The Entrepreneurial Characters of Farmers That Influence on Profits of Shallot Farming in Coastal Land

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> Abstract. This article contains the results of research with a purpose to determine the farmer's entrepreneurial character, the profits, and analyze the entrepreneurial character that influencing the profits of shallot farming in coastal lands, Panjatan District, Kulon Progo. The sampling technique used is simple random sampling. This research was conducted using descriptive quantitative analysis. Determination of respondents by simple random sampling as many as 40 farmers among 76 farmers who planted shallots on coastal land during the study. The entrepreneurial character analysis uses an assessment based on the Likert scale, while analyzing the entrepreneurial character that affects the profits of shallot farming using multiple linear regression. The result of research shows that the entrepreneurial character score is 3.17. Internal factors show the score obtained is 3.14. External factors score is 3.54. The shallot farming analysis shows that the total costs are IDR 5,290,619 per 1,000 m2, Revenue IDR 7,312,625 per 1,000 m2. Income IDR 1,529,897 per 1,000 m2, and Profit IDR 2,022,006 per 1,000 m2. Multiple linear regression analysis shows that entrepreneurial character factors that have a significant effect on profit are facing change. The conclusion obtained is that entrepreneurial character analysis has a strong category.

1 Introduction

Agriculture is an important sector in building the country's economy because it generates foreign exchange for the country and plays a major role in maintaining resilience and meeting food needs [1]. One of the potential commodities to continue to be developed is horticulture because it has high economic value and market demand. One of them is red onion, as a seasoning ingredient in everyday life. As the population increases, the demand for shallots also increases, with a high elasticity of demand [2]. Loose and fertile soil that contains organic material to produce more optimal growth and production of shallots [3].

Shallots require maximum exposure to sunlight (minimum 70% exposure), with an air temperature of 25-32°C, and relative humidity of 50-70% [4, 5]. Shallot cultivation can be carried out on coastal land to overcome the narrowing of agricultural land due to land conversion. According to the Central Bureau of Statistics for Kulon Progo Regency in 2021,

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most of the shallot cultivation in coastal sand areas is in Panjatan District. According to the research results[6], that one of the prospective opportunities for agribusiness development is the use of beach sand land by planting superior commodities such as shallots.

Coastal land is marginal land with low productivity so that the farming process needs special treatment. The texture is rough, the ability to hold water is low, and during the day the soil temperature will increase causing high evaporation. so that farmers need to use more fertilizer and water, which results in higher costs [7].

Farmers must be able to allocate production factors that are used efficiently to obtain sufficient yields to meet family needs while developing their agricultural activities [8]. Behavior and attitudes are related to character, which can be formed from life experiences, suffering, ambition, and the desire to succeed. This behavior can be developed from an early age and can be obtained from training and positive habits [9]. There is an influence of the entrepreneurial character of farmers so that they can manage farming efficiently [10] so research on the entrepreneurial character of farmers that influences the profits of farming on coastal land needs to be done, with the aim of knowing the advantages of shallot farming; and knowing the entrepreneurial character of farmers that affect their profits.

2 Method

The research was carried out in the coastal lands of Panjatan District, Kulon Progo Regency, with the study population being farmers in Bugel Village and Garongan Village who received the TAJUK variety of shallot seeds from the government. Intake of 40 samples proportional simple random sampling, from Bugel Village as many as 14 samples while from Garongan Village as many as 26 samples.

Score Achievement	Character Level
1.00 - 1.79	Very weak
1.80 - 2.59	Weak
2.60 - 3.39	Enough
3.40 - 4.19	Strong
4.20 - 5.00	Very strong

Table 1. Level of Entrepreneurial Character

Before collecting interval data from respondents, the validity and reliability tests were carried out. According to [11,12] validity indicates the degree of accuracy between the data that occurs on the object with data that can be collected by researchers. The formula for the validity test is as follows:

$$rxy = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$
(1)

Information:

- rxy = Correlation coefficient
- n = Number of respondents
- x = Item score for each indicator
- y = Total score of each indicator

Based on the research results, all the questions on the questionnaire used in this study are valid because the r-count > r-table value with an error rate of 5%.

Reliability test

According to (Ridwan, 2010) test the reliability of the research instrument using the Cronbach's Alpha formula. An instrument can be said to be reliable if it has a reliability coefficient or alpha of 0.5 or more. The stages of calculating reliability can be measured using the following formula:

1. Calculate item variances.

$$\tau_l^2 = \sum X I \frac{(\sum X)^2}{n} \tag{2}$$

2. Calculate the total variance.

$$\sigma t^2 = \sum X^2 - (\sum X) 2/n \tag{3}$$

3. Calculating the reliability of the instrument.

$$\propto = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^{k} \sigma_y^2}{\sum \sigma_x^2}\right) \tag{4}$$

Information:

n = Number of samples

Xi = Subject for each question item

 $\sum X$ = Total subjects for each item

α Cronbach alpha reliability coefficient

k= Total number of items

 $\sigma i2$ = Variance of score of each item

 $\sigma t^2 =$ Variant item

 $\sum \sigma i2$ = Total variance score of each item

 $\overline{\Sigma} \sigma t^2 =$ Number of variant items

The results of the reliability test in this study have a Cronbach's value > critical r. This means that all question items on the questionnaire are reliable. Farming analysis includes production costs, receipts, income, and profits. [13,14]. Analysis of factors that affect the profit of farming using multiple linear regression. As the dependent variable is profit (Y), the independent variable is entrepreneurial character, internal factors, and external factors. In the entrepreneurial character variable, there are 5 supporting indicators, namely achievement motivation, leadership, orientation to the future, business networks, and dealing with change. In the internal factor variables, there are 4 indicators, namely farmer age, business experience, education level, and family responsibilities. On external variables there are 4 indicators, namely family, community, government support, and the development of transportation infrastructure.

In each indicator of entrepreneurial character there are supporting indicators. There are 4 supporting indicators for achievement motivation, namely extroversion, need for achievement, execution, and supervision. In the leadership indicator there are 4 supporting indicators, namely independence, taking risks, self-confidence, and organizing. In the future orientation indicator, there are 3 supporting indicators, namely developments in the use of production technology, skills, and market orientation. In the business network indicator, there are 3 supporting indicators facing change, there are 4 supporting indicators, namely the development of business profits, developments in the use of information technology, product diversification, and creativity. To find out the influencing factors, a multiple regression test was carried out on the production function:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5$$
(5)

Informat	ion
iniormai	IOII:

AND	= Profit
а	= Constant
$b_1 - b_7$	= Regression Coefficient
X_1	= Achievement motivation
X_2	= Leadership
X_3	= Orientation to the Future
X_4	= Business Network
37	

$X_5 = Facing Change$

3 Results and Discussions

3.1 Entrepreneurial Character of Shallot Farmer

The level of entrepreneurial character can be seen in Table 2.

Table 2. Entrepreneuria	l Character Level	of Shallot Farmer	s in Coastal Land Pa	njatan, Kulon	progo
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No.	Variable	Entrepreneurial Character Score	
		Score	Average
Achieve	ment motivation		
1	Nature of Extroversion	3.48	3.36
2	Need for Achievement	2.00	
3	Implementation	3.43	
4	Supervision	4.53	
Leadersl	nip		
5	Independence	2.48	2.55
6	Dare to Take Risks	1.90	
7	Confidence	2.58	
8	Organizing	3.25	
Orientat	ion To the Future		
9	Development of Production Technology	3.85	4.06
	Utilization		
10	Skills	4.45	
11	Market Orientation	3.88	
Business	s Network		
12	Business Group	3.83	3.13
13	Role of Financial/Credit Institutions	3.65	
14	The Role of Higher Education Institutions	1.90	
Facing C	Change		
15	Development of Business Profits	2.58	2.77
16	Development of Information Technology	2.45	
	Utilization		
17	Product Diversification	4.30	
18	Creativity	1.75	
Average	Entrepreneurial Character Score		3.17
Category	1		Enough

Based on Table 2 it is known that shallot farmers in beach sand land have a sufficient level of entrepreneurial character, with an average score of the weakest leadership indicator. It is difficult to hope that a weak leadership spirit can advance shallot farming with its management capabilities. The courageous sub-indicator in taking risks that has the lowest

points can also hinder farming development. Unlike the horticultural farmers in Lembang District who have strong leadership [15]

The average score of the strongest is future orientation indicator. This means that farmers are aware of the increasingly stringent competitiveness of farming, the need for planning in farming so as not to experience big losses. While the results of the study [16], show that the achievement motivation of household furniture farmers is in the very strong category.

3.2 Internal and external factors

Shallot farming in the coastal land of Panjatan District also involves internal and external factors. Internal factors are factors that come from within the farmer and can affect the success of the business.

Indicator	Score
Entrepreneur Age	3.23
Business Age	2.90
Level of education	2.58
Family Dependents	3.88
Rata-Rata score	3.14

Table 3. Internal Factors of Shallot Farmers in Coastal Land, Panjatan, Kulon Progo

Based on table 3 shallot farmers have sufficient internal factors to help maximize their business. The family dependents sub-indicator has the highest average score of the internal factor sub-indicators, meaning that the larger the family's dependents, the more living expenses are required. This can motivate them to be more efficient in farming, it is also possible to get labor assistance in larger families.

External factors are factors that come from outside the farmer that can affect the success of farming.

Table 4. External Factors of Shallot Farmers in Coastal Land Panjatan, Kulon Progo.

Indicator	Score
Family support	4.13
Community Support	3.20
Government Support	3.08
Development of Transportation Facilities and Infrastructure	3.75
Rata-Rata score	3.54

Based on table 4 the average score of the external factor indicator is 3.54. This shows that farmers have strong external factors. This support is very helpful for the development of ongoing farming. The more support given from external, the farmers can maximize their business.

3.3 Onion farming analysis

Shallot farming on sandy beach land takes 2 months until it is ready to be harvested like farming on non-sand land. Production costs at one planting season incurred by farmers are divided into implicit and explicit costs.

3.3.1 Buy your own seeds (explicit fee)

The cost of purchasing the seeds themselves is the amount of money incurred by farmers to buy additional shallot seeds. Some farmers feel that the seed assistance provided is lacking, so the farmers buy additional seeds themselves according to the area of land they cultivate.

Description	Amount
Number of seeds (Kg)	36
Seed price (IDR/Kg)	36.680
Total amount (IDR)	1.320.495

Table 5. Average cost of buying shallot seeds yourself per 1,204 m2.

Based on table 5, it is known that the average farmer adds 36 kg of shallot seeds at a price of IDR 36,680/kg, with a total cost of IDR 1,320,495.

3.3.2 Seeds government assistance (implicit cost)

The government helped farmers in the form of 35 kg of shallot seeds with the TAJUK variety.

Table 6. Average Cost of Seeds Assisted by the Government for Onion Farming Red in
the Panjatan Coastal Land per 1,204 m2.

Description	Amount
Number of Seeds (Kg)	35
Seed Price (IDR)	35.000
Total Amount (IDR)	1.225.000

Based on the data in table 6 above, it shows that the average seed that farmers get from government assistance is 35 kg at a price of IDR 35,000/kg. The total cost of seed assistance is IDR 1,225,000 per 1,204 m2.

3.3.3 Fertilizer Cost (explicit cost)

 Table 7. Average fertilizer uses per 1,204 m2 shallot farming in coastal land, Panjatan Kulon Progo

Description	Total (IDR)
Manure	911.875
NPK	427.125
Phonska	57.638
FOR	154.050
TSP	51.250
KCL	42.000
SP36	42.000
Blower	11.250
pearl	22.500
Total number	1.737.438

Fertilizer serves to provide a source of plant nutrition and increase soil fertility, so it absolutely needs to be provided. Based on table 7 it is known that the average use of fertilizer for shallot farming is IDR 1,737,438 per 1,204 m2. Manure is the most widely used fertilizer as basic fertilizer, an average of 2,100 kg is used at a cost of IDR 911,875 per 1,204 m2. The

most widely used chemical fertilizer by farmers is NPK with an average purchase of IDR 427,125 per 1,204 m2.

3.3.4 Pesticide costs (explicit costs)

Medicines function to eradicate pests, diseases, and weeds so that the results of shallot farming can be maximized.

Description	Total (IDR)
Fungicide	82.231
Insecticide	124.559
Herbicide	7.750
Total number	214.540

Table 8. Mean Pesticide use per 1,204 m2 shallot farming in coastal land, Panjatan

Based on table 8 data, it is known that the total cost used for the use of drugs is IDR 214,540. The most widely used drugs were fungicides, as much as 0.68 kg with a total cost of IDR 82,231 per 1,204 m2. This is because shallot plants are often attacked by fungi, so they need quite a lot of fungicide. According to the opinion of [17] medicines are always used by farmers in the process of farming. In selecting the type of drug and its dosage, farmers prefer to see the success of other farmers or from their own experience without reading the instructions for use on the packaging.

3.3.5 Fuel costs (explicit costs)

In cultivating shallots in coastal areas, gasoline is needed for diesel fuel, there are also those that require electricity to be used when turning on the water machine during the watering process. Based on the results of the study, it shows that the average cost of using electricity is IDR 78,000 per 1,204 m2. A total of 9 farmers uses electricity to water the plants in the morning and evening. The average cost of using gasoline is IDR 244,000 per 1,204 m2. As many as 31 farmers use diesel water pumps to get water in the process of watering plants in the morning and evening or use it for lighting/pest repellent when the attacks start to appear.

3.3.6 Other Expenses (explicit costs)

Other costs are costs incurred by farmers in farming, one of which is the cost of renting a tractor. The results showed that the average cost of renting a tractor was IDR 153,000 per 1,204 m2. The use of tractors is carried out for processing land so that it is effective and efficient. As many as 27 farmers use tractors, while 13 farmers use hoes for land preparation.

3.3.7 Equipment depreciation costs (explicit costs)

Equipment depreciation costs are costs that are allocated to replace tools that are no longer usable and must be replaced with new ones. Based on table 9 it is known that the total equipment depreciation cost is IDR 148,176 per 1,204 m2. The most spent depreciation expense is diesel depreciation cost of IDR 62,700 per 1,204 m2/planting season, due to the high purchase price. Meanwhile, the lowest is the cost of depreciation of buckets of IDR 168 per 1,204 m2/planting season. This is because the purchase price of the equipment is cheap.

Type of equipment	Cost (IDR)
Diesel	62.700
Water machine	32.604
Tank sprayer	11.559
Lighting lamp / pest repellent	3.483
Hose	19.432
Hoe	1.010
Pipe	4.587
Springkel	1.630
claim	3.465
Stable	313
Human	168
Boreholes	274
Mulching	3.132
Dopeng	3.819
Total number	148.176

Table 9. Average cost of depreciation of shallot farming equipment in coastal land in
Panjatan per 1,204 m2.

3.3.8 Loan capital interest

Interest on loan capital is calculated based on capital borrowed from banks/cooperatives that apply in the local area, which is 6% per year. Based on the data there are 10 farmers who use sources of financing from bank loans. On average, shallot farmers get a bank loan of IDR 1,581,650.

Table 10. Interest on onion farming loan capital in coastal land, Panjatan Kulon Progoper 1,204 m2.

Description	Amount
Loan Capital (IDR)	1.581.650
Loan Capital Interest Rate (per planting season)	0,01
Total	15.817

Based on table 10 above, the average shallot farmer takes a loan capital of IDR 1,581,650 while the interest rate for loan capital is 1% per 1 planting season, the interest on loan capital to farmers will be IDR 15,817 per 1,204 m2.

3.3.9 Own capital interest (implicit cost)

Own capital is capital owned by farmers for initial capital for shallot farming businesses in sandy beach land, Panjatan District. The interest rate used to calculate it is like the interest on loan capital that applies to local banks, which is 6% per year.

Based on research data there are 33 farmers who use sources of capital financing from their own capital. On average, shallot farmers use their own capital of IDR 2,979,838.

Table 11. Own	capital interest	for shallot farm	ing in coast	al land, Panj	atan Kulon Progo
		per 1,204 r	n2.		

Description	Amount
Cost of Capital (IDR)	2.979.838
Interest Rate (per growing season)	0,01
Total number	29.798

Based on table 11 above, the average shallot farmer uses farming capital of Rp. 2,979,838 while an interest rate of 1% will get the farmer's own capital interest of Rp. 29,798 per 1,204 m2.

3.3.10 Labor in the Family (implicit costs)

Labor in the family is labor that comes from within the family. Based on table 12 it is known that the costs incurred in using labor in the family are IDR 1,820,375 per 1,204 m2. The number of uses is greater than that of non-family labour. The labor that is needed is during the harvesting process due to the large number of production results, more energy is needed. The average cost of wages earned is Rp. Rp. 59,464/HKO.

Table 12. The average labor force in the shallot farming family in the coastal LandPanjatan Kulon Progo per 1,204 m2.

Description	Cost (IDR)
Land processing	159.094
Fertilization	55.313
Planting	48.406
Sprinkling	1.400.156
Weeding	68.656
pest control	38.281
Harvesting	50.469
Total number	1.820.375

3.3.11 Workers outside the family are workers who come from outside the family

Table 13. Average workforce outside the shallot farming family in coastal land, PanjatanKulon Progo per 1,204 m2.

Description	Cost (IDR)
Land processing	33.484
Fertilization	12.375
Mulch installation	5.000
Planting	48.719
Sprinkling	490.059
Weeding	3.688
pest control	12.813
Harvesting	43.213
Total number	649.349

Based on the data in table 13 above, the average cost incurred for the use of labor outside the family is IDR 649,349 per 1.204 m2.

3.3.12 Explicit costs

Explicit costs are costs directly incurred by shallot farmers to run their business.

Table 14. Explicit costs of shallot farming in sandy beach land, Panjatan Kulon Progoper 1,204 m2.

Description	Cost (IDR)
Buy seeds yourself	1.320.495
Fertilizer	1.737.438
Drug	214.540
Electricity	78.000
Miscellaneous expense	153.000
Gas	244.400
Thx	649.349
Cost of depreciation	148.176
Interest on loan capital	15.817
Total explicit costs	4.561.215

Based on the data in table 14 above, it shows that the costs incurred by shallot farmers in beach sand land at an explicit cost of IDR 4,561,215 per 1,204 m2.

3.3.13 Implicit cost

Implicit costs are indirect costs incurred by shallot farmers to run their business.

Table 15. Implicit cost of shallot farming in Coastal land, Panjatan Kulon Progo per1,204 m2.

Description	Price (IDR)
Government Assistance Seeds	1,225,000
Labor in the family	1,820,375
Own Capital Interest	29,798
Total Implicit Cost	3,075,173

Based on the data from table 15 above, it shows that the costs incurred indirectly by shallot farmers in beach sand land are at an implicit cost of IDR 3,075,173 per 1,204 m2. The most incurred costs were TKDK costs of IDR 1,820,375.

3.3.14 total cost

The total cost is the production cost incurred by farmers for shallot farming on sandy beach land during one growing season.

Table 16. The total	cost of shallot fa	arming in the	Coastal Land	d of Panjatan	Kulon Progo
	1	per 1,204 m2.			

Description	Cost (IDR)
Total explicit costs	4.561.215
Total implicit costs	3.075.173
Total number	7.636.388

Based on the data in table 16 above, the total costs incurred by shallot farmers amount to IDR 7,636,388 per 1,204 m2.

3.3.15 Receipt, revenue, and profit

The acceptance of shallot farmers in the sand beach of the Panjatan sub-district is obtained from the production results multiplied by the selling price of the product. The income of shallot farmers in the sand beach of the Panjatan sub-district is obtained from the difference between income and explicit costs. While the profits of shallot farmers are obtained from the difference between revenue and total costs, a net profit will be obtained.

Table 17. The average Revenue of shallot farmers in the Coastal Land of PanjatanKulon Progoper 1,204 m2.

Description	Value
Total Production (Kg)	667
Selling Price (IDR/Kg)	15.200
Total	10.138.020

Based on table 17 data, it is known that the average income earned by farmers in shallot farming on sandy beach land is IDR. 10,138,020 per 1,204 m2. The average amount of production obtained is 667 kg with a selling price of IDR 15,200/kg.

Table 18. Average income and profits of shallot farming in Coastal Land, in PanjatanDistrict per 1,204 m2

Description	Amount (IDR)
Revenue	10.138.020
Explicit Cost	4.561.214
Implicit Cost	3.075.173
Total income	5.576.806
Total Profit	2.501.632

Based on table 18 above, shallot farmers in sandy beach land in Panjatan District have an average income of IDR 5,576,806 per 1,204 m3.2. The proceeds of this income are received from the difference between the receipt fees of IDR 10,138,020 per 1,204 m2 with an explicit cost of IDR 4,561,214 per 1,204 m2. Meanwhile, the average profit earned by shallot farmers in the sandy beach area of Panjatan District is IDR 2,501,632 per 1,204 m2. The farmer who gets the highest profit is IDR 44,392,806 per 1,204 m2.

3.3.16 Factors affecting the profit of shallot farming

Multiple linear regression analysis on entrepreneurial character, internal factors, and external factors that influence the profits of shallot farming can be seen in table 19 below:

Variable	В	Std. Error	Beta	Т	Say.
Constant	-5,311	2,770		-1,917	,063
Entrepreneurial character	,114	,043	,446	2,647	,012
Internal factors	,148	,166	,130	,890	,379
External Factors	,103	,193	,091	,534	,597

Table 19. Results of multiple linear regression tests and t (partial) tests on entrepreneurial character, internal factors, and external factors.

Based on table 19 above, it is known that the t value of entrepreneurial character (X1) of 2.647 with a significant result of 0.012 < 0.05 or t count 2.647 > t table 2.028. This means that entrepreneurial character has a significant effect on the profits of shallot farming. Therefore, it requires further analysis related to 5 indicators (achievement motivation, leadership, orientation to the future, business networks, and facing change) that influence the profits of shallot farming.

3.3.17 Multiple linear regression on entrepreneurial character indicators

Multiple linear regression analysis on entrepreneurial character indicators that influence the profits of shallot farming can be seen in table 20 below:

Variable	В	Std. Error	Beta	Т	Say.
(Constant)	-	2,668		-,479	,635
	1,277				
Achievement Motivation (X1)	,193	,180	,209	1,067	,293
Leadership (X2)	,134	,147	,173	,916	,366
Orientation to the Future (X3)	-,208	,270	-	-,769	,447
			,139		
Business Network (X4)	,068	,148	,071	,459	,649
Facing Change (X5)	,327	,144	,375	2,270	,030

 Table 20. The results of multiple linear regression tests and t (partial) tests on entrepreneurial character indicators.

Based on table 20 it is known that the multiple linear regression equation on the entrepreneurial character indicators is as follows:

Y= -1.277 + 0.193 X1 + 0,134 X2 - 0,208 X3 + 0,068 X4 + 0,327 X5

Information:

Y = Profit

X1 = Achievement motivation X2 = Leadership

X3 = Orientation to the future X4 = Business network

X5 = Facing change

Based on the results of the multiple linear regression equation, if the achievement motivation (X1), leadership (X2), future orientation (X3), business network (X4), facing change (X5) is considered unchanged, then the profit of shallot farming will decrease in value to 1.277. It is known that the magnitude of the coefficient of each independent variable, achievement motivation (X1) has a coefficient of 0.193, meaning that if the achievement motivation increases by 1 scale, the profit of farming increases by 1 scale, the profit of farming increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of farming increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the magnitude of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership increases by 1 scale, the profit of the coefficient of 0.134, meaning that if leadership in

farming increases by IDR 13.4. Orientation to the future (X3) has a coefficient of -0.208, meaning that if the orientation to the future increases by 1 scale, the profit of farming decreases by IDR 20.8. Business network (X4) has a coefficient of 0.068, meaning that if the business network increases by 1 scale, the profit of farming increases by IDR 6.8. Facing change (X5) has a coefficient of 0.327, which means that if you face a change that increases by 1 scale, the profit of farming increases by 1 scale, the profit of 20.7.

3.3.18 The coefficient of determination (R2)

Following are the results of the determination test (R2) which serves to determine what percentage of the influence if the independent variable on the dependent variable. Following are the results of the determination test (R2) as follows:

Table 21. Results of the determination test (R2) on entrepreneurial character indicators

Variable	R	R	Adjusted R Square	Std. Error of the Estimate	
		Square			
1	,591ª	,349	,253	2,22067	

Source: Primary data, 2021 (processed)

Based on table 21 above, the magnitude of the coefficient of determination (R2) is 0.253. This shows that the ability on indicators of achievement motivation (X1), leadership (X2), future orientation (X3), business network (X4), facing change (X5) has an effect to a profit of 25.3%. While the rest is explained by other variables outside the variables used in this study.

3.3.19 F Test (Simultaneous)

The following is the result of the f (simultaneous) test which functions to determine the comparison of calculated f values with f tables.

Variable	Sum of Squares	df	Mean	F	Say.
			Square		
Regression	89,933	5	17,987	3,647	,009 ^b
Residual	167,667	34	4,931		
Total	257,600	39			

 Table 22. Results of the f (simultaneous) test on entrepreneurial character indicators

Based on table 22 data, it is known that the indicator of achievement motivation (X1), leadership (X2), future orientation (X3), business network (X4), facing change (X5) jointly affect profits, as evidenced by the sig value of 0.009 < 0.05 or F count 3.647 > F table 2.494.

Based on the results of the t test (partial) table 20 it is known that the calculated t value is subject to change (X5) of 2.270 with a significant result of 0.030 < 0.05 or t count 2.270 > t table 2.023. This means that the indicators facing changes have a significant effect on the profits of shallot farming. This is because the other 4 indicators are less flexible if there are problems in the future that require responsive, innovative, and creative solutions. For example, in dealing with pests and diseases during the production process. If farmers have creativity such as installation light trap in reducing pest attacks and providing sufficient fungicide-type drugs or keeping the planting media from getting damp, it is possible for farmers to get maximum production results.

4 Conclusion

Based on the results of the analysis and discussion above, it can be concluded that the average entrepreneurial character of shallot farmers in sandy beach land in Panjatan District has a strong category. Of the 5 indicators of entrepreneurial character, the most prominent is the future orientation indicator with a strong category. The profit for the shallot farmers in the sandy beach area of Panjatan District is IDR 2,501,632 per 1,204 m2. The entrepreneurial character that has a real effect on farming profits is facing change.

The suggestions expected from the results of this study are to improve shallot farming by analyzing and recording expenditures and income related to the costs used in shallot farming so that it is useful for learning for the next period to be better and maximal. In addition to increasing new knowledge and experience about the causes of farmers getting losses when planting shallots from the planning to harvest point of view.

References

- 1. S. Amelia and E. Rining Nawangsari, Jurnal GOVERNANSI 2, 121 (2021).
- 2. D. Awaran, S. Ullah Baloch, S. Khan Baloch, R. Ahmed Baloch, H. Noor Baloch, S. Ahmed Badini, W. Bashir, A. Bakhsh Baloch, and J. Baloch, *Economic Analysis of Onion (Allium Cepa L.) Production and Marketing in District Awaran, Balochistan* (2014).
- 3. I. nur Istina, The Shallot Production Increase Through NPK Fertilizer Technique (2016).
- 4. G., S. H., & S. R. Grubben, *Guidelines for Growing Lowland Vegetables* (Gadjah Mada University Press Prosea Indonesia Lembang Horticulture Research Institute, 1995).
- 5. Nazaruddin, *Cultivation and Harvesting of Lowland Vegetables* (Self-help Spreader, 1999).
- 6. R. Witjaksono, Mudiyono, and S. S. Hariadi, Agriekonomika 1, 89 (2012).
- 7. A. Slamet Widodo, AGRARIS: Journal of Agribusiness and Rural Development Research 1, 1 (2015).
- F. Eugene, M. Suryanty, and N. N. Arianti, Journal of Agri Socioeconomics and Business 1, 45 (2019).
- 9. A. Z., S. H. M. P., S. A. P., M. S., L. D., A. M., P. B., M. R., D. I. K., P. P. B., & F. Kurniullah, *Entrepreneurship and Business* (Our Writing Foundation, 2021).
- 10. Y., & B. K. Suryana, Entrepreneurship: Approach to the Characteristics (2021).
- 11. Sugiyono, Quantitative Research Methods, Qualitative, and R&D (Alphabet, 2019).
- 12. Sugiono, Educational Research Methods Quantitative, Qualitative, and R&D Approaches (Alphabetical, 2017).
- 13. K. Suratiyah, Revised Edition of Farming Science (Self-help Spreader, Jakarta, 2015).
- 14. Hasnidar, T.M Nur, and Elfiana, Jurnal S. Pertanian 2, 97 (2017).
- 15. G. W. Mukti, R. Andriani, B. Kusumo, and Y. Deliana, *The Relationship Between Entrepreneurial Characteristics and The Success Of Horticulture Farming (Case In Horticulture Farmers In Cibodas Village, Lembang District, West Bandung Regency)* (2020).
- N. Ekasari, R. Rosmeli, and D. Elliyana, in *Proceedings of the 3rd Progress in Social Science, Humanities and Education Research Symposium (PSSHERS 2021)* (Atlantis Press SARL, 2023), pp. 412–431.
- V. Darwis, C. Muslim, and I. S. Anugrah, Journal of Food System and Agribusiness 156 (2021).