountered (Abelardo, et al, 2019) on unpaid collectibles and delayed payments.
- 4. The government must not only provide farm machinery to the RFAs but also lend a beginning fund for the operation of farm machinery services.

REFERENCES

- [1] Abelardo, L., Lomboy, M., Lopez, C., Balaria, F., & Subia, G. (2019). Challenges Encountered by the National High
- [2] School Teachers in Doing Action Research. International Journal of English, Literature and Social Science (IJELS)
- [3] Vol-4, Issue-4, Jul Aug 2019. https://dx.doi.org/10.22161/ijels.4418 ISSN:2456-7620.
- [4] Bautista, E. et al., (2017) Farmer's Perception on Farm Mechanization and Land Reformation in the Philippines
- [5] https://www.researchgate.net/publication/321967889_Farme r's_Perception_on_Farm_mechanization_and_Land_reforma tion_in_the_Philippines.

- [6] Brigham, E. F., & Ehrhardt, M. C. (2013). Financial management: Theory & practice. Cengage Learning. Retrieved. http://bit.ly/36r7geI.
- [7] Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses the Minnesota Institute for Sustainable Agriculture developed this guide in 2003 to help ag and other business owners create a holistic business plan. http://conservancy.umn.edu/handle/115840
- [8] Butzer, R., Mundlak, Y., Larson, D. F. (2010): Measures of fixed capital in agriculture, World Bank Policy Research Working Paper Number 5472, pp. 1-39.
- [9] DOST (2009) Agricultural Mechanization in the Philippines
- [10] http://scinet.dost.gov.ph/union/Downloads/BS%20Agricultu ral%20Mechanization%20in%20the%20Philippines_beta_3 61500.pdf
- [11] Laney, K. (2013). Launching Low-Income Entrepreneurs. Center for an Urban Future 120 Wall Street, Floor 20 New York, NY 10005
- [12] Subia, G. (2018) Comprehensible Technique in Solving Consecutive Number Problems in Algebra. Journal of Applied Mathematics and Physics, 6, 447-457. doi: 10.4236/jamp.2018.63041.
- [13] Subia, G. S., Mangiduyos, G. P., & Turgano, J. B. D. (2020). Emergency Preparedness of Novo Ecijanos. Open Journal of
- [14] Social Sciences, 8, 17-23.https://doi.org/10.4236/jss.2020.83003.
- [15] Van Loon, J. et al., 2004 Scaling Agricultural Mechanization Services in Smallholder Farming Systems
- [16] https://www.sciencedirect.com/science/article/pii/S0308521 X18314914#s0070.