

THE IMPACT OF ENTREPRENEURIAL MOTIVATION, COMPETENCY, AND ORIENTATION ON GARLIC FARMING PERFORMANCE IN SEMBALUN DISTRICT

Shabilla Uswatun Hasanah^{*1}, Lestari Rahayu Waluyati^{**}, Any Suryantini^{**})

^{*)}Master of Agribusiness Management, Department of Agricultural Socioeconomics, Faculty of Agriculture, Universitas Gadjah Mada

Jl. Flora Bulaksumur, Sleman, Yogyakarta 55281, Indonesia

^{**})Department of Agricultural Socioeconomics, Faculty of Agriculture, Universitas Gadjah Mada

Jl. Flora Bulaksumur, Sleman, Yogyakarta 55281, Indonesia

Article history:

Received
22 January 2024

Revised
2 February 2024

Accepted
28 February 2024

Available online
31 March 2024

This is an open access
article under the CC BY
license



Abstract: Sembalun District is the center of garlic farming in East Lombok Regency and one of the areas with the highest garlic production in Indonesia. Garlic is a commodity with very high demand in Indonesia and continues to increase. However, this demand is primarily supported by imports. On the other hand, garlic farming has high risks due to dependence on the weather. Therefore, farmers must have good entrepreneurial skills to optimize the performance of their farming business. This research aims to determine the influence of entrepreneurial motivation, entrepreneurial competency, and entrepreneurial orientation on the business performance of garlic farmers in Sembalun District. The research uses primary data taken from 70 garlic farmers spread across five villages in Sembalun District. The analytical method used in this research is SEM PLS analysis with the help of SmartPLS software version 4.0. The research results show that (1a) pull motivation has a positive effect on entrepreneurial orientation; (1b) push motivation has a negative effect on entrepreneurial orientation; (1c) entrepreneurial competency has a positive impact on entrepreneurial orientation; (2a) pull motivation has a positive effect on farming business performance; (2b) push motivation has a negative effect on farming business performance; (2c) entrepreneurial competency has no impact on farming business performance; (3) entrepreneurial orientation has a positive effect on farming business performance.

Keywords: entrepreneurial motivation, entrepreneurial competency, entrepreneurial orientation, farming performance, garlic

Abstrak: Kecamatan Sembalun merupakan sentra usaha tani bawang putih di Kabupaten Lombok Timur dan merupakan salah satu wilayah dengan produksi bawang putih tertinggi di Indonesia. Bawang putih adalah salah satu komoditas yang memiliki permintaan yang sangat tinggi di Indonesia dan terus mengalami peningkatan. Akan tetapi, permintaan tersebut sebagian besar dipenuhi oleh impor. Di sisi lain, usaha tani bawang putih memiliki resiko yang tinggi karena ketergantungan terhadap cuaca. Oleh karena itu, petani harus memiliki kemampuan kewirausahaan yang baik agar dapat mengoptimalkan kinerja usaha taninya. Penelitian ini bertujuan untuk mengetahui pengaruh motivasi berwirausaha, kompetensi kewirausahaan, dan orientasi kewirausahaan terhadap kinerja usaha tani bawang putih di Kecamatan Sembalun. Penelitian ini menggunakan data primer yang diambil dari 73 petani bawang putih yang tersebar di lima desa di Kecamatan Sembalun. Metode analisis yang digunakan pada penelitian ini adalah analisis SEM PLS dengan bantuan software SmartPLS versi 4.0. Hasil penelitian menunjukkan bahwa (1a) motivasi penarik berpengaruh positif terhadap orientasi kewirausahaan; (1b) motivasi pendorong berpengaruh negatif terhadap orientasi kewirausahaan; (1c) kompetensi kewirausahaan berpengaruh positif terhadap orientasi kewirausahaan; (2a) motivasi penarik berpengaruh positif terhadap kinerja usaha tani; (2b) motivasi pendorong berpengaruh negatif terhadap kinerja usaha tani; (2c) kompetensi kewirausahaan tidak berpengaruh terhadap kinerja usaha tani; (3) orientasi kewirausahaan berpengaruh positif terhadap kinerja usaha tani.

Kata kunci: motivasi berwirausaha, kompetensi kewirausahaan, orientasi kewirausahaan, kinerja usaha tani, bawang putih

¹ Corresponding author:

Email: shabilla.u.h@mail.ugm.ac.id

INTRODUCTION

Garlic holds a prominent place in Indonesia due to its considerable demand. According to Setiawan et al. (2022), from 2016 to 2019, the average national garlic consumption stood at 479,054 tons annually, experiencing a steady 4.3% increase each year. However, this demand outpaces domestic production, necessitating significant imports. By 2020, domestic production only covered 16% of the country's garlic consumption, as reported by the Ministry of Agriculture (2020). Unfortunately, this situation worsened with a decline in national garlic productivity from 2019 to 2021 (West Nusa Tenggara Provincial Government, 2022).

Garlic farming is a promising business, given the high demand for garlic and its potential role in import substitution, thereby saving the country's foreign exchange. However, it also comes with high risks, primarily due to the dependency of garlic commodities on weather and climate conditions. Mistakes in weather forecasting during garlic planting can lead to suboptimal growth and yields. Additionally, pests and diseases, often triggered by weather conditions, further increase the risk in farming (Sriyadi et al. 2010). Effective entrepreneurial behavior and skills are crucial for farmers to navigate these higher risks.

Entrepreneurship is the ability to be creative, realize innovation, and capitalize on opportunities for success (Sanawiri & Iqbal, 2018). An individual's knowledge or competency in entrepreneurship can influence entrepreneurial behavior. Since entrepreneurial behavior cannot be measured directly, entrepreneurial orientation is a commonly used method. Entrepreneurial orientation refers to the ability of business owners to identify and exploit existing opportunities (Dewantoro & Ellitan, 2021). Research by Wickramaratne et al. (2014) demonstrated a positive impact of entrepreneurial competency on entrepreneurial orientation among tea factory owners in Sri Lanka.

In addition, farmer motivation can be an essential variable influencing entrepreneurial orientation and farming performance. Jasintha's research in 2021 underscores the crucial role of farmer motivation in shaping entrepreneurial orientation and farming performance. This motivation, as identified, influences

the entrepreneurial mindset not only among new engineering graduates in Sri Lanka but also within the broader agricultural context. There are two distinct types of motivation at play: push and pull. Push motivation typically arises from pressing circumstances such as poverty and limited job opportunities, compelling individuals to pursue entrepreneurship. Pull motivations, on the other hand, stem from a person's desire to become an entrepreneur based on the attractiveness of a business and the profits that will be obtained later. Pull motivation triggers the formation of entrepreneurial abilities needed for business success (Yang et al. 2023). Additionally, that study shows that both push and pull motivation positively impact farming performance.

Semalun District is located in East Lombok Regency, West Nusa Tenggara, Indonesia's second-largest garlic-producing province. East Lombok Regency is the largest garlic-producing region in West Nusa Tenggara, contributing more than 60% to the total garlic production in 2021 (West Nusa Tenggara Provincial Government, 2022). Semalun District is a significant garlic-production center in East Lombok Regency.

Garlic has been one of the primary commodities cultivated in Semalun District since the 1980s. However, from 2019 to 2021, garlic productivity in Semalun continued to decline (West Nusa Tenggara Provincial Government, 2022). Despite various government efforts to increase productivity, the results could have been more optimal. Improving the quality of human resources can be a way to optimize these garlic productivity improvement programs. Identifying the behavior and abilities of entrepreneurs is essential to support the enhancement of human resources for optimizing garlic productivity. This research is also part of the efforts to increase Indonesian garlic production to meet domestic needs and reduce dependence on imported products.

This research aims to determine the influence of entrepreneurial motivation, entrepreneurial competency, and entrepreneurial orientation on the business performance of garlic farmers in Semalun District. This study attempts to fill the gap in the literature by combining the influence of entrepreneurial motivation, orientation, and competency on garlic farming performance.

METHODS

The research was conducted in Sembalun District, East Lombok Regency, West Nusa Tenggara (NTB). The study focused on garlic farmers in the research area, and the sample collection began from the end of July to the end of August 2023 using purposive sampling. The sample size was determined based on the analytical tool used, SEM-PLS (Structural Equation Modeling-Partial Least Square) analysis. Following Nauvallia et al. (2020), the minimum representative sample size is the number of indicators multiplied by five. In this research, 70 samples were used, with 13 indicators.

The data used in this research is primary data. Data was collected through interviews using a questionnaire containing written questions related to the research. The entrepreneurial motivation variable's indicators were measured using a 1-5 Likert scale, where one means strongly disagree, two means differ, three means neutral, four means agree, and five means strongly agree.

Pull motivation (X₁) was measured using indicators related to running a farm business due to high revenue opportunities (X₁₁), promising selling prices (X₁₂), and high confidence in profits (X₁₃). Push motivation (X₂) was measured using statements related to farmers running businesses because of hereditary culture (X₂₁) and to meet family needs (X₂₂). Entrepreneurial competency (X₃) was measured using indicators of organizing competency (X₃₁), conceptual competency (X₃₂), and strategy-making competency (X₃₃). Entrepreneurial orientation (Y)

variables were measured using indicators of risk-taking (Y₁), innovative attitude (Y₂), and proactive attitude (Y₃). Farming performance (Z) was measured using productivity (Z₁) and profits per hectare of farm business (Z₂).

The primary method used in this research is a quantitative descriptive method. Data analysis was conducted using Partial Least Square-Structural Equation Modeling (PLS-SEM) analysis with the assistance of Smart PLS 4.0 Software. This method is used because it can estimate highly complex models consisting of many constructs and indicators. SEM-PLS can also evaluate models that incorporate mediation effects (Figure 1). The hypotheses in this research are:

- H1: Pull motivation, push motivation, and entrepreneurial competency have a positive effect on the entrepreneurial orientation of garlic farmers in Sembalun District, East Lombok Regency.
- H2: Pull motivation, push motivation, and entrepreneurial competency have a positive effect on the performance of garlic farming in Sembalun District, East Lombok Regency.
- H3: Entrepreneurial orientation has a positive effect on the performance of garlic farming in Sembalun District, East Lombok Regency.
- H4: Pull motivation, push motivation, and entrepreneurial competency positively affect the performance of garlic farming in Sembalun District, East Lombok Regency, with entrepreneurial orientation as a mediating variable.

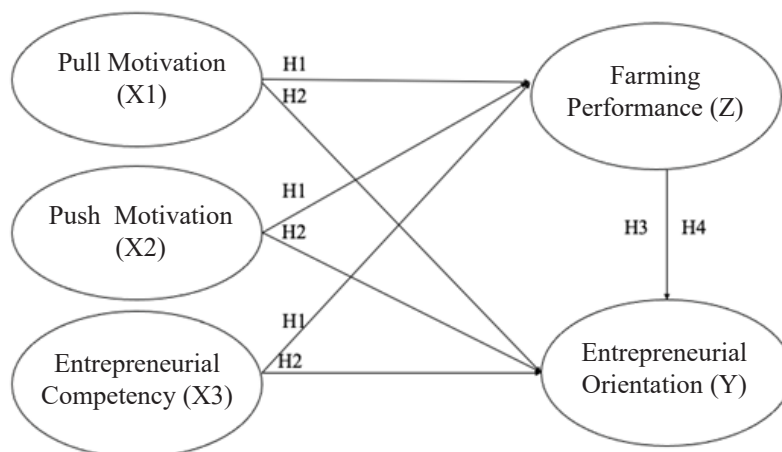


Figure 1. Model structure

RESULTS

Farming performance

This study portrays farming performance according to productivity and profit/ha. The average productivity of fresh garlic is 17.76 tons/ha (Table 1). The drying and storage process for approximately one month caused a decrease in the weight of fresh garlic, reaching 52.44% (Sulistyaningrum et al. 2020). Based on the table, the average productivity of dried garlic is 8.45 tons/ha. This productivity value is below the national average garlic productivity, which reaches 8.7 tons/ha (West Nusa Tenggara Provincial Government, 2022).

Based on Table 2, the average profit of garlic farm business is IDR 48.893.742. Meanwhile, the average profit per hectare of garlic farming in Sembalun District is IDR 134.165.502. The average profit is relatively high because the average price of garlic in Sembalun District is relatively high, IDR 16,036 when compared to the average price of fresh garlic in Indonesia, which is in the range of IDR 8,670 – IDR 10,703 / kg (Sandra et al. 2022).

Measurement Model Evaluation

The measurement model is evaluated to demonstrate the manifest variables' ability to represent the latent variables being measured.

Table 1. Garlic farm productivity (Ton/ha)

Categories	Fresh (tons/ha)	Dry (tons/ha)
Average	17.76	8.45
Maximum	35.71	16.98
Minimum	9.60	4.57
Standart Deviation	4.44	2.11

Table 2. Garlic farming profit

Categories	Per-Farm Business	Per-hectare
Productions (Kg)	6,120	16,794
Prices (IDR)	16,036	16,036
Reception (IDR)	98,144,037	269,309,391
Explicit costs		
Seed costs (IDR)	12,999,286	35,670,325
Mulsa costs (IDR)	2,342,507	6,427,891
Non-family labors (IDR)	13,605,705	37,334,353
Fertilizers costs (IDR)	4,007,024	10,995,361
Pesticides cost (IDR)	1,987,954	5,454,989
Depreciations (IDR)	51,023	140,008
Others (IDR)	1,100,149	3,018,834
Total explicit costs (IDR)	36,093,648	99,041,762
Income (IDR)	62,050,389	170,267,629
Implicit costs		
Family labors (IDR)	8,075,599	22,159,621
Owner's land rent (IDR)	2,915,429	8,000,000
Owner's capital interest (IDR)	2,165,619	5,942,506
Total implicit costs (IDR)	13,156,646	36,102,127
Profit (IDR)	48,893,742	134,165,502

Convergent Validity

Convergent validity testing involves identifying the outer loading value and the Average Variance Extracted (AVE) value. An indicator is considered to have met the convergent validity test if it has a factor loading value above 0.7. However, factor loading values above 0.5 are still considered valid during the measurement scale development stage. Additionally, an indicator is declared valid if it has an AVE value greater than 0.5 (Ghozali & Latan, 2015). Based on the analysis results, all indicators used in this research have an outer loading value above 0.5, indicating that they can effectively represent the latent variable (Figure 2). Table 3 shows that all latent variable AVE values are above 0.5, confirming the validity of all latent variables used in this research.

Discriminant Validity

Testing for discriminant validity in this research was conducted using the Fornell-Larcker Criteria Test, which involves comparing the root value of the Average Variance Extracted (AVE) with the correlation value between latent variables. A variable is considered valid if its AVE root value is greater than the correlation with other constructs in the model (Henseler et al. 2015). Based on Table 4, all variables are deemed valid as each variable has a square root AVE value greater than the correlation value with other variables.

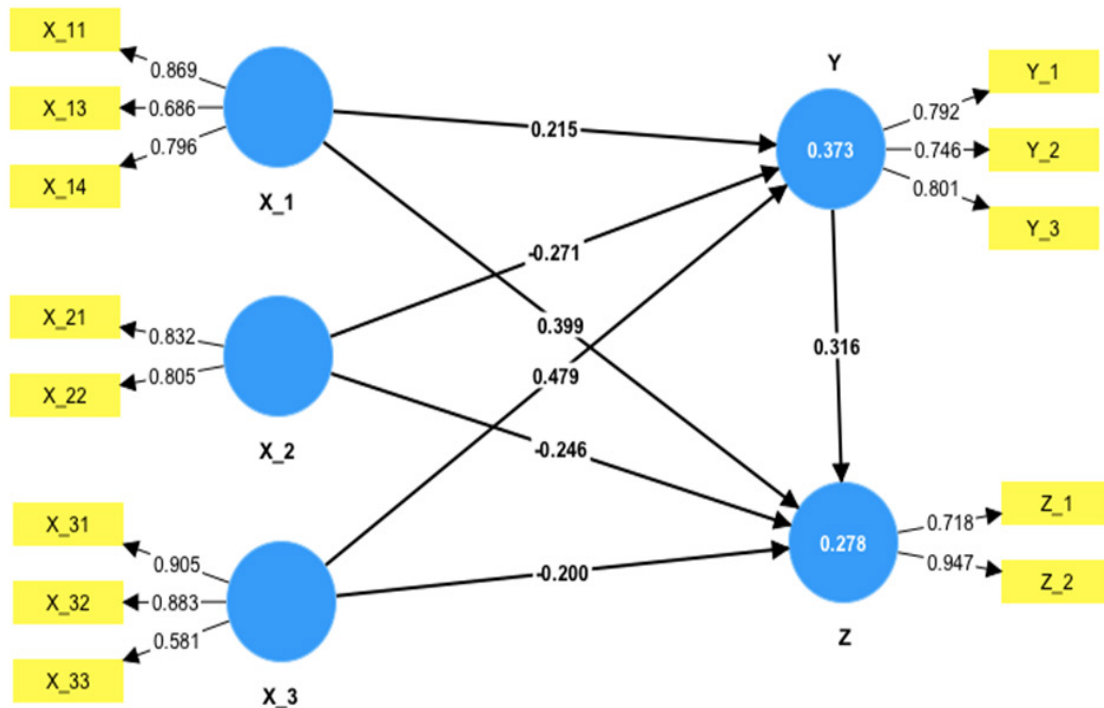


Figure 2. Outer Loading

Table 3. Average Variance Extracted (AVE)

Variables	Code	AVE	Explanation
Pull Motivation	X ₁	0.620	Valid
Push Motivation	X ₂	0.670	Valid
Entrepreneurial Competency	X ₃	0.646	Valid
Entrepreneurial Orientation	Y	0.609	Valid
Farming performance	Z	0.706	Valid

Reliability Test

A reliability test demonstrates the instrument's accuracy, consistency, and correctness in measuring the construct. Reflective indicators can be assessed based on the composite reliability value, with a threshold of greater than 0.7 considered acceptable (Ghozali & Latan, 2015). As per Table 5, all variables are deemed reliable since they exhibit a composite reliability value greater than 0.7. This indicates that all variables used in this research demonstrate good accuracy and consistency.

Structural Model Evaluation

Table 6 shows the coefficient of determination of the dependent variable entrepreneurial orientation is 0.344 or equivalent to 34.4%, where this value is included in the moderate category because it is in the range of 33% to 67%. This shows that the independent variables in the form of pull motivation, push motivation, and entrepreneurial competency can explain the

dependent variable entrepreneurial orientation by 34.4%, while other variables outside the model explain 65.5%. Meanwhile, the dependent variable, farming performance, has an adjusted R-square value of 0.233 or the equivalent of 23.3%, where this value is in the weak category because it is in the range of 19% to 33%. The adjusted R-square indicates that the independent variables in the form of pull motivation, push motivation, entrepreneurial competency, and entrepreneurial orientation can explain the dependent variable of farming performance by 23.3%, while 76.7% explained by variables outside the model.

Hypothesis Testing

After establishing the outer model and inner model criteria, the next step is the hypothesis testing stage. Hypothesis testing is carried out using the bootstrapping method. The bootstrapping process is a resampling technique by drawing many subsamples from the original data and estimating a model for each subsample (Hair et al. 2017).

Table 4. Fornell-Larcker criteria test

	X_1	X_2	X_3	Y	Z
X_1	0.787				
X_2	0.339	0.819			
X_3	0.094	-0.169	0.804		
Y_2	0.168	-0.280	0.545	0.780	
Z	0.349	-0.166	0.052	0.343	0.840

Table 5. Reliability test

Variables	Code	Composite Reliability	Explanation
Pull Motivation	X_1	0.829	Reliable
Push Motivation	X_2	0.802	Reliable
Entrepreneurial Competency	X_3	0.841	Reliable
Entrepreneurial Orientation	Y	0.823	Reliable
Farming performance	Z	0.825	Reliable

Table 6. Coefficient of Determination

Variable	Code	R-square	Adjusted R-square	Category
Entrepreneurial Orientation	Y	0.372	0.344	Moderate
Farming Business Performance	Z	0.278	0.233	Weak

The influence of pull motivation, push motivation, and entrepreneurial competency on entrepreneurial orientation

This analysis aims to address the first hypothesis of this research. Based on the results of the bootstrapping analysis, the t-statistic value between pull motivation and entrepreneurial orientation is 2.134, which exceeds the critical t-table value of 1.96 ($\alpha = 0.05$). These findings suggest that pull motivation significantly influences entrepreneurial orientation. This effect is reinforced by the p-value, smaller than alpha ($\alpha = 0.05$). The coefficient value of the influence of pull motivation on entrepreneurial orientation is 0.215, indicating a positive impact. This result means that for every one-unit increase in pull motivation (X_1), the value of entrepreneurial orientation (Y) is expected to increase by 0.215.

These results are consistent with the findings of Alam et al. (2015), which suggest that motivation towards high opportunities for success positively affects entrepreneurial orientation. The heightened pull motivation can also be attributed to the age of farmers, primarily millennials, who often exhibit high confidence in the success of their ventures. As the Ministry of PPPA & Central Statistics Agency (2018) reported, the millennial generation tends to have the courage to try new things. Overall, the analysis indicates that farmers with high pull motivation are inclined to innovate, take risks, and act proactively.

Similarly, based on the bootstrapping results, the t-statistic value between push motivation and entrepreneurial orientation is 3.047, surpassing the critical t-table value of 2.58 ($\alpha = 0.01$). This result implies that push motivation significantly influences entrepreneurial orientation. The significance is

supported by the p-value, smaller than alpha ($\alpha = 0.01$). The coefficient value of the influence of push motivation on entrepreneurial orientation is -0.271, indicating a negative impact. This finding implies that every one-unit increase in push motivation (X_2) is associated with a decrease in entrepreneurial orientation (Y) value by -0.271.

These results align with the findings of Martínez-Cañas et al. (2023), which suggest that push motivation has a negative effect on entrepreneurial intentions. The research also indicates that individuals driven by push motivation are less willing to take risks and resist new opportunities. This situation happened because push motivation is typically grounded in urgent situations that cause someone to start a business, rather than a proactive pursuit of business possibilities. Farmers dominated by push motivations, such as those engaging in farming due to hereditary culture or fulfilling basic needs, tend to avoid risks, lack proactivity, and demonstrate limited innovation and adaptation to new technologies for developing their farming businesses.

Table 7 provides the t-statistic value between entrepreneurial competency and entrepreneurial orientation is 4.422, surpassing the critical t-table value of 2.58 ($\alpha = 0.01$). These findings strongly suggest that entrepreneurial competency significantly influences entrepreneurial orientation. This significance is further supported by the p-value, smaller than alpha ($\alpha = 0.01$). The coefficient value representing the influence of entrepreneurial competency on entrepreneurial orientation is 0.479, indicating a positive impact. This result implies that for every one-unit increase in entrepreneurial competency (X_3), the value of entrepreneurial orientation (Y) is expected to increase by 0.479.

Table 7. Direct effect analysis

Hypothesis	Coefficient	T statistics	P values
Pull motivation → Orientation	0.215**	2.134	0.033
Push motivation → Orientation	-0.271***	3.047	0.002
Competency → Orientation	0.479***	4.422	0.000
Pull motivation → Performance	0.399***	3.714	0.000
Push motivation → Performance	-0.246**	2.457	0.014
Competency → Performance	-0.200 ^{ns}	1.420	0.156
Orientation → Performance	0.316**	2.380	0.018

Descriptions: * (significance at 10% error rate ($\alpha = 0.10$)); ** (significance at 5% error level ($\alpha = 0.05$)); *** (significance at 1% error rate ($\alpha = 0.01$)); ns (not significant).

These results align with the research conducted by Wickramaratne et al. (2014), demonstrating a positive influence between entrepreneurial competency and the dimensions of entrepreneurial orientation. The findings suggest that farmers with high entrepreneurial competency, such as effective financial management, the ability to identify new opportunities, clear planning skills, and strategic thinking abilities, are more inclined to take risks, innovate, and act proactively.

The influence of pull motivation, push motivation, and entrepreneurial competency on farming performance

This analysis aims to answer the second hypothesis of this research. It can be seen from Table 7 that the t-statistic value between pull motivation and farming business performance is 3.714, surpassing the critical t-table value of 2.58 ($\alpha = 0.01$). These results indicate that pull motivation significantly influences farming business performance. The significance is further supported by the p-value, which is smaller than alpha ($\alpha = 0.01$). The coefficient value representing the influence of pull motivation on farming business performance is 0.399, signifying a positive impact. This finding means that for every one-unit increase in pull motivation (X_1), the value of farming performance (Z) is expected to increase by 0.399.

These findings are in line with research by Wicaksono et al. (2023), which emphasizes the influence of motivation on performance, specifically in terms of job satisfaction. Yang et al. (2023) also suggest a positive correlation between pull motivation and business performance. Individuals starting a business based on pull motivation tend to be proactive, optimistic, and receptive to various opportunities to enhance business outcomes (Martínez-Cañas et al. 2023).

Based on the bootstrapping results, the t-statistic value between push motivation and farming performance is 2.457, exceeding the t-table value of 1.96 ($\alpha = 0.05$). These results demonstrate that push motivation influences farming business performance, as supported by the p-value of 0.014, which is smaller than alpha ($\alpha = 0.05$). The coefficient value indicates a negative impact, with every one-unit increase in driving motivation (X_2) associated with a reduction in the value of farming business performance (Z) by 0.246.

These results are consistent with earlier findings suggesting that push motivation has a negative effect on entrepreneurial orientation. Farmers who initiate businesses due to push motivation tend to be less open to new opportunities and avoid taking risks, resulting in lower farming business performance. The study by Rodríguez & Tejada (2015) states that entrepreneurs with driving motivation are more likely to experience a decline in business performance than entrepreneurs with attracting motivation.

On the other hand, the t-statistic value between entrepreneurial competency and farming business performance is 1.420, which is smaller than the t-table value of 1.65 ($\alpha = 0.1$). These findings indicate that entrepreneurial competency does not significantly affect farming business performance, supported by the p-value of 0.156, greater than alpha ($\alpha = 0.1$). These results align with research by Bose & Lopa (2014), which also suggests that entrepreneurial competency does not significantly impact business performance.

This condition may be attributed to several farmers in Sembalun District facing challenges related to pests and diseases, particularly root rot affecting garlic plants. Root rot, caused by fungus, exhibits symptoms of slow plant growth, wilting, and eventual death (Kwon, 2010). Pests and diseases pose a critical obstacle in the agricultural sector, leading to decreased crop yields and even crop failure.

The influence of entrepreneurial orientation on farming performance

The analysis of the influence of entrepreneurial orientation on farming performance is intended to address the third hypothesis of this research. In Table 7, the t-statistic value between entrepreneurial orientation and farming business performance is 2.380, exceeding the critical t-table value of 1.96 ($\alpha = 0.05$). These results indicate that entrepreneurial orientation significantly influences farming business performance, further supported by the p-value of 0.018, smaller than alpha ($\alpha = 0.05$). The coefficient value representing the influence of entrepreneurial orientation on farming business performance is 0.316, signifying a positive impact. This finding implies that for every one-unit increase in entrepreneurial orientation (Y), the value of farming performance (Z) is expected to increase by 0.316.

These findings are consistent with research by Daneluz et al. (2022) and Veidal & Flaten (2014), affirming that entrepreneurial orientation positively affects farming business performance. The results suggest that farmers who effectively manage risks, embrace frequent innovation. They are early adopters of new technologies and have a higher likelihood of achieving superior farming performance, leading to increased profits. The analysis indicates that the orientation indicator with the most significant influence on performance is the innovation indicator, particularly innovation in the use of biological fertilizer. This result underscores that innovating in applying natural fertilizers can positively impact farming profits.

Pull motivation, push motivation, and entrepreneurial competency on farming business performance with entrepreneurial orientation as a mediation variable

Indirect effect analysis was conducted to assess the indirect influence of pull motivation, push motivation, and entrepreneurial competency on farming business performance through the mediating variable entrepreneurial orientation, as stated in the fourth hypothesis. The results of the indirect effect analysis between pull motivation on farming business performance and the mediating variable entrepreneurial orientation show a t-statistic value of 1.698, surpassing the t-table value of 1.65 ($\alpha = 0.1$) (Table 8). These findings indicate that pull motivation indirectly affects farming business performance with entrepreneurial orientation as a mediating variable. The significance is reinforced by the p-value of 0.098, smaller than alpha ($\alpha = 0.1$). The coefficient value for this equation is 0.068, signifying a positive influence. This implies that every one-unit increase in pull motivation (X_1) will indirectly increase the value of farming business performance (Z) through entrepreneurial orientation (Y) by 0.068.

Similarly, the indirect effect analysis results between push motivation on farming business performance and the mediating variable entrepreneurial orientation show a t-statistic value of 1.813, exceeding the t-table value of 1.65 ($\alpha = 0.1$). These results indicate that push motivation indirectly affects farming business performance with entrepreneurial orientation as a mediating variable. The significance is supported by the p-value of 0.070, smaller than alpha ($\alpha = 0.1$). The coefficient value for this equation is -0.086, indicating a negative effect. This resmeans that every one-unit increase in push motivation (X_2) will indirectly reduce the value of farming business performance (Z) through entrepreneurial orientation (Y) by -0.086.

These results align with previous findings that suggest pull motivation has a negative effect on entrepreneurial orientation. This finding is consistent with the research results of Yang et al. (2023), indicating that individuals with push motivation tend to have weaker entrepreneurial abilities, which can, in turn, impact lower farming business performance.

The results of the indirect effect analysis between entrepreneurial competency on farming business performance and the mediating variable entrepreneurial orientation show a t-statistic value of 1.924, exceeding the t-table value of 1.65 ($\alpha = 0.1$). These findings indicate that entrepreneurial competency indirectly affects farming business performance with entrepreneurial orientation as a mediating variable. The significance is supported by the p-value of 0.055, smaller than alpha ($\alpha = 0.1$). The coefficient value for this equation is 0.151, signifying a positive influence. This finding implies that every one-unit increase in entrepreneurial competency (X_3) will indirectly increase the value of farming business performance (Z) through entrepreneurial orientation (Y) by 0.151.

Table 8. Indirect effect analysis

Hypothesis	Coefficient	T statistics	P values
Pull motivation → Orientation → Performance	0.068*	1.658	0.098
Push motivation → Orientation → Performance	-0.086*	1.813	0.070
Competency → Orientation → Performance	0.151*	1.924	0.055

Descriptions: * (significance at 10% error rate ($\alpha = 0.10$))

These results align with research by Waqingah et al. (2022), which asserts that entrepreneurial orientation acts as a mediating variable in the indirect influence between entrepreneurial competency and the performance of shallot farming in Bogor. The analysis indicates that an individual's competency in entrepreneurship, coupled with the willingness to take risks, innovate, and be proactive, can enhance farming business performance.

Managerial Implication

Garlic farmers in Sembalun District are advised to prioritize key indicators that strongly influence farming performance. Precisely, emphasis should be placed on enhancing the motivation variable, particularly by boosting farmers' confidence in the likelihood of success and improving their ability to control risks. This proactive approach is crucial for farmers to stay ahead of the curve and effectively navigate the challenges associated with garlic farming. Moreover, fostering an aggressive stance towards innovations is emphasized, as it stands out as the most influential indicator of entrepreneurial orientation. By embracing innovation, farmers can significantly enhance their farming performance and contribute to the overall success of garlic cultivation in the region.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Several conclusions can be drawn from the results of this research. The findings indicate that both pull motivation and competence positively affect the entrepreneurial orientation of garlic farmers in Sembalun District, East Lombok Regency. Conversely, driving motivation has a negative impact on farming business performance. This situation happened because farmers often initiate businesses under driving motivation due to external pressures solely to meet their basic needs, which consequently hinders their willingness to take risks and innovate.

The performance of garlic farmers' farming businesses in Sembalun District, East Lombok Regency, is directly influenced by pull motivation, push motivation, and entrepreneurial orientation. Pull motivation and

entrepreneurial orientation positively impact farming business performance, while push motivation has a negative influence. The adverse effect of driving motivation on farming business performance suggests that farmers who engage in business solely to meet their needs, without a genuine entrepreneurial drive, are prone to achieving lower performance levels.

In the indirect effect, the three exogenous variables pull motivation, push motivation, and entrepreneurial competence indirectly influence farming business performance through entrepreneurial orientation as a mediating variable. Pull motivation also indirectly contributes positively to farming business performance, indicating that entrepreneurial orientation reinforces the relationship between pull motivation and farming business performance. However, pull motivation indirectly has a negative effect on farming business performance. Meanwhile, entrepreneurial competence indirectly yields a positive effect on farming business performance. This outcome contrasts with the results of the direct influence relationship, where entrepreneurial competence exhibits no direct impact on farming business performance. This result underscores the pivotal role of entrepreneurial orientation in the relationship between entrepreneurial competence and farming business performance.

Recommendations

Entrepreneurial orientation acts as a pivotal mediator, amplifying the effects of entrepreneurial pull motivation and competency on farming performance. Therefore, to enhance garlic farming performance in Sembalun Regency, government-led entrepreneurship training for garlic farmers should prioritize the cultivation of entrepreneurial orientation. This training should encompass the development of a risk-taking mindset, fostering innovation, and promoting proactive approaches among garlic farmers. Additionally, efforts to enhance farmer motivation in garlic cultivation should involve government-sponsored counselling sessions. These sessions can address various risk management aspects, including strategies for pest and disease control, as well as disaster mitigation measures like excess rainfall. By focusing on these critical components, stakeholders can contribute significantly to improving garlic farming performance in the region.

FUNDING STATEMENT: This research did not receive any specific grant from funding agencies in the public, commercial, or not - for - profit sectors.

CONFLICTS OF INTEREST: The authors declare no conflict of interest.

REFERENCES

- Alam S S, Mohd R, Kamaruddin, B H, Nor N G M. 2015. Personal values and entrepreneurial orientations in Malay entrepreneurs in Malaysia: Mediating role of self-efficacy. *International Journal of Commerce and Management* 25(4): 385–401. <https://doi.org/10.1108/IJCoMA-01-2013-0001>.
- Bose T K, Lopa N Z. 2014. *Relationship between entrepreneurial competencies of SME owners/managers and firm performance: A study of manufacturing SMEs in Khulna city Relationship between Entrepreneurial Competencies of SME Owners/Managers and Firm Performance: A Study on Manufacturing SMEs in Khulna City*. <http://www.publishingindia.com>
- Daneluz M, Canever M D, de Lima H G, Bermudes R F, Menezes G R. 2022. Linking entrepreneurial orientation and managerial capacity to performance in dairy farms. *Revista de Economia e Sociologia Rural* 60(3): 1–23. <https://doi.org/10.1590/1806-9479.2021.229910>
- Dewantoro DA, Ellitan L. 2021. *Strategi Meningkatkan Kinerja Usaha Kuliner*. PT. Mediatama Digital Cendikia.
- Ghozali I, Latan H. 2015. *Konsep, Teknik, Aplikasi Menggunakan Smart PLS 3.0 Untuk Penelitian Empiris*. Semarang: Badan Penerbit UNDIP.
- Hair J, Hult T, Christian R, Sarstedt M. 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Second Edition*. SAGE Publications, Inc.
- Henseler J, Ringle C M, Sarstedt M. 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1): 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Iandoli L, Landstrom H, Raffa M. 2007. *Entrepreneurship, Competitiveness, and Local Development*. Edward Elgar Publishing, Inc.
- Jasinth. 2021. The intervening effect of entrepreneurial orientation on the nexus between entrepreneurial motivation and self-employment intention: an evidence from Sri Lankan Engineering Graduates. In *International Journal of Accounting & Business Finance* 7(2).
- Kementerian Pertanian. 2020. *Outlook Bawang Putih*. Jakarta: Kementerian Pertanian.
- Kementerian Pppa, Badan Pusat Statistik. 2018. *Statistik Gender Tematik: Profil Generasi Milenial Indonesia Statistik Gender Tematik: Profil Generasi Milenial Indonesia*. Jakarta: Kementerian Pppa, Badan Pusat Statistik.
- Kwon. 2010. Stem rot of garlic (*Allium sativum*) caused by *Sclerotium rolfsii*. *Journal The Korean Society of Mycology* 38(2): 156–158.
- Martínez-Cañas R, Ruiz-Palomino P, Jiménez-Moreno J J, Linuesa-Langreo J. 2023. Push versus Pull motivations in entrepreneurial intention: The mediating effect of perceived risk and opportunity recognition. *European Research on Management and Business Economics* 29(2). <https://doi.org/10.1016/j.iedeen.2023.100214>
- Nauvallia S, Martini E, Sos S. 2020. Pengaruh celebrity endorser gita savitri terhadap keputusan pembelian produk online shop femme outfit di Media Sosial Instagram. *E-Proceeding of Management* 7(2): 2254–2261.
- Pemerintah Provinsi Nusa Tenggara Barat. 2022. *Rekapitulasi Luas Panen, Produktivitas, dan Produksi Bawang Putih Tahun 2013-2021 di NTB*. Mataram: Pemerintah Provinsi Nusa Tenggara Barat.
- Rodríguez M J, Gutiérrez PM, Tejada GPMP. 2015. Entrepreneurial Orientation and Performance of SMEs in the Services Industry. *Journal of Organizational Change Management* 28(2). <http://dx.doi.org/10.1108/JOCM-01-2015-0020>.
- Sanawiri B, Iqbal M. 2018. *Kewirausahaan*. UB Press.
- Sandra IK, Sahara, Krisnamurthi B, Novianti T. 2022. Dinamika harga bawang putih sebelum dan saat pandemi Covid-19 di Indonesia. *Pertanian, Kelautan, Dan Biosains Tropika* 4(1): 1–5.
- Setiawan LH, Suprehatin S, Khosyati MA, Nazira N, Shara S, Hidayati BW. 2022. Willingness Petani Menanam Bawang Putih: Bukti dari Kecamatan Sembalun, Nusa Tenggara Barat. *Jurnal Penelitian Pertanian Terapan* 22(2): 111–123. <https://doi.org/10.25181/jppt.v22i2.2419>.
- Sriyadi O. 2010. *Risiko Produksi dan Keefisienan Relatif Usahatani Bawang Putih Di Kabupaten Karanganyar (Production Risk And Relative Efficiency of Garlic Farming In Karanganyar*

Regency).

- Sulistyaningrum A, Kiloes A M, Darudriyo D. 2020. Analisis regresi penampilan bawang putih sangga sembalun dan lumbu kuning selama penyimpanan dalam suhu ruang. *Jurnal Agronida* 6(1): 34. <https://doi.org/10.30997/jag.v6i1.2599>.
- Veidal A, Flaten O. 2014. Entrepreneurial orientation and farm business performance: The moderating role of on-farm diversification and location. *International Journal of Entrepreneurship and Innovation* 15(2): 101–112. <https://doi.org/10.5367/ije.2014.0147>
- Waqingah S, Irham, Mulyo J H. 2022. The effect of competency and orientation toward agripreneurship performance on semi-organic shallot farmers: A case study of Selopamiro Village, Imogiri, Bantul District, Indonesia. *IOP Conference Series: Earth and Environmental Science* 1005(1). <https://doi.org/10.1088/1755-1315/1005/1/012018>
- Wicaksono A B, Masyhuri M, Suryantini A. 2023. The Effect of motivation, compensation, work environment on work performance through job satisfaction PT XYZ palm oil company. *Jurnal Manajemen dan Agribisnis* 20(2):165–172. <https://doi.org/10.17358/jma.20.2.165>
- Wickramaratne A, Kiminami A, Yagi H. 2014. Entrepreneurial competencies and entrepreneurial orientation of tea manufacturing firms in Sri Lanka. *Asian Social Science* 10(18): 50–62. <https://doi.org/10.5539/ass.v10n18p50>
- Yang S, Li M, Yue L, Yu L, Li, W. 2023. From farmers' entrepreneurial motivation to performance-the chain mediating effect of entrepreneurial learning and entrepreneurial ability. *Sustainability (Switzerland)* 15(1). <https://doi.org/10.3390/su15010726>
- Zwan P, Thurik R, Verheul I, Hessels J. 2016. Factors influencing the entrepreneurial engagement of opportunity and necessity entrepreneurs. *Eurasian Business Review* 6(3): 273–295. <https://doi.org/10.1007/s40821-016-0065-1>