

Financial Literacy Level of Smallholder Corn Farmers in Tuguegarao City, Cagayan

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Abstract

Agribusiness has been a growing trend for the past years. Transactions have become more complex, and farming faced more challenges than before. Financial literacy is essential for farm management to sustain the resiliency and sustainability of farmers' livelihoods. Tuguegarao City is the regional center of Cagayan Valley, and its top agricultural product is corn. Additionally, most of its farmers' population are smallholders owning less than two hectares of operated land area. Thus, this study assessed the financial literacy level of smallholder corn farmers in Tuguegarao City, Cagayan. Specifically, the study aimed to measure their financial literacy level, and identify the relationship between overall financial literacy level and socio-demographic profile. Data were gathered among 136 smallholder corn farmers through a survey questionnaire comprising the respondents' socio-demographic characteristics and core questions about financial literacy, adopted from the standardized survey instrument developed by the Organisation for Economic Co-operation and Development (OECD). Results showed that smallholder corn farmers in Tuguegarao possessed a medium measure of financial knowledge, financial behavior, and financial attitude. Overall, the respondents also have a medium level of financial literacy, and financial attitude has the largest share in overall financial literacy. It was concluded that a significant positive relationship exists between income per cropping, participation in financial training/programs, and overall financial literacy. Furthermore, farmers with higher incomes and those who participated in financial training tended to have medium financial literacy.

Keywords: *Financial Literacy, Financial Knowledge, Financial Behavior, Financial Attitude, Farming, Smallholder Farmers*

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Introduction

In 2020, Cagayan Valley Region consistently ranked first among corn producers in the Philippines, providing roughly 23.39 percent of total corn production. Tuguegarao City, the regional center of Cagayan Valley, is also a corn-producer area. Based on the data of the City Agricultural Office of Tuguegarao, corn is the top 1 agricultural product in the city, with a total corn land area of 2,919.25 hectares. Philippine Crop Insurance Corporation's Registry System for Basic Sectors in Agriculture in 2019 provided that the majority of the corn farmers are smallholders with less than 2 hectares of operated land area. Smallholdings may vary from country to country, but the Food and Agricultural Organization (FAO) and Thapa and Gaiha (2011) categorized farms under 2 hectares as small. Hence, corn farmers need to be financially literate in order to efficiently, harmlessly, and cost-effectively supply corn commodities locally, regionally, and the whole country. Boekhold (2016) highlighted that financial literacy is a critical component for farmers to achieve significant increases in productivity, revenue, profitability, and improved lifestyles. Zakic et al. (2017) emphasized the continual training of farmers in the fields of finances and records on holdings by state authorities, in which scientific institutes and universities would be engaged, and constant training of agricultural advisors is essential. According to The Organisation for Economic Co-Operation and Development, financial literacy is "the combination of awareness, knowledge, skill, attitude, and behavior required to make financial decisions and ultimately achieve individual financial well-being" (OECD, 2013, p.14). In the Philippines, the majority of financial literacy assessments focused on the general public, regardless of occupation. The respondents of Financial Inclusion Survey in 2019 by Bangko Sentral ng Pilipinas (BSP) were Filipinos fifteen-years-old and above while the survey by World Bank in 2015 focused on adult financial literacy. Few studies have focused on investigating local farmers' financial literacy and respondents were irrespective of crops cultivated. Furthermore, there exist some uncertainty and conflicts on some factors affecting financial literacy. Safitri (2021) concluded that age and income have no significant effect on financial literacy level of farmers. However, Widhiyanto et al. (2018), claimed that age and annual income significantly influence financial literacy index. Tuguegarao City's number one agricultural commodity is corn. Hence, the corn farmers are the best representative of the farmers' population and the suitable respondents in the study area. It is with these literature findings that this paper measured the financial literacy of smallholder corn farmers and investigated the factors affecting their financial literacy in terms of socio-demographic profile.

Methodology

This study used a quantitative research design employing a descriptive research method. The study used purposive sampling technique to identify participants among smallholder corn farmers in Tuguegarao City, Cagayan with farm holdings devoted to corn production of 1-2 hectares. Through a request letter sent to the City Agricultural Office, 20 of 46 barangays identified as agricultural, the list identified 136 farmers who willingly participated in the study. A questionnaire comprising of two sections was used to gather the data. The first part consists of the respondents' socio-demographic characteristics. The second part consists of the core questions about financial literacy, adapted from the standardized survey instrument developed by the Organisation for Economic Co-operation and Development- International Network on Financial Education (OECD-INFE) in 2010. The financial literacy section further consists of three subsections: financial knowledge, behavior, and attitude. The subsection for financial knowledge includes eight (8) questions designed to test knowledge relating to finance, such as calculating interest rates, compound interest rates, risk and return evaluation and understanding of inflation and financial diversification. The subsection for financial behavior captures information about how respondents manage their money, including household budgeting, saving, considered purchases, bill payments, care about financial affairs, long-term financial goals, and borrowing. Seven of the questions use a 5-point Likert scale (1-never, 2-not often, 3-not very often, 4-often 5-very often) and a question with multiple-choice, enabling people to provide more information about the frequency of their behavior. Lastly, the subsection for financial attitude will gather information on respondents' outlook toward financial matters. It measured the respondent's perceptions about money, saving, and spending using three-scaled attitudinal statements (1-strongly agree, 2-agree, 3-uncertain, 4-disagree, 5-strongly disagree). The data gathered was analyzed through descriptive and inferential statistics. Descriptive statistics was used to analyze the socio-demographic characteristics of the respondents. For the financial literacy, the responses under financial knowledge were scored with values of 1 for correct answer and 0 for otherwise, under financial behavior, responses was scored one if the respondents indicate high positive behavior (scale of 4-5) towards financial well-being and zero for otherwise, while the active saving question (multiple choice) was scored 1 point for any type of active saving (excluding letting money build up in a current account as this is not active) and 0 in all other cases, under financial attitude, responses were scored 1 point for respondents who put themselves at 4 or 5 on the scale and 0 in all other cases. Lastly, the overall financial literacy

score was computed by simply adding all the scores from the three core financial literacy components. This study followed the interpretation of the financial literacy level used by Ravikumar (2013), in which the mean FL level - High (> 78.51), Medium (78.51 to 51.64), and Low (< 51.64). For testing if there is a significant relationship between the financial literacy and socio-demographic profile, chi-square test was employed.

Findings

The results showed that corn farmers have a medium financial knowledge which implies that they have an average key financial concepts and the ability to apply numeracy skills in financial situations. Same with financial behavior and financial attitude, respondents possessed a medium level of managing their money, including whether they consider carefully if they can afford something, whether they typically pay bills on time, if they report that they keep a close watch over their finances and attitudes towards money, particularly towards planning for the future. It was also revealed that the corn farmers, in overall, have a medium measure of financial literacy level. It is in line with the result that smallholder corn farmers in the study area possessed an average level of awareness, knowledge, skill, attitude, and behavior required to make financial decisions and ultimately achieve individual financial well-being. The financial attitude takes the largest share in the overall financial literacy level. It shows that most farmers indicated a higher positive attitude than positive behaviors and financial knowledge scores. The chi-square test revealed that income per cropping and participation in financial training/programs have significant relationship with the financial literacy of corn farmers. Income per cropping was found to have moderate positive relationship with the overall financial literacy. This implies that farmers with higher income is associated with medium financial literacy levels.

Conclusion

The study concludes that corn farmers possessed a medium financial literacy level. Furthermore, a significant positive relationship exists between income per cropping, participation in financial training/programs, and overall financial literacy. Smallholder corn farmers with higher incomes and those who participate in financial training tended to have medium financial literacy. In line with the results of the study, the study recommends the continuous implementation and expansion of financial literacy training and programs. This study has a limited overview since respondents only came from the northern part of Tuguegarao. Future research may increase the sample size by including corn farmers up to the southern portion of Tuguegarao, particularly until Nammabalan Sur. The study also suggests exploring other types

of farmers or include all kinds of farmers to obtain a more holistic measure of financial literacy. It is also highly recommended that future research identifies other variables that may affect financial literacy, which may help in its further improvement.

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