

# The Effect of Social Economic Factors on Ability to Save of Farmers: The Role of Income Supply, Education Supply, Experience, Age, Land Area Distribution, Piece, Consumption and Family

Muhammad Buhari Sibuea<sup>\*1</sup>, Faiz Ahmad Sibuea<sup>2</sup>

<sup>1</sup>*Department of Agribusiness, Universitas Muhammadiyah Sumatera Utara, Jl. Kapten Muchtar Basri No.3, Medan, Sumatera Utara, Indonesia*

<sup>2</sup>*Master Program of Agribusiness, IPB University, Jl. Raya Dramaga Kampus IPB Dramaga Bogor, West Java, Indonesia*

<sup>1</sup>*mhd.buhari@umsu.ac.id*

**Abstract**— The ability of farmers in the village's economic life is very varied and tends to be in a weak position, especially in terms of saving skills. This study aims to determine the influence of socioeconomic factors on the ability to save, pull, and push elements of farmers to keep and resource savings fund farmers. This research is a case study in Deli Serdang Regency, North Sumatera, where 60 people from 312 populations of paddy rice farmers were sampled purposively. The results showed that simultaneously social factors: the number of dependents, education supply, experience, and age of farmers significantly affected the ability to save. While partially, the number of dependents and skills influence substantially the ability to save, while the education supply and age of the farmer have no significant effect on the ability to save. Simultaneously economic factors: land area distribution, income supply, price, and consumption have a substantial impact on the ability to save. Partially, use has a significant effect on the ability to save, while land area distribution, income supply, and the price has no significant impact on the ability to save. The factors attracting farmers to keep are security, the interest of money, prizes, proximity to their homes, and familiarity with bank officers. While the elements are driving farmers to save the desire to change lives, children's education supply expands the business, supplies sudden necessities, and insurance. Source of farmers' savings comes from farm income supply, off-farm income supply, and other family income supply. The study recommends that farmers increase their farming skills to better earnings so that the ability to save the better. Farmers can

**utilize existing financial institutions as much as possible for farming needs.**

**Keywords**—Income Supply, Education Supply, Socioeconomic Factors, Farmers Savings Ability.

## 1. Introduction

Indonesia is an agricultural country where this sector plays a significant role in the overall national economy. Indonesia has quite extensive agrarian land, and most of the people in this country are working in this sector[1]. Besides that, Indonesia has a high diversity in types of agriculture[2]. Agriculture plays a substantial role in the Indonesian economy. It generates half of total employment and accounts for about a fifth of GDP, as well as a significant contributor to export[3]. It is internationally substantial in its production and export of rice, palm oil, coffee, rubber, cocoa, and spices (nutmeg, cinnamon, and cloves)[4]. The success or failure of agricultural development will affect national development because the success of agricultural development will improve the welfare of farmers and rural communities, which at the same time will improve the living standards of most Indonesian people[5].

Farmers are the most important food producers in Indonesia, according to[6], food is an essential human basic necessity for survival. Food needs to always be available in residential areas in sufficient quantities, of

appropriate quality, and medically safe for consumption. These factors are economically related to people's purchasing power, so food prices must be affordable. Moreover, poor rural households were the most negatively affected by the increments in food prices[7]. Besides that, high rice prices have a significant impact on the number of individuals living below the poverty line and on the quality of their diet[8]. Some researchers reported that the higher prices harming household poverty in Indonesia, of which the latest statistic indicated that ten percent increase in rice prices improves the welfare of 14 percent of the households, while the remaining 86 percent suffer a relative loss of income supply[9-11]. Therefore, affordable food prices do not necessarily have to be cheap. Such a policy causes many losses to farmers and the country's national food security capabilities. Food prices must benefit producers, so farmers have incentives to increase production.

According to [12] Indonesian people are mostly farmers, but only have less than one hectare of land. Even today, the area of agricultural land is less than 0.2 hectares per head of family continues to increase, and it is ironic that there are farmers who do not own property, so the farmers rent land. The status of farmer ownership of land affected farmers' welfare in Indonesia, which is generally low[13]. Moreover, farmers received the least profit compared to other actors, such as rice mills and traders in the overall rice production and trade chain[14]. Although the price of food is increasing, the farmers could not gain any better income supply since the owners of agricultural land and capital, many of whom are urban-based[15]. The farmers tend to leave their farming job since another job sector provides better employment opportunities for the farmers[16]. Many laborers in the farming sector moved to the urban industrial area because of the wage differences[17], which was confirmed by[18], who reported that the average wage of non-agricultural is much higher than the average salary in agriculture. Even underpaid laborers in factories as having a better social status than farmers[19]. If this continues, of course, Indonesia's agricultural capability will continue to decline and will enter food insecurity in the sense that

dependence on imported food continues to increase[20].

Farmers continue to be in the scope of a vicious circle, where conditions of income supply are shallow. Automatic, cause low income supply of farmers living in poverty. According to[21], debt interpretation as a condition in which a person is unable to take care of himself under the standard of living of a group's life and is unable to utilize his mental or physical energy within the group. Poverty is the inability to achieve that minimal standard, which is experiencing deprivation[22]. Poverty was one of the biggest social problems in the twentieth century and will continue to be so in the twenty-first century[23]. According to[24], poverty can cause changes in social and political status, movements of the human mind, and understanding of what is happening in the world. This situation causes farmers to be unable to save to improve their standard of living. Even if they could, they would keep for ensuring provisions for running consumption expenditure, purchase durable goods, and expand their economic activity[25].

Savings plays a foundational role in economic development as it is a key to capital formation, which is necessary for investment[26]. If investment remains localized following the size of savings generated in a specific area, there are likelihoods for reinvestment in areas wherein higher savings are recorded compared to those of meager savings[27]. Adequate integration of saving and investment programs into development strategies is capable of improving resource allocation, promoting equitable distribution of income supply, and reducing credit delivery and recovery costs[28]. Savings is as a means of sacrificing the current consumption to increase the living standard and fulfilling daily requirement in future[29]. The increased saving of a family could indicate financial standing [30] and provide conditions for the increase in future consumption[32]. Moreover, households saving play an essential role in the economic development of both developed and developing nations due to its significant influence on the circular flow of income supply in the economy[33].

A person's ability shows two factors that influence it, namely, social and economic factors, where these two factors affect each other. Low income supply makes farmers less able to save. That is reasonable, considering the high needs of farm families, and the number of dependents is usually quite large so that the income supply can only be sufficient for daily life. Then often, farmers who live in the village do their farming according to the inherited habits of their parents, and it is awkward or reluctant to use new technology [31] that will ultimately be difficult to increase farm income supply.

Various socioeconomic factors influence the ability to save farmers. High and low social factors such as the number of dependents, the level of education supply, experience, and age of farmers allegedly affect the ability to save farmers. Economic factors such as land area distribution, income supply level, price, and consumption level influence the ability to save. Therefore, it is essential to study the effect of socioeconomic factors on the ability to keep farmers and pull factors and encourage farmers to save. According to the research [34] that families with high economic levels (permanent

houses) have an average savings potential of Rp 23,387,817 compared to families with lower economic levels (semi-permanent dwellings), which are an average of Rp 13,242,018 every year. These figures indicate a positive and significant potential for the development of rural banking. According to [35], nine factors influence interest in saving, namely, owned wealth, consumption, employment, tastes/desires, age, family circumstances, education supply, guard/downsize, and interest rates. One of the efforts to improve the ability of farmers to save can make by allocating an optimal family workforce [36]. The increase in income supply triggers the farmer's household to protect and decrease non-food consumption [37]. The household saving is significant because it affects a family's level of living, emergency reserves, and the ability to meet financial goals such as making purchases using cash rather than credit [38]. The other most important benefits of savings are the ability to invest in the education supply and skills development of young members of the household [39-41].

Therefore, the following schematics can be formulated:

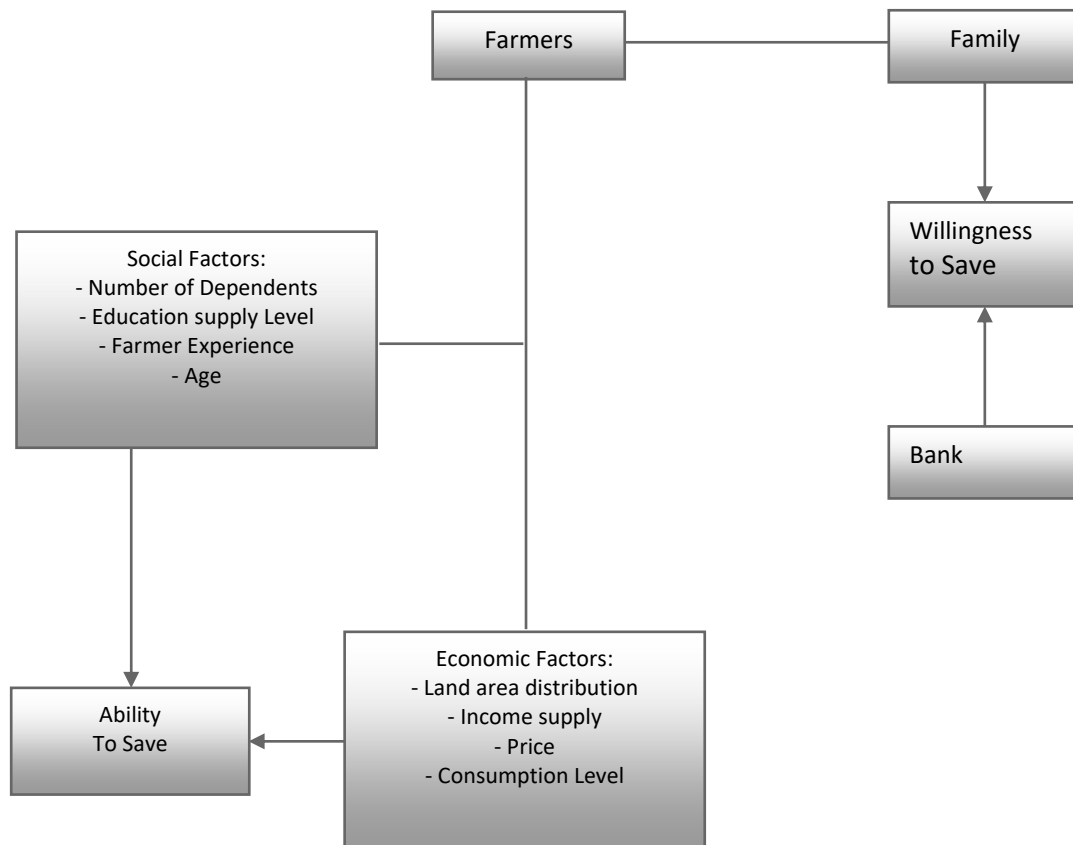


Figure 1. Schematic Framework

The government has launched a conscious movement to save for farmers. Through this movement, the Kelompok Tani Nelayan Andalan (KTNA) mobilizes farmer funds submitted to Bank Rakyat Indonesia in the form of agribusiness savings. The priority is farmers who are members of around 250,000 farmer groups, with members reaching 25 million farmers. But the problem is whether farmers can save with socioeconomic conditions that are still poor.

The government has launched several saving movements such as the National Agribusiness Saving Movement. Through this movement, it is hoped that farmers throughout Indonesia can have their capital saved at BRI. This movement also helps the government to overcome the burden of the budget, which very heavy. With this movement, farmers can capitalize on their agribusiness efforts, which the government feels helped reduce the budget burden.

Most farmers themselves always welcome all policies that aim to help farmers. Moreover, saving, without being moved, farmers will try to set aside part of their income supply to be kept so that they can meet the needs of their families in the future or in difficult times, especially the children's school needs. But the ability to save farmers is greatly influenced by socioeconomic factors owned by farm families. The willingness to keep farmers can also be affected by pull factors that come from financial institutions where they save and

driving factors that come from farmers and their families[42].

## 2. Research Method

This research is a case study in the area of Deli Serdang Regency, North Sumatra, which was purposively determined because the majority of the population are rice farmers. The case study can be defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident[43]. Case studies typically make use of qualitative data, often in combination with quantitative data[44].

The study population was all rice farmers in Beringin District, amounting to 312 families, and for the study, the sample was 60 farmers taken by purposive sampling. The method used to analyze the research problem is to use Cobb Douglass's production function analysis and descriptively[45].

## 3. Research Discussion

### 3.1 Influence of Social Factors on Farmers' Savings Ability

The limited social and economic conditions of farmers significantly affect the ability to save. In this study, social factors examined include the number of dependents, education supply, experience, and age, while economic factors are land area distribution, income supply, price, and consumption. From the test results obtained the following data:

**Table 1.** Results of Analysis of the Effects of Number of Dependents, Education supply, Experience and Age Against Farmer Savings Ability

No	Variable	Koef.	t Stat	P-value	Sig F	F table
1	Intercept	4.29	4.13	0.00	0.00	2.62
2	Dependents	-0.81	-2.33	0.03		
3	Education supply	-0.32	-1.42	0.17		
4	Experience	0.79	2.41	0.02		
5	Age	0.94	1.17	0.25		
6	R Square	0.61				
7	Adj. R Square	0.54				
8	Standard Error	0.23				
9	F <sub>count</sub>	9.64				

From the test results above, an estimation model can be made as:

$$\log Y = 4.29 - 0.81 \log X_1 - 0.32 \log X_2 + 0.79 \log X_3 + 0.94 \log X_4$$

Then it can be converted to:

$$Y = 19,498.45X_1^{-0.81} X_2^{-0.32} X_3^{0.79} X_4^{0.94}$$

From Table 1, It can be seen that  $F_{\text{count}} > F_{\text{table}}$  or sig value  $F < \alpha$  (0.05), then  $H_a$  accepted and  $H_o$  rejected, meaning that simultaneously the number of dependents, education supply, experience and age variables significantly influence the ability to save at 95% confidence level. The adjusted R square coefficient shows 0.54, meaning that differences affect the rise and fall of saving ability variables in the rise and fall of the number of dependents, children's education supply, experience, and age by 54%. In comparison, the remaining 46 % is influenced by other variables not included in the research model. Estimation results explain that the elasticity of the number of dependents, education supply, experience and age of saving ability is 0.6, meaning that the increase in savings is less proportional to the rise in the name of dependents, education supply, experience, and age simultaneously (law of decreasing returns to scale), i.e., if the variable number dependents, children's education supply, experience and age each increase by 1%, then savings increase by 0.6%.

Partially the number of dependents harms saving ability. The elasticity is -0.81, which means that if the number of dependents increases by 1%, then saving capacity will decrease by 0.81% and significantly influence the ability to save at a 95% confidence level. From the interview results, it is known that most farmers use the income supply to meet family needs.

The education supply variable harms saving ability because its elasticity is -0.32 which means that if education supply is 1%, then the ability to save strength will decrease by 0.32% but does not show a significant effect on the 95% confidence level. From the results of interviews with farmers obtained information that the high cost of education supply makes farmers cannot save because of their residual income supply after being used to meet their daily needs for school children. It is line with [46] who found that education supply became one of the determinants reducing the ability of household savings of lower-income supply

groups, of which farmer household is among them. However, it should be clearly defined that this education supply is considered as the financial cost for education supply. It is not about the education supply background of the farmers or the families. Since, education supply is regarded as one of the factors affecting a personal saving positively[47]. Moreover, early financial education supply, such as in elementary school, plays an essential role in determining the saving behavior[48].

While the experience of farming has a positive influence on the ability to save where the elasticity is 0.79, if the experience increases by 1%, then the ability to save will increase by 0.79% and significantly influence the 95% confidence level. These results show that the more experienced farmers will have the ability to manage their farming better so that their production and income supply will be higher. The interview results show that farmers save after pennies, where harvest income supply is saved for capital stock in the following season. It is in line with other previous researches that revealed the job experience influence the saving attitude of the household[49, 50]. Farming experience also had a positive impact on farmers' saving[51].

The age factor has a positive influence on the ability to save. The elasticity is 0.94, which means that if age increases by 1%, the ability to save increases by 0.94%, but has no significant effect on the 95% confidence level. The older it becomes, the more aware that the ability to work decreases and tries to save for old age needs. The older the cost is usually to meet the needs of the family, the less because the dependents are reduced. This finding is very consistent with the research results[52], which states the influence of social variables on the ability and motivation to save farmers. Another study also indicated that social impact, such as family involvement, plays a significant role in savings behavior[53]. It is also in line with[54], who quoted that age, education supply, gender, income supply,

marital status, and occupation appeared to have a significant relation with saving. The saving rates also varied with age and tended to be higher for households with more workers, higher education supply, better health, and more assets[55].

### 3.2 Effect of Economic Factors on Farmers' Saving Ability

From the results of statistical tests, the following results are obtained:

**Table 2.** Results of the Influence of Land area distribution, Income supply, Price, and Consumption on Ability to Save Farmers.

No.	Variable	Coefficient	t Stat	P-value	Sig F	F table
1	Intercept	1,270	0.090	0.93	0.00	2.62
2	Land area distribution	0.004	0.002	1.00		
3	Income supply	1,130	0.630	0.53		
4	Price	2,620	0.480	0.63		
5	Consumption	-1,860	-3,970	0.00		
6	R Square	0.610				
7	Adj. R square	0.550				
8	Standard error	0.220				
9	F count	9,730				

From the test results above, an estimation model can be made as:

$$\log Y = 1.27 + 0.004 \log X_1 + 1.13 \log X_2 + 2.62 \log X_3 - 1.86 \log X_4$$

$$Y = 18.62X_1^{0.004} X_2^{1.13} X_3^{2.62} X_4^{-1.86}$$

From Table 2, it can be seen that F-count > F-table or sig F (0.00) <  $\alpha$  (0.05), then accept  $H_a$  and reject  $H_o$ , meaning that simultaneously the area of land area distribution, income supply, price, and consumption have a significant effect on the ability to save at the level of confidence 95%. The adjusted R square coefficient indicates 0.55, meaning that variations in the ups and downs of keeping skills are influenced by differences in the rise and fall of land area distribution, income supply, prices, and farmer consumption by 55%. In comparison, the remaining 45% is influenced by other variables not included in the research model. The estimation results explain that the variable elasticity of land area distribution, income supply, price and consumption to the saving ability variable is 1.89, meaning that the increase in savings is directly proportional to the increase in land area distribution, revenue, cost, and consumption (law of increasing returns to scale), i.e., if the area of land, income supply, price, and expenditure of farmers increased by 1%, then savings increased by 1.89%. These results are consistent with research by [56] that there is an influence between factors of income

supply, consumption, type of work with saving ability and motivation.

Partially the area of land has a positive influence on the ability to save where the elasticity is 0.004, which means that if the area of land increases by 1 %, the ability to save increases by 0.004%, but the effect is not significant at the 95% confidence level. Information from the interviews revealed that the average land area distribution was only 0.71 hectares or smaller than one hectare means that if the area of land increases, the ability to save will also increase. Thus, under the results of the analysis that the area of land provides a positive contribution to improving the ability to save. [57] studied that there is a significant relationship between land tenure, non-agricultural employment, household income supply, the wealth of the socioeconomic status of farm households with the motivation to save at financial institutions [58, 59].

The income supply variable has a positive effect on the saving ability variable because its elasticity is 1.13 which means that if income supply rises 1% then saving ability will

increase 1.13% but based on the results of the t-test and the P-value test table there is no apparent effect between income supply on keeping knowledge at a 95% confidence level. Interview results obtained information that the desire to save is powerful but very much depends on the income supply earned. Income supply is an essential determinant of the capacity to keep [60]. Moreover, income supply level had a significantly positive influence on both the average saving ratio and amount [61].

The variable selling price of grain has a positive influence on the ability to save where the elasticity is 2.62, meaning that if the experience increases 1%, then the ability to save will increase 2.62% but based on the results of the t-test and the P-value table test indicate there is no real effect between the selling price grain to saving ability at 95% confidence level. High and low farm income supply is not only determined by production but also determined by the selling price so that it contributes positively to the ability to save.

The consumption variable has a negative influence on saving ability where the elasticity is -1.86, meaning that if family consumption increases by 1%, then saving capacity is reduced by 1.86%. But based on t-test results obtained  $-t_{\text{count}} < t_{\text{table}}$  then accept  $H_a$  and reject  $H_0$ , which means the real upside, that means a real effect was reversed between the consumption of the ability to save in. Dissipation is the most dominant factor in influencing the ability to save, especially for the community of paddy rice farmers whose majority of the farming system is still subsistence and low-income supply. Hence, consumption contributes negatively to keeping ability. The use in the form of household expenditure negatively affected the farmers' household savings [62].

### 3.3 Factors Pulling and Encouraging Farmers to Save

The research results obtained information that several factors make farmers interested in saving, as shown in Table 3.

**Table 3.** Farmers' Responses to Attractive Factors for Saving

No.	Farmer's Pulling Factors To Save	Number of Samples (People)	Percentage (%)
1	Secure	30	100.00
2	Interest of money	26	86.67
3	A prize	20	66.67
4	Nearly to Residence	21	70.00
5	Familiar with the Officer	11	36.67

From Table 3, it can be seen that all farmers state that security is the most attractive factor for saving at the bank because safety is more secure saving at the bank than outside the home, both from the dangers of a disaster such as fire, the threat of theft. Security guarantee had the most significant impact on people's savings application [63]. The second pull factor is interest, because according to the results of the interview in addition to safe saving at the bank also interest, so the amount of savings can increase. This is under the research of [64],

[65], [66] and [67] stated that the presence of good gifts and services from banks is an attraction for farmers to save. Quality of service, which consists of reliability, responsiveness, assurance, empathy, and tangibles, also determined the saving decisions [68].

From the results of the study, it was found that in addition to the pull factors, several driving factors influence farmers to save, as can be seen in Table 4.

**Table 4.** Farmers' Responses to Saving Factors

No.	Driving Factors for Saving Farmers	amount (Person)	Percentage (%)
1	Desire to Change a Better Life	25	83.33
2	The Desire for Schooling Children	28	93.33
3	Desire to Expand the Business	19	63.33
4	Sudden Supplies	23	76.67
5	Pension plan	17	56.67

From Table 4, it can be seen that the main driving factor for saving is the desire to send children to school because, according to the interview results obtained, information that children are the most significant investment that is the obligation of parents. Therefore, farmers try to send their children to the highest possible level so that their children's lives will be better. By saving, farmers hope to send their children to a more senior school. The parents have personal motivation to give knowledge to their children to be a success in the future[69]. While the second driving factor is the desire of farmers to change lives for the better because saving can improve primary or secondary needs. Besides, saving and frugality is the most realistic way to improve the lives of farmers. As research from [70] and [71] stated that there are social influences, aspects of religiosity and economic elements are a driving factor for the desire to save.

#### 4. Conclusion

From the result of the analysis, this study concludes that:

- a. Simultaneously social factors significantly influence the ability to save farmers, and partially the number of dependents and farming experience substantially affects the ability to save. At the same time, education supply and age have no significant effect on the ability to save at a 95% confidence level.
- b. Simultaneously economic factors significantly influence the ability to save. At the same time, partially, the consumption variable has a significant effect on the ability to save. However, land area distribution, income supply, and price have no significant impact on the ability to save at a 95% confidence level.

- c. Attractive factors for saving are security, interest, prizes, proximity to a place of residence, and familiar with bank officers. The driving factors for saving are the desire to change lives, send children to school, expand businesses, and supply immediate necessities and old age savings.

#### 4. Recommendation

Based on the results of the study, the researcher recommends the following things:

- a. The farmers need to increase their farming skills so that they can increase productivity and, at the same time, their revenues so that their ability to save will be better.
- b. It is expected that farmers will utilize the existing financial institutions as much as possible for farming needs.
- c. It is expected that financial institutions can provide facilities and socialization to farmers.

#### References

- [1] S. Virgawati, "The prospects of precision agricultural development in Indonesia: a review," in *11th International Conference on Precision Agriculture*, Indianapolis, Indiana, USA, 2012.
- [2] H. Maat, "Agriculture in Indonesia," in *Encyclopaedia of the History of Science, Technology, and Medicine in Non-Western Cultures*: Springer Science+Business Media Dordrech, 2016, pp. 1-5.
- [3] M. F. Syuaib, "Sustainable agriculture in Indonesia: Facts and challenges to keep growing in harmony with environment," *Agricultural Engineering International : CIGR Journal Open*, vol. 18, no. 2, pp. 170-184, June 2016.



- [4] R. Barichello and A. Patunru. (2009) Agriculture in Indonesia: Lagging Performance and Difficult Choices. *Choices The magazine of food, farm, and resource issues*. 37-41.
- [5] Mubyarto, *Introduction to Agricultural Economics*. Jakarta: LP3ES, 1989.
- [6] S. Yudohusodo, *The Future of Indonesian Agriculture*. Jakarta, 2003.
- [7] Misdawita, D. Hartono, and A. Nugroho, "Impacts of food prices on the economy: social accounting matrix and microsimulation approach in Indonesia," *Review of Urban and Regional Development Studies*, vol. 31, no. 2, August 2019.
- [8] C. P. Timmer, "Food security in Indonesia: current challenges and the long-run outlook," *SSRN Electronic Journal*, pp. 1-22, November 2004.
- [9] M. Ravallion and D. Van de Walle, "The impact on poverty of food pricing reforms: a welfare analysis for Indonesia," *Journal of Policy Modeling*, vol. 13, no. 2, pp. 281-299, 1991.
- [10] M. Ikhsan, "Poverty and Rice Price," LPEM UI, Jakarta, Working Paper No 3 2003.
- [11] N. McCulloch, "Rice prices and poverty in Indonesia," *Bulletin of Indonesian Economic Studies*, vol. 44, no. 1, pp. 45-64, 2008.
- [12] Soekartawi, *Agricultural Science and Research for Smallholder Development*. Jakarta: UI Press, 1984.
- [13] D. A. Anandita and K. Z. Patria, "Agriculture challenges: decline of farmers and farmland study from Indonesian family life survey," *Jurnal Ilmu Ekonomi dan Pembangunan (JIEP)*, vol. 16, no. 1, pp. 48-53, 2016.
- [14] N. Novira, N. Berutu, Rohani, N. Hasanah, and Yusriati, "Marginalization of farmers in Indonesia," *Advances in Social Science, Education and Humanities Research (ASSEHR)*, vol. 313, pp. 178-181, January 2019.
- [15] P. Warr and A. A. Yusuf, "World food prices and poverty in Indonesia," *Australian Journal of Agricultural and Resource Economics*, vol. 58, no. 1, June 2013.
- [16] N. Yulianti, Kusnandar, T. Soedarto, and E. S. Rahayu, "Farmers' intention to leave the agricultural sector in East Java, Indonesia: a crisis through non agricultural job opportunities challenges," *Journal of Social Science Research*, vol. 13, pp. 2854-2863, 2018.
- [17] G. Ranis, "Is dualism worth revisiting?," Yale University, Economic Growth Center, Discussion Paper 2003.
- [18] B. Herrendorf and T. Schoellman, "Wages, human capital, and structural transformation," 2017.
- [19] D. Caouette and S. Turner, *Agrarian angst and rural resistance in contemporary Southeast Asia*. London, New York: Routledge, 2009.
- [20] N. Hanani, *Agricultural Development Strategies (A New Thought)*. Jakarta: LAPPERA, 2003.
- [21] Soerjono, *Theory of Poverty*. Yogyakarta: Gajah Mada University Press., 1990.
- [22] D. Raywat, "Defining poverty: a summary of competing models," *Journal of Social and Political Sciences*, vol. 2, no. 1, pp. 17-21, 2019.
- [23] U. Wagle, "Rethinking poverty: definition and measurement," *International Social Science Journal*, pp. 155-165, 2002.
- [24] Mubyarto, *Changes in Poverty in Village Communities that Affect Income*. Jakarta: Rineka Cipta, 1990.
- [25] A. Kozera, R. Głowicka-Wołoszyn, and J. Stanisławska, "Savings behaviour in households of farmers as compared to other socio-economic groups in Poland," *Journal of Agribusiness and Rural Development*, vol. 4, no. 42, pp. 557-566, 2016.
- [26] T. O. Obalola, R. O. Audu, and S. T. Danilola, "Determinants of savings among smallholder farmers in Sokoto South Local Government Area, Sokoto State, Nigeria," *Acta agriculturae Slovenica*, vol. 111, no. 2, pp. 341-347, September 2018.
- [27] I. U. Odoemenem, J. A. C. Ezihe, and S. O. Akerele, "Saving and investment pattern of small-scale farmers of Benue State, Nigeria," *Global Journal of Human Social Science*, vol. 13, no. 1, 2013.
- [28] R. Adeyemo and A. S. Bamire, "Saving and investment patterns of cooperative farmers in Southwestern Nigeria," *Journal of Social Sciences*, vol. 11, no. 3, pp. 183-192, 2005.
- [29] B. Y. Mamman, A. Mustapha, I. M. Sulumbe, and U. M. Abdulhamid, "Savings profile and its determinant among small-holder farmers in Jigawa State, Nigeria," *Journal of Agricultural Economics, Extension & Social Sciences*, vol. 1, no. 1, pp. 136-143, 2018.
- [30] C. Bywalec, *Economics and finance of households*. Warszawa: Wydawnictwo Naukowe PWN, 2009.
- [31] Dalle, J., Hairudinor., Baharuddin., Sriadhi., & Chandra, T, " Does

- information technology unrest alter the effect of risk-taking attitude on the organization's performance?" *Journal of Security and Sustainability Issues*, vol. 9, no. M, pp. 158-172, 2020.
- [32] A. Anioła and Z. Gołaś, "Saving strategies of households in Poland," *Journal of Agribusiness and Rural Development*, vol. 1, no. 13, pp. 19-31, 2013.
- [33] M. Iyoha, S. A. Oyefusi, and D. E. Oriakhi, *An introduction to modern Macroeconomics*. Benin City, Nigeria: Mindex publishing, 2003.
- [34] C. M. Pelle, "Potential of Farmer Household Savings in the North Poopo Village, Ranoyapo District," *In Cocos*, vol. 1, no. 2, 2012.
- [35] J. M. Piarna and H. Syahrudin, "Factors Affecting Interest in Saving Society in Dusun Sebau Apo Landak District," *Journal of Education and Learning*, vol. 4, no. 4, 2018.
- [36] J. Kore, Y. Susanto, and T. Jenahar, "Analysis of the ability of farmer savings to bear the cost of rejuvenating the rubber plantation in Musi Banyuasin, South Sumatra," *Jurnal Manajemen dan Bisnis Sriwijaya*, vol. 15, no. 1, pp. 13-20, 2017.
- [37] F. Norfahmi, N. Kusnadi, R. Nurmawati, and R. Winandi, "Time allocation analysis of rice farm and its impact of household farmers income," *Informatika Pertanian*, vol. 26, no. 1, pp. 13-22, 2017.
- [38] S. T. Anong and S. A. DeVaney, "Determinants of adequate emergency funds including the effects of seeking professional advice and industry affiliation," *Family and Consumer Sciences Research Journal*, vol. 38, no. 4, pp. 405-419, 2010.
- [39] D. Ansong, "The relationship between household economic resources and youth academic performance in Ghana: a multilevel structural equation modeling," *Electronic Theses and Dissertations* 2013.
- [40] D. Ansong, M. Okumu, E. R. Hamilton, G. A. Chowa, and S. R. Eisensmith, "Perceived family economic hardship and student engagement among junior high schoolers in Ghana," *Children and Youth Services Review*, vol. 85, pp. 9-18, 2018.
- [41] J. S.-H. Wang *et al.*, "Effects of financial incentives on saving outcomes and material well-being: evidence from a randomized controlled trial in Uganda," *Journal of Policy Analysis and Management*, vol. 37, no. 3, pp. 602-29, May 29 2018.
- [42] J. R. Kore, Y. Susanto, and T. Jenahar, "Analysis of The Ability of Saving Farmers to Bear the Costs of Replanting Their Rubber Gardens in Musi Banyuasin, South Sumatra," *Sriwijaya Management and Business Journal*, vol. 15, no. 1, pp. 13-20, 2017.
- [43] R. K. Yin, *Case study research: design and methods*. London: SAGE Publications Ltd, 2003.
- [44] P. Darke and G. Shanks, "Case study research," in *Research Methods for Students, Academics and Professionals*: Chandos Publishing, 2002, pp. 111-123.
- [45] S. Arikunto, *Research Methods*. Yogyakarta: Rineka Cipta, 2010.
- [46] H. u. Rehman, F. Bashir, and M. Z. Faridi, "Saving behavior among different income groups in Pakistan: a micro study," *International Journal of Humanities and Social Science*, vol. 1, no. 10, pp. 268-277, 2011.
- [47] M. Y. Bayar, H. F. Sezgin, Ö. F. Öztürk, and M. Ü. Şaşmaz, "Impact of financial literacy on personal savings: a research on Usak University staff," *Journal of Knowledge Management, Economics and Information Technology*, vol. VII, no. 6, pp. 1-19, December 2017.
- [48] Y. G. Lee and J. M. Lown, "Effects of financial education and impulsive buying on saving behavior of Korean college students," *International Journal of Human Ecology*, vol. 13, pp. 159-169, June 2012.
- [49] S. B. Akpan, E. J. Udoh, and E. A. Aya, "Analysis of savings determinants among agro-based firm workers in Nigeria: a simultaneous equation approach," *Research on Humanities and Social Sciences*, vol. 1, no. 3, pp. 1-11, 2011.
- [50] J. S. Orebiyi, "Determinants of saving mobilization by farmers cooperators in Kwara State Nigeria," *International Journal of Agriculture and Rural Development*, vol. 6, pp. 66-73, 2000.
- [51] N. E. Odoh, S. U. Nwibo, A. V. Eze, and E. O. Igwe, "Farmers income and savings pattern in Benue State, Nigeria," *Journal of Agricultural Extension*, vol. 24, no. 1, pp. 128-137, January 2020.
- [52] O. D. Siska and S. Djaja, "Analysis of Motivation for Saving Housewives in Kebonsari Village, Summersari District, Jember Regency," *Journal of Economic Education: Scientific Journal of Education, Economics and Social Sciences*, vol. 9, no. 1, 2016.
- [53] A. A. Abdul Jamal, W. K. Ramlan, M. R. Abdul Karim, R. Mohidin, and Z. Osman, "The effects of social influence and financial literacy on savings behavior: a study on students of higher learning

- institutions in Kota Kinabalu, Sabah," *International Journal of Business and Social Science*, vol. 6, no. 11, pp. 110-119, November 2015.
- [54] S. Joo and J. E. Grable, "A retirement investment and saving decision model: influencing factors and outcomes," *Consumer Interest Annual*, vol. 46, pp. 43-48, 2000.
- [55] S. Lugauer, J. Ni, and Z. Yin, "Chinese household saving and dependent children: theory and evidence," *China Economic Review*, vol. 57, October 2019.
- [56] S. Sutarno, "Saving Behavior of Households in Rural Areas (Case Study in Delanggu District, Klaten Regency)," Diponegoro University Postgraduate Program, Semarang 2005.
- [57] A. P. Lestari, "Relations Socioeconomic Status Farmer Households with Motivation Saving on Financial Institutions in Bendosari of Sukoharjo District," University Sebelas Maret, Surakarta 2008.
- [58] N. Maqbool, S. Razzaq, W. Hameed, A. Nawaz, Muhammad, , and A. Niaz, Shafqat, , "Advance Fundraising Techniques: An Evidence from Non-Profit Organizations," *Pakistan Journal of Humanities and Social Sciences*, vol. 7, no. 1, pp. 147-157, 2019.
- [59] S. Razzaq, N. Maqbool, and W. U. Hameed, "Factors Effecting The Elasticity Of Micro Credit Demand In Southern Punjab, Pakistan," *International Journal of Social Sciences and Economic Review*, vol. 1, no. 2, pp. 46-53, 2019.
- [60] B. Frączek, "The factors affecting the level of household savings and their influence on economy development," in *8th international scientific conference Financial management of firms and financial institutions*, Ostrava, 2011: VŠB-TU Ostrava, faculty of economics, finance department.
- [61] P. Swasdpeera and I. M. Pandey, "Determinants of personal saving: a study of salaried individuals in Thailand," *Afro-Asian Journal Finance and Accounting*, vol. 3, no. 1, pp. 34-68, 2012.
- [62] L. Marnisah, A. Karim, A. Sanmorino, and T. J. Jenahar, "Analysis of factors affecting the household expenditure of rubber farmers in Indonesia," *International Journal of Engineering and Advanced Technology (IJEAT)*, vol. 8, no. 4, pp. 304-306, April 2019.
- [63] Y. N. Setyawan and E. Japariato, "Analysis of the influence of trust, guarantee of safety, and accessibility to savings interests of Bank Danamon customers in Surabaya," *Jurnal Manajemen Pemasaran Petra*, vol. 2, no. 1, pp. 1-8, 2014.
- [64] A. Mahmudi, "Influence Savings Product Quality and Service Quality for Interest Savings in BMT Tumang Branch Salatiga," IAIN Salatiga, Salatiga 2016.
- [65] W. G. P. Soraya and M. M. Azis Slamet Wiyono, "The Effect of Lucky Draws, Profit Sharing and Service Quality on Savings Interests (Case Study of KSPPS Bina Insan Mandiri Karanganyar)," IAIN Surakarta, Surakarta 2017.
- [66] Rizal, E. Maharani, and Eliza, "Analysis of farmer's extrinsic motivation in saving in Ukui Unit of BRI Bank," *Jurnal Ilmiah Pertanian*, vol. 13, no. 1, pp. 15-21, August 2016.
- [67] T. R. Handayanni, "Effect Savings Product Quality and Service Quality of Interest Member Savings for Cooperative Sharia Al-Mawaddah Ngunut Tulungagung," 2018.
- [68] R. R. Tyas and A. Setiawan, "The effect of location and service quality on the saving decisions in BMT Sumber Mulia Tuntang," *Jurnal Muqtasid*, vol. 3, no. 2, pp. 277-297, December 2012.
- [69] B. S. Maulana Bahari, "Management of farmer families who do not have a steady income in sending their children from elementary to tertiary education in Dusun Rejodani, Sariharjo Village, Ngaglik District, Sleman Regency," FKIP, PGRI Yogyakarta University, Yogyakarta, Thesis 2014.
- [70] Z. Nikmah, " The Influence of The Dimensions of Religiosity of the Santri Community of Kajen Village, Margoyoso Subdistrict, Pati Regency on The Interest in Saving (Case Study on BPRS Artha Mas Abadi)," IAIN Walisongo, Semarang 2013.
- [71] W. M. Hilda, "The Effect of Advertising, Sales Promotion, Personal Selling, Direct Marketing and Corporate Image on Customers' Savings Decisions at BRI Sub-Branch Office Syariah Ungaran," 2018.