

Financial Management Practices and Business Profitability of Sugarcane Farmers

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ABSTRACT

This study determined the financial management practices and business profitability of sugarcane farmers and examined differences in these variables according to selected farmer profiles. A quantitative descriptive-comparative research design was employed. Data were gathered from 100 sugarcane farmers selected through convenience sampling using a researcher-made structured questionnaire. The instrument demonstrated strong content validity and excellent internal consistency. Data were analyzed using frequency and percentage, mean and standard deviation, Mann–Whitney U test, and Kruskal–Wallis H test. The findings showed that most respondents were 41–60 years old (53%), male (76%), had 11–20 years of farming experience (51%), and operated more than 10 hectares (46%). Financial management practices were rated Very High ($M = 4.35$, $SD = 0.57$), with Financial Planning and Budgeting and Record Keeping obtaining the highest means ($M = 4.41$). Business profitability was rated High ($M = 4.17$, $SD = 0.69$), with Cost Efficiency obtaining the highest mean ($M = 4.28$). Significant differences in financial management practices were found according to sex and farm size, while business profitability differed significantly according to sex. No significant differences were found according to age and years in farming for financial management practices, or according to age, years in farming, and farm size for business profitability. These findings indicate that farmers generally practice sound financial management and maintain a favorable level of profitability. The results also suggest that differences in financial management practices and profitability may be associated with selected characteristics of farmers and their farming operations. Strengthening financial planning, record keeping, cash and credit management, and cost control may further support the sustainability and profitability of sugarcane farming enterprises.

Keywords: Financial Management Practices, Business Profitability, Sugarcane Farmers, Financial Planning, Cost Efficiency

INTRODUCTION

Sugarcane farming is an important agricultural activity that provides livelihood opportunities for farming households and contributes to the agricultural economy. However, farmers operate in an environment characterized by production costs, fluctuating market conditions, limited financial resources, and production risks. These conditions make effective financial management essential to the sustainability and profitability of farming enterprises.

Financial management practices such as financial planning and budgeting, record keeping, and cash and credit management enable farmers to allocate resources appropriately, control expenditures, monitor financial performance, and make informed decisions. Effective management of financial resources may also help farmers respond to unexpected production expenses and maintain sufficient funds throughout the farming cycle. Business profitability, meanwhile, reflects the capacity of a farming enterprise to generate sufficient income after accounting for production and operating costs.

Financial Management Theory provides the foundation for understanding the importance of these practices. The theory emphasizes the effective planning, organizing, directing, and controlling of financial resources to achieve organizational objectives and improve financial performance. Applied to sugarcane farming, effective financial management involves appropriate budgeting, accurate record keeping, cash management, and responsible credit decisions that may contribute to profitability and sustainability.

Although financial management is important in agricultural enterprises, farmers may differ in their financial practices and profitability according to their demographic and farm characteristics. The present study therefore examined the financial management practices and business profitability of sugarcane farmers and determined whether significant differences existed when respondents were grouped according to age, sex, years in farming, and farm size.

METHODOLOGY

Research Design

The study employed a quantitative descriptive-comparative research design. The descriptive component was used to determine the financial management practices and business profitability of sugarcane farmers, while the comparative component was used to examine differences across selected respondent groups.

Subject and Respondents of the Study

The respondents were 100 sugarcane farmers who were directly involved in sugarcane production and farm business operations. Convenience sampling was employed, wherein respondents were selected based on their accessibility, availability, and willingness to participate.

Research Instrument

Data were collected using a researcher-made structured questionnaire developed from related literature and previous studies on financial management and agricultural profitability. The instrument consisted of three parts: respondent profile; financial management practices; and business profitability. Financial management practices were measured through Financial Planning and Budgeting, Record Keeping, and Cash and Credit Management. Business profitability was measured through Revenue Generation, Cost Efficiency, and Financial Performance and Growth. Responses were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The questionnaire was evaluated by five expert validators. The Financial Management Practices and Business Profitability sections obtained a mean Content Validity Ratio of 1.00. The instrument was subsequently pilot-tested among 30 sugarcane farmers who were not included in the actual study. Cronbach's alpha coefficients were 0.923 for Financial Management Practices and 0.962 for Business Profitability, indicating excellent internal consistency.

Data Gathering Procedures

After securing the necessary approval, the questionnaires were personally distributed to qualified respondents. Completed questionnaires were checked for completeness, tallied, coded, and prepared for statistical analysis. The collected data were kept confidential and used solely for academic purposes.

Frequency and percentage were used to describe the respondents' profiles. Mean and standard deviation were used to determine the levels of financial management practices and business profitability. The Mann–Whitney U test was used for comparisons involving two groups, while the Kruskal–Wallis H test was used for comparisons involving more than two groups. Statistical decisions were based on a 0.05 level of significance.

RESULTS AND DISCUSSION

Table 1: Demographic Profile of the Sugarcane Farmers

Profile	Category	f	%
Age	Under 25	2	2.00
	25–40	20	20.00
	41–60	53	53.00
	Over 60	25	25.00

Profile	Category	f	%
	Total	100	100.00
Sex	Male	76	76.00
	Female	24	24.00
	Total	100	100.0
Years in Farming	Less than 5 years	10	10.00
	5–10 years	24	24.00
	11–20 years	51	51.00
	Over 20 years	15	15.00
	Total	100	100.00
Farm Size	Less than 1 hectare	3	3.00
	1–5 hectares	24	24.00
	6–10 hectares	27	27.00
	Over 10 hectares	46	46.00
	Total	100	100.00

The respondents were predominantly 41–60 years old, male, experienced in farming, and operating relatively large farms.

Table 2: Level of Financial Management Practices of Sugarcane Farmers

Statements	Mean	Standard Deviation	Interpretation
Financial Planning & Budgeting	4.41	0.58	Very High
1. I prepare a budget before every planting season.	4.47	0.63	Very High
2. I estimate production costs before making farm-related expenditures.	4.34	0.67	Very High
3. I set financial goals for my sugarcane farming.	4.44	0.70	Very High
4. I regularly compare actual expenses with my planned budget.	4.28	0.67	Very High
5. I allocate funds for unexpected farm expenses.	4.50	0.70	Very High
Record Keeping	4.41	0.62	Very High
6. I maintain records of all farm income and expenses.	4.38	0.67	Very High
7. I keep receipts and documents related to farm transactions.	4.41	0.71	Very High
8. I regularly review my financial records to monitor farm performance.	4.39	0.74	Very High
9. I record the costs of far inputs such as fertilizers, labor, and pesticides.	4.37	0.73	Very High
10. Accurate record-keeping helps me make better financial decisions.	4.50	0.67	Very High
Cash and Credit Management	4.22	0.68	Very High
11. I ensure that sufficient cash is available for farm operations.	4.25	0.64	Very High
12. I carefully evaluate loan options before borrowing money.	4.19	0.80	Very High

13. I pay farm-related debts on time.	4.17	0.79	Very High
14. I monitor cash inflows and outflows throughout the farming season.	4.31	0.83	Very High
15. I save a portion of farm earnings for future farm investments.	4.20	0.88	Very High
Financial Management Practices as a Whole	4.35	0.57	Very High

The respondents demonstrated a Very High level of financial management practices overall. Financial Planning and Budgeting and Record Keeping obtained the highest ratings, while Cash and Credit Management also remained at a Very High level.

Table 3: Level of Business Profitability of Sugarcane Farmers

Statements	Mean	Standard Deviation	Interpretation
Revenue Generation	4.13	0.76	High
1. My sugarcane farm generates sufficient income to cover production costs.	4.24	0.74	Very High
2. My farm income has increased over the past few years.	4.12	0.83	High
3. The sale of sugarcane provides a stable source of income.	4.17	0.87	High
4. I am satisfied with the revenue generated from sugarcane farming.	4.08	0.86	High
5. My farm consistently achieves its income targets.	4.02	0.89	High
Cost Efficiency	4.28	0.66	Very High
6. I am able to control production costs effectively.	4.27	0.71	Very High
7. Proper management of farm resources help increase profitability.	4.31	0.75	Very High
8. I regularly monitor expenses to maximize profits.	4.39	0.71	Very High
9. My farm operations minimize unnecessary expenditures.	4.28	0.74	Very High
10. I obtain favorable returns from my investments in farm inputs.	4.17	0.83	High
Financial Performance and Growth	4.11	0.77	High
11. My sugarcane farming business generates profit every harvest season.	4.10	0.85	High
12. Farm profits allow me to expand or improve my farming operations	4.09	0.88	High

Statements	Mean	Standard Deviation	Interpretation
13. My farming business remains financially sustainable despite market fluctuations.	4.12	0.84	High
14. I am able to reinvest part of my profits into farm development.	4.14	0.88	High
15. Overall, my sugarcane farming business is profitable.	4.09	0.90	High
Business Profitability as a whole	4.17	0.69	High

Business profitability was rated High overall. Cost Efficiency obtained the highest rating among the profitability dimensions, followed by Revenue Generation and Financial Performance and Growth.

Table 4a: Difference in Financial Management Practices According to Age

Age	Test Statistics (H)	p-value	Decision for Ho	Interpretation
13-16 years old	2.389	0.496	Failed to Reject H _o	Not Significant
17-18 years old				
21-24 years old				
25 years old and above				

Financial management practices did not significantly differ according to age.

Table 4b: Difference in Financial Management Practices According to Sex

Sex	Test Statistics (U)	p-value	Decision for Ho	Interpretation
Female	463.000	<0.001	Reject H _o	Significant

Financial management practices differed significantly according to sex.

Table 4c: Difference in Financial Management Practices According to Years in Farming

Years in Farming	Test Statistics (H)	p-value	Decision for Ho	Interpretation
Less than 5 years	1.110	0.775	Failed to Reject H _o	No Significant
5-10 years				
11-20 years				
Over 20 years				

Financial management practices did not significantly differ according to years in farming.

Table 4d: Difference in Financial Management Practices According to Farm Size

Farm Size	Test Statistics (H)	p-value	Decision for Ho	Interpretation
Less than 1 hectare	8.227	0.042	Reject H _o	Significant
1-5 hectares				
6-10 hectares				
Over 10 hectares				

Financial management practices differed significantly according to farm size.

Table 4d.1: Pairwise Comparison of Financial Management Practices According to Farm Size

Farm Size	Test Statistic	p-value	Interpretation
Less than 1 hectare vs 1-5 hectares	-0.053	0.995	Not Significant
Less than 1 hectare vs 6-10 hectares	13.479	0.447	Not Significant
Less than 1 hectare vs OVER 10 hectares	-16.798	0.021	Significant
1-5 Hectares vs 6-10 Hectares	13.426	0.446	Not Significant
1-5 Hectares vs Over 10 Hectares	-16.745	0.017	Significant

The pairwise results provide the detailed comparisons among the farm-size groups and are presented in full in the table.

Table 5a: Difference in Business Profitability According to Age

Age	Test Statistics (H)	p-value	Decision for Ho	Interpretation
13-16 years old	2.420	0.490	Failed to Reject H _o	Not Significant
17-20 years old				
21-24 years old				
25 years old and above				

Business profitability did not significantly differ according to age.

Table 5b: Difference in Business Profitability According to Sex

Sex	Test Statistics (U)	p-value	Decision for Ho	Interpretation
Female	529.500	0.002	Reject H _o	Significant

Business profitability differed significantly according to sex.

Table 5c: Difference in Business Profitability According to Years in Farming

Years in Farming	Test Statistics (H)	p-value	Decision for Ho	Interpretation
Less than 5 years	4.066	0.254	Failed to Reject Ho	Not Significant
5-10 years				
11-20 years				
Over 20 years				

Business profitability did not significantly differ according to years in farming.

Table 5d: Difference in Business Profitability According to Farm Size

Farm Size	Test Statistics (H)	p-value	Decision for Ho	Interpretation
Less than 1hectare	6.061	0.109	Failed to Reject H _o	Not Significant
1-5 hectares				
6-10 hectares				
Over 10 hectares				

Business profitability did not significantly differ according to farm size.

CONCLUSION

The respondents were predominantly middle-aged, male, experienced sugarcane farmers operating relatively large farms. They demonstrated a Very High level of financial management practices and a High level of business profitability. Financial Planning and Budgeting and Record Keeping were the strongest financial management dimensions, while Cost Efficiency was the strongest profitability dimension.

Financial management practices differed significantly according to sex and farm size but not according to age and years in farming. Business profitability differed significantly according to sex but not according to age, years in farming, and farm size. The findings emphasize the importance of sound financial planning, accurate record keeping, responsible cash and credit management, and effective cost control in sustaining sugarcane farm profitability.

RECOMMENDATIONS

- Sugarcane farmers should continue strengthening financial planning and budgeting, maintaining accurate financial records, and managing cash and credit responsibly.
- Farmers should continue monitoring production expenses, utilizing farm resources efficiently, and reinvesting appropriate portions of farm earnings into farm development.
- Both male and female farmers should be encouraged to strengthen their financial management knowledge and participate actively in farm financial and business decisions.
- Future researchers may examine additional factors such as access to credit, farm income, production costs, market access, technology adoption, and financial literacy that may influence financial management practices and business profitability.

REFERENCES

1. Aceron, J. M. B., Danton, H. G. C., Danton, S. N., & Geloca, K. M. B. (2025). Financial management practices and profitability of small-scale farmers in a disintermediated market in Digos City. *American Journal of Economics and Business Innovation*, 4(1), 62–73. <https://doi.org/10.54536/ajebi.v4i1.4067>
2. Atrill, P. (2021). *Financial management for decision makers* (9th ed.). Pearson.
3. Brigham, E. F., & Ehrhardt, M. C. (2022). *Financial management: Theory and practice* (16th ed.). Cengage Learning.
4. Caintic, P. S., Salabao, A. A., & Tambis, M. M. (2018). Financing needs and financial management practices of banana farmers in Inopacan, Leyte. *Annals of Tropical Research*, 40(2), 107–123. <https://doi.org/10.32945/atr4029.2018>
5. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches* (5th ed.). SAGE Publications.
6. Dhoubhadel, S. P. (2020). Precision agriculture technologies and farm profitability. *Journal of Agricultural and Resource Economics*, 46(2), 256–268. <https://doi.org/10.22004/ag.econ.303598>
7. Eleazar, P. J. M., Cardey, S. P., Osbahr, H., Tirol, M. S. C., & Quimbo, M. A. T. (2024). Gendering sugarcane farming: Understanding the plight of sugarcane block farmers in Batangas, Philippines. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2024.2318881>
8. Oñal, P. A., Jr., Andrade, F. E., & Oñal, P. M. M. (2025). Farmers' aspiration happiness, and sugarcane production in the Visayas, Philippines. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(9), 4364–4376. <https://doi.org/10.11594/ijmaber.06.09.12>
9. Oñal, P. A., Jr., Samillano, N. P., Andrade, F. E., & Oñal, P. M. M. (2025). Impact of age and farming experience on sugarcane productivity in the Visayas, Philippines. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(8), 4028–4037. <https://doi.org/10.11594/ijmaber.06.08.23>