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Factors Influencing Young People's Interest in Becoming Farmers in Langkat District

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Abstract

This research is motivated by the lack of interest of the younger generation in entrepreneurship in agriculture, it is important to know the factors that can be a driving force for the younger generation to become farmers. The objectives of the study were to determine or analyze the profile of the interest of the younger generation as farmers, analyze the influence of social and economic factors that influence the interest of the younger generation as farmers, analyze the influence of educational and psychological factors that influence the interest of the younger generation as farmers, and analyze the influence of environmental and cultural factors on the interest of the younger generation as farmers. This research was conducted at SMK Swasta Pertanian Pembangunan Putra Jaya Stabat. The research method used in this study is a quantitative approach with the SEM method. To analyze the factors that influence the interest of the younger generation as farmers. The quantitative approach was chosen because of its ability to provide objective and measurable numerical data, as well as its ability to statistically identify patterns and relationships between variables. The results of this study show: 1). The profile of young people's interest in the farming profession at SMK Pertanian Pembangunan Putra Jaya is still low, 2). Social and economic factors have a significant effect on the interest of young people to become farmers. 3). Educational and psychological factors have a significant effect on the interest of the younger generation

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in the farming profession. And 4). Cultural environmental factors significantly influence the interest of the younger generation to become farmers.

Keywords: Analysis, Young Generation Interest, Farmer

INTRODUCTION

Indonesia is an agricultural country and has the 4th largest population in the world, 64.16 million people (23.18%) of youth based (Jamil 2022). Agriculture is a crucial sector in maintaining food security and the economy of a country. However, in the midst of technological development and rapid urbanization, the interest of the younger generation to choose a career in agriculture has decreased (Fauzi, 2021). Langkat Regency, as one of the districts with a large area of agricultural land, has little regeneration of young farmers (BPS Kabupaten Langkat, 2023).

SMK Swasta Putra Jaya Stabat, as an educational institution that prepares students to enter the world of work, has an important role in shaping students' interest and knowledge of various sectors, including agriculture. However, a number of challenges are faced in increasing students' interest in agriculture. Factors that can encourage the interest of the younger generation as farmers can foster and motivate students' interest in becoming farmers. According to Peka et al, (2022) concluded that the factors that influence the perception of rural youth towards work as farmers in the research location consist of 2 factors, namely internal factors and external factors. Internal factors consist of gender, age, and education level. External factors consist of agricultural technology, cosmopolitan, and socialization from parents.

By understanding the factors that influence the interest of the younger generation, particularly students of SMK Swasta Putra Jaya Stabat, in choosing a career in agriculture, it is hoped that effective strategies can be found to overcome these challenges. This research aims to identify the various aspects that influence students' interest in agriculture and design measures that can increase their interest in entering the sector, as well as promote agriculture as a sustainable and profitable career choice (Suseno et al., 2021).

Based on the description as stated in the background of the problem above, the problems that can be identified are as follows: Profile of the Interest of the Young Generation as Farmers in the Private Agricultural Development SMK Putra Jaya Stabat; Influence of Social and Economic Factors on the Interest of the Young Generation as Farmers in the Private Agricultural Development SMK Putra Jaya Stabat; Influence of

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Educational and Psychological Factors on the Interest of the Young Generation as Farmers in the Private Agricultural Development SMK Putra Jaya Stabat.; Influence of Environmental and Cultural Factors on the Interest of the Young Generation as Farmers in the Private Agricultural Development SMK Putra Jaya Stabat.

Based on the description above, several problems were formulated: 1. What is the profile of the interest of the younger generation as farmers in the private SMK Pertanian Pembangunan Putra Jaya Stabat? 2. Do social and economic factors influence the interest of the younger generation as farmers at SMK Swasta Pertanian Pembangunan Putra Jaya Stabat? 3. Do educational and psychological factors influence young people's interest in becoming farmers at SMK Swasta Pertanian Pembangunan Putra Jaya Stabat? 4. Do environmental and cultural factors influence the interest of the younger generation as farmers at SMK Swasta Pertanian Pembangunan Putra Jaya Stabat?

This study aims to determine and analyze: The profile of the interest of the younger generation as farmers in SMK Swasta Pertanian Pembangunan Putra Jaya Stabat; The influence of social and economic factors on the interest of the younger generation as farmers; The influence of educational and psychological factors on the interest of the younger generation as farmers; The influence of environmental and cultural factors on the interest of the younger generation as farmers.

The benefit of this research is that farmers and parties who need information about the factors that influence young people's perceptions of interest in becoming farmers. This is because there are fewer young people who are interested in becoming farmers.

RESEARCH METHOD

This research method uses a quantitative approach with the Survey method (Sugiyono, 2017). This research was conducted at SMK Swasta Pertanian Pembangunan Putra Jaya Stabat, where the determination of this research location was carried out deliberately with purposive method. The research was conducted in August-November 2024.

Determination of the sample is done by simple sampling method (Simple Random Sampling), by drawing without return (Wirartha, 2006). The research population is the entire young generation in the SMK Private Agricultural Development Putra Jaya Stabat Plantation Study Program with the level of education class (grade 10, 11, 12) as many as 131 people. The research sample was taken by simple random sampling from the research population, using the propability sample formula, namely stratifield random sampling, where a sample of 45 students was obtained.

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Data collection was carried out using the interview method using a questionnaire to obtain primary data. Interviews were conducted with students of SMK Swasta Pembangunan Pertanian Putra Jaya Stabat. While secondary data was collected using the documentation method, which was obtained through books, government publications, internal organizational records, reports, journals, and various sites related to the research topic.

The data analysis method used in the research is descriptive statistical method. Descriptive statistical analysis includes the calculation of frequency, percentage, average, and standard deviation. To evaluate the relationship between variables, Pearson correlation test and linear regression analysis were used. Validity and reliability tests were also conducted to ensure the accuracy and consistency of the research instruments. Data analysis using SEM PLS Application, and using inferential statistics, using linear regression analysis and validity and reliability tests.

RESULT AND DISCUSSION

Results

A profile of SMK Putra Jaya students' interest in the farming profession, including the factors that influence their decision to enter agriculture. The interest of students at SMKS Pertanian Pembangunan Putra Jaya Stabat in the farming profession is influenced by the following aspects:

a. Family Aspirations: Most students come from farming families, so their interest tends to be influenced by the desire to continue the family business,
b. Entrepreneurial Opportunities: Some students see farming as a promising business opportunity, especially in the era of modern, technology-based agriculture..,
c. Environmental Support
d. Local Culture: Langkat Regency is known for its strong agricultural traditions, which helps build students' positive perceptions of the profession,
e. Community: The existence of a young farmer group around the school also inspires students to pursue agriculture..,
f. Educational Influences viz: Agribusiness Curriculum: The learning program at SMK Putra Jaya is designed to introduce students to modern agricultural practices, including the use of the latest agricultural tools and technology.
g. Field Practices: Internships on local farms provide hands-on experience that reinforces students' skills and interests.

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To foster or develop the low interest of students of Private Agricultural Development SMKs, interventions from schools are needed in the form of interesting and innovative Agribusiness agricultural education, field practice and cooperation with Agribusiness companies, introduction to inspiring millennial farmer communities, educational, socio-economic, environmental and cultural support.

Table 1. Pilot Test Results of the Likert Scale Questionnaire Langkat 2024

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Environmental & Cultural Factors	0,951	0,953	0,968	0,911
Educational & Psychological Factors	0,973	0,974	0,982	0,948
Social & Economic Factors	0,862	0,865	0,916	0,784
Young Generation's Interest in Becoming Farmers	0,958	0,959	0,973	0,922

Based on the data table above, it can be concluded that for each indicator that has been calculated has a valid and reliable statement.

Based on the results of the analysis of the figure below, it can be interpreted that from each factor that affects the interest of the younger generation in the farming profession can be seen through:

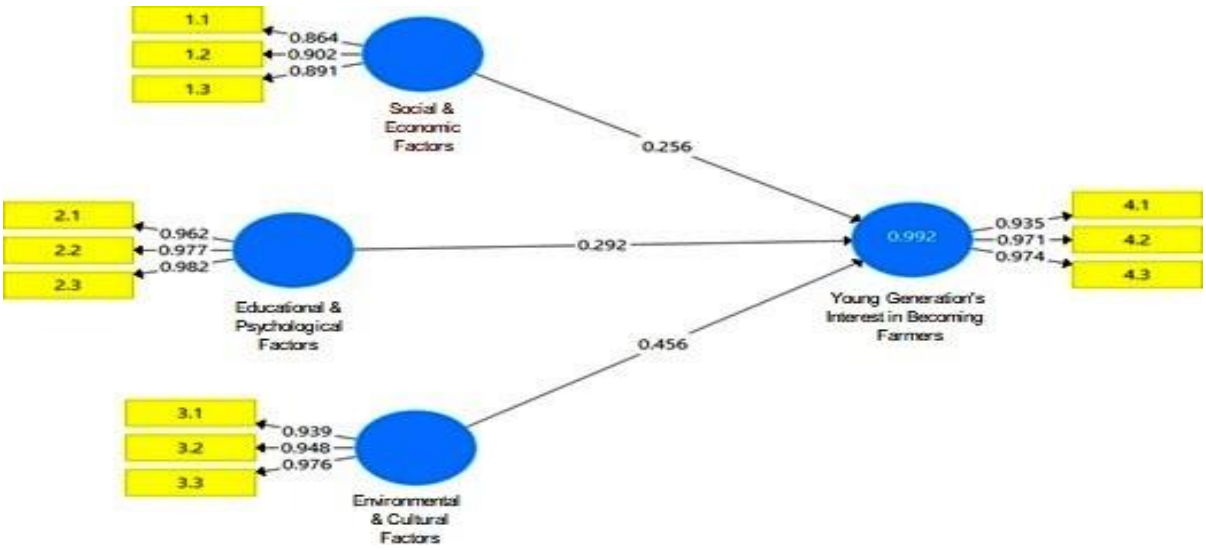


Figure 1. Algorithm / Outer Model in Kab. Langkat 2024

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The outer model above illustrates:

1. Social and Economic Factors (Path Coefficient: 0.256): This factor has a positive influence of 0.256 on the interest of the younger generation to become farmers. This means that social and economic aspects such as social support, community perceptions of the farming profession, and the earning potential of this profession also influence the interest of the younger generation. However, the effect is not too large when compared to other factors in this model. The loading factor values of indicators 1.1, 1.2, and 1.3 (0.864, 0.902, and 0.891 respectively) indicate that these three indicators are strong enough to represent the latent variable of social and economic factors. These indicators may include things such as the social status of farmers in the community and the economic prospects of agriculture.
2. Educational and Psychological Factors (Path Coefficient: 0.292): This factor has a positive influence of 0.292 on young people's interest in becoming farmers. Educational and psychological aspects, such as knowledge about agriculture, mental attitude, and interest arising from the education they receive, are enough to influence their interest in this profession. The high loading factors on indicators 2.1, 2.2, and 2.3 (0.962, 0.977, and 0.982, respectively) indicate that these indicators have a very strong role in describing educational and psychological factors. This means that education and psychological understanding are important factors in shaping young people's interests.
3. Environmental and Cultural Factors (Path Coefficient: 0.456): Environmental and cultural factors have the greatest influence on young people's interest in the farming profession, with a coefficient of 0.456. This suggests that environmental and cultural aspects such as cultural values, perceptions of the farming profession passed down from families, or traditions that support this profession, play a major role in shaping young people's interest. The high loading factor values of indicators 3.1, 3.2, and 3.3 (0.939, 0.948, and 0.976 respectively) indicate that these indicators are quite strong in describing Environmental and Cultural Factors. This indicates that cultural factors and the social environment around the young generation are instrumental in shaping their interest in the farming profession.
4. Young Generation's Interest in the Farming Profession: This variable is measured through three indicators (4.1, 4.2, and 4.3) with high loading factor values of 0.935, 0.971, and 0.974. This indicates that these three indicators strongly represent the interest of the younger generation towards the farming profession, where the higher

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the value of these three indicators, the stronger the interest of the younger generation to choose the profession.

DISCUSSION

In order to understand the factors that influence young people's interest in the farming profession, three main groups of variables were statistically analyzed: Environmental and Cultural Factors, Educational and Psychological Factors, and Social and Economic Factors. This analysis aims to measure how much influence each factor has on the interest of the younger generation, and test the significance of the relationship. The results of this study are contained in the following table:

Table 2. Hypothesis Test Results in Kab. Langkat 2024

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Notes
Environmental & Cultural Factors -> Young Generation's Interest in Becoming Farmers	0,456	0,478	0,150	3,047	0,002	Valid
Educational & Psychological Factors -> Generation's Interest in Becoming Farmers	0,292	0,281	0,107	2,716	0,007	Valid
Social & Economic Factors -> Generation's Interest in Becoming Farmers	0,256	0,245	0,126	2,037	0,042	Valid

Based on the data from this hypothesis test, the results of variable x with variable y, namely:

1. The influence of environmental and cultural factors on young people's interest in becoming farmers is one of the interesting studies in understanding the dynamics of the agricultural sector in the modern era. Based on the results of statistical analysis, this hypothesis is accepted with a t-Statistics value of 3.047 and a P-Value of 0.002, which is significantly smaller than 0.05. This shows that environmental and cultural factors have a real impact on the interest of the younger generation to pursue a career in agriculture. Environmental factors include natural conditions, land availability, access to technology, and adequate infrastructure support. If the environment is favorable, young people are more likely to see agriculture as a promising career opportunity. Conversely, if environmental factors are less conducive, this can lead to the perception that the farming profession is less attractive or high-risk. Meanwhile,

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cultural aspects play an important role in shaping young people's perceptions and attitudes towards the farming profession. Local cultures that value farmers as pillars of society tend to encourage a sense of pride and interest in the occupation. However, in some cases, modern cultures that prioritize professions in the urban sector often make farming seen as a less prestigious traditional occupation. The results of this study underscore the importance of creating an enabling environment and reinforcing a positive culture towards the farming profession to increase the interest of the younger generation. Measures such as modernizing the agricultural sector, agribusiness-based education, and campaigns promoting the important role of farmers in food security can be strategic solutions in attracting young people. Thus, the synergistic influence between environmental and cultural factors can not only increase interest, but also change the paradigm that the farming profession is a relevant, valuable job with potential in the future.

2. The effect of Educational and Psychological Factors on Young Generation's Interest in Farming has a T-Statistics value: 2.716, and P-Value: 0.007. This hypothesis is also accepted because the T-statistic is 2.716 with a P-value of 0.007 (smaller than 0.05). This means that educational and psychological factors have a significant influence on young people's interest in the farming profession. Educational factors include access to and quality of education that supports knowledge about modern agriculture, agricultural technology, and business opportunities in the agricultural sector. Relevant education can open young people's minds that agriculture is not only about traditional activities, but can also be an innovative, high-tech and economically promising profession. Meanwhile, psychological factors such as motivation, self-confidence and perception of risk play an equally important role. Young people who have high confidence in their ability to adapt to the challenges of the agricultural sector will be more motivated to pursue a career in the field. Conversely, negative perceptions of the risks of farming, such as dependence on the weather or income instability, may reduce their interest. These results suggest that efforts to increase young people's interest in the farming profession require an integrated approach that includes relevant education and psychological strategies to increase motivation. Programs such as providing agribusiness scholarships, mentoring by successful farmers, and campaigns that emphasize the important role of farmers in food security can be strategic solutions. Thus, educational and psychological factors not only significantly influence interest, but also create a foundation for building a more confident, knowledgeable and innovative generation of farmers to face future agricultural challenges.

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3. The effect of Social and Economic Factors on Young Generation Interest in Farmers has a T-Statistics value: 2.037, and P-Value: 0.042. This hypothesis is accepted with T-statistic 2.037 and P-value 0.042 (smaller than 0.05). This indicates that social and economic factors also have a significant effect on young people's interest in becoming farmers. Social factors include support from the family, the community's view of the farming profession, and the social network owned by the individual. In an environment where the farming profession is valued and considered important, young people tend to be more motivated to pursue a career in this field. Conversely, if the farming profession is perceived as less prestigious or as a job that is only done out of necessity, this may decrease their interest. Support from family and community is also an important factor in building young people's confidence to enter the agricultural sector. From an economic perspective, access to capital, income stability and profit potential are key considerations for young people in choosing a profession. If the agricultural sector is seen as having good economic prospects, with opportunities to generate a stable and decent income, then young people's interest in becoming farmers will increase. However, if the profession is still perceived to be full of risks, such as crop yield uncertainty or limited market access, this can be a deterrent. The results of this study suggest that efforts to increase young people's interest in the farming profession should include strategic social and economic approaches. Programs such as providing economic incentives, facilitating access to farming capital, and strengthening the image of farmers as a profession that contributes greatly to food security and community welfare can be effective measures. Thus, social and economic factors not only influence interest, but also provide a framework for creating an ecosystem that supports young people to become productive and competitive farmers.

From the results above, all factors tested-environmental and cultural, educational and psychological, and social and economic-have a significant influence on young people's interest in becoming farmers, as indicated by t-statistics greater than 1.96 and P-values smaller than 0.05. In addition, there are several comprehensive strategies undertaken by SMK Swasta Pertanian Pembangunan Putra Jaya Stabat Stabat schools to attract the younger generation to the agricultural sector through strengthening education by involving students in internship programs in modern companies, providing access to students of SMK Swasta Pertanian Pembangunan Putra Jaya Stabat Stabat to innovate and use advanced technology such as agricultural drones or soil sensors that make farming more efficient and interesting. In addition, SMK Swasta Pertanian

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Pembangunan Putra Jaya Stabat school provides and provides opportunities for students who want to farm, entrepreneurship in agriculture by providing incentives, and funding agribusiness startups.

In addition, SMK Swasta Pertanian Pembangunan Putra Jaya Stabat provides the widest possible space for students to form a community or organization to encourage partnerships between senior farmers and the younger generation to collaborate in networking and experience.

CONCLUSION

Based on the results of research analyzing the factors that influence the interest of the younger generation as farmers, it can be concluded that: The profile of the younger generation's interest in the farming profession at SMK Pertanian Pembangunan Putra Jaya is still low, but can be improved through innovative education, changing perceptions, and introducing modern agricultural opportunities along with continuing to carry out cooperation with companies in agriculture. Social and economic factors influence the interest of the younger generation as farmers. Educational and psychological factors influence the interest of the younger generation as farmers. Environmental and cultural factors influence the interest of the younger generation as farmers.

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