Business Capital, Social Interaction, Level of Education and Land Area on Income of Seaweed Farmers in Binamu District, Jeneponto Regency

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ABSTRACT

This research looks at how the independent factors of company capital, social contact, level of education, and land area affect the dependent variable of income of seaweed cultivators either directly or indirectly. The quantitative research methodology was used to conduct explanatory investigations. Seaweed cultivators became the research target group, and 30 respondents from Pabiringa Village in Binamu District, Jeneponto Regency, were selected using a saturated sampling methodology. The data was collected and processed using IBM SPSS 25 using multiple linear regression analysis and hypothesis testing after the respondents filled out the questionnaire. The research findings show that: (1) Working capital has a beneficial and significant effect on the income of seaweed cultivators; (2) Social interaction has a positive and significant effect on the income of seaweed farmers. (3) The level of education has no positive or significant effect on the income of seaweed cultivators. (4) Land area has a positive and significant effect on the income of seaweed farmers. (5) Business capital, social interaction, and level of education are all profitable and have a significant effect on the income of seaweed cultivators.

Keywords: Business capital, seaweed cultivation, income

1. INTRODUCTION

Indonesia, which is an archipelago with a coastline of 81,000 kilometers, offers a wealth of diverse biological resources diverse in coastal and marine areas. These various biological resources have great potential to grow as new sources of economic expansion (Ridwan, 2012). The foundation for responding to opportunities and problems for Indonesia's economic growth now and in the future is marine economic resources. The fact that the Unitary State of the Republic of Indonesia (NKRI) is 75% of its land area covered by waters is based on the large potential of marine economic resources which have so far helped the success of the country's economic growth (Irwansyah and Maya, 2012).

The government has identified the production of seaweed products to be part of the entrance to the development of means of increasing the welfare of the population of disadvantaged coastal areas. Seaweed is an export item that generates foreign exchange for the government, provides employment for fishermen, and utilizes the coastal waters of the archipelago which have a lot of potential. Indonesia is an archipelagic country, therefore farmers or fishermen can play an active role in developing seaweed, especially in South Sulawesi. Seaweed is a superior commodity, and South Sulawesi is one of its production centers. 193,700 ha of seaweed and 32,000 ha of land are used for agriculture (Ridwan, 2012).

With a beach area of +95 kilometers and a land area of 749.79 km2, Jeneponto is a district in South Sulawesi Province, which has the potential for seaweed cultivation. Jeneponto is home to a species of seaweed called Eucheuma cottonii. Carrageenan, which has great economic

significance, is produced by this type. In the world of commerce and industry, carrageenan is similar to agar and alginate in that it can be used as a raw material for the cosmetic, pharmaceutical, food and other industries. There are six sub-districts that form the coastline of Jeneponto Regency: Bangkala, Bangkala Barat, Binamu, Tamalate, Batang and Arungkeke. Then Kelurahan in Binamu District, The Jeneponto district which has the potential for developing Eucheuma cottonii seaweed is Pabiringa (Vijayanti, 2016). Many factors are taken into account and are also profitable, such as wide open export market opportunities, relatively stable prices, and no trade restrictions or quotas for seaweed (Yasa, 2015).

Income disparity is a serious problem in the economy, according to Fauzi (2016), Satisfying one's desires brings one closer to obtaining prosperity (Hae-Young, 2013). Farmers' income is calculated by subtracting the costs incurred from the nursery to harvesting from sales during one harvest and the amount of production. The total costs incurred and income earned increase in line with individual income (Mariani, 2015). The level of education will be the main factor in determining a person's income (Kurniawan, 2016).

The division of labor between men and women is divided equally among all members of the nuclear family when growing Eucheuma cottonii or Eucheuma spinosum seaweed. This indicates that female or men, as well as parents or children, are equally active in this commercial activity. Of course, with many parts and roles. Men usually perform tasks such as land preparation, maintenance, and harvesting at sea. In land-based jobs such as making rope, tying seeds, and drying seaweed, women are more dominant.

Many elements determine income such as working capital, output, business duration, labor, business competition, and entrepreneurial behavior (Lesmana, 2014). According to Priyandika's research in (2015), a person's income is influenced by several variables, including length of business, capital, and working hours.

Based on the context above, the research objective is to determine the magnitude of the influence of business capital, social interaction, level of education, and land area on the income of seaweed cultivators.

The Effect of Business Capital on Income of Seaweed Cultivators: Capital is required in order to launch a new business or expand a business where it already exists, capital plays an important role in the creation process. Without sufficient capital, a company's ability to continue operating will be compromised, which will impact its ability to generate income. Seaweed does not cost much in terms of business size characteristics. Goods or machines that can be used to carry out the creative process are referred to as capital. Capital can be interpreted as something that can be used to produce services, goods, and money is not always the same (Dewi 2014). The majority of people are reluctant to start a business because it is difficult to get material capital. However, some capital is needed to run a business such as experience, determination, knowledge, courage, network and financial capital. Business experts usually distinguish between tangible and intangible capital when interpreting capital, including capital for small businesses. Tangible capital, whether in the form of movable or immovable goods, is referred to as tangible capital. Movable goods include motorcycles, construction equipment, and other vehicles. Intangible capital, including original ideas, is referred to as intangible capital. including operating capital, working capital, and joint investment capital (Pramaishella, 2017). Hypothesis 1 (H1): Working capital (X1) is significant and has a positive effect on the income of seaweed cultivators (Y).

The Effect of Social Interaction on Income of Seaweed Cultivators: Workers according to Agustina and Kartika (2017) in previous research are people carrying out work and directing activities in order to obtain services and goods of value in satisfying human desires. According to Ian and Rashesh (2016), labor is a factor of production which needs to be considered in sufficient quantities, namely the procession of production. This applies both to the quality and type of workforce as well as its availability (Cahya Ningsih, et al 2015). Production bottlenecks will still occur because the quantity of labor is still heavily influenced by labor quality and

gender. Mankiw (2013) underlined that more output is produced when more labor is used in the production process, and less output is produced when less work is used in the process. Higher output can result in higher production values. So, it can be said that labor productivity/work hours is positively related (Chaudhary, et al 2016). Hypothesis 2 (H2): Social interaction (X2) has a significant & positive effect on the income of seaweed farmers (Y).

The Effect of Education Level on Income of Seaweed Cultivators: A person's educational level is the step or level they take over time that gives them the skills and confidence to advance in their field of work. Because someone believes that if the implementation of work is carried out responsibly, independently in taking opinions, skills and abilities in carrying out work, etc., then professional work has a certain level of education as one of its characteristics. Theoretical for general purposes as well as the acquisition of conceptual knowledge of administrative staff involves a long period of education (Martoyo, 2016). This study also provides empirical evidence that supports Mamahit's (2013) conclusion that education level has a significant impact on employee performance. In Binamu District, Jeneponto Regency, it can be said that the income of seaweed farmers benefits from education. Hypothesis 3 (H3): Education level (X3) has a positive & significant impact on the income of seaweed cultivators (Y).

The Effect of Land Area on Income of Seaweed Cultivators: In the process of making a living from farming and cultivating seaweed, the length of land tenure is a very determining factor. Owning or exercising control of a narrow area of land is undoubtedly less effective than larger areas of land in industrial agriculture, for example. The less efficient farming is done, the smaller the commercial area. The effectiveness of seaweed cultivation is inseparable from the area of ownership or control. If the area of land managed is larger, the use of inputs will be more effective. Permit resources are the most significant input used in the revenue process for the seaweed cultivation business. However, the more land that can be used for agriculture, the income and standard of living of farmers will be even greater. Based on the findings of previous research by Risna et al. (2018), he found that in Lampuara Village, South Ponrang District, Luwu Regency, land area directly had a large impact on income from Nyalaut grass cultivation. The SPPS test result of 0.004 is smaller than the 0.05 significance level stating that seaweed farmers can earn more money with the wider area they use. We can conclude that the area of land has a beneficial impact on the income of seaweed cultivators. Hypothesis 4 (H4): Land area (X4) is significant & has a positive effect on the income of seaweed cultivators (Y).

2. METHOD

The type of quantitative research approach used in research uses 1 dependent variable on four independent variables. In this regard, studies are made by building relationships between variables to explore, estimate, and test relationships based on existing ideas. The variable itself is the focus of the study, or the focus of the study may be on other problems (Mujaddid & Nugroho, 2019).

In this study, data acquisition was carried out by carrying out research on seaweed cultivation in Binamu District, Jeneponto Regency. The samples obtained in the research were targeted at 30 seaweed cultivators. Then for the data collection method using a questionnaire, the questionnaire itself is a set of questions or statements related to research, which then requires respondents to answer these questions in obtaining empirical data to answer the problems raised in the research and propose hypotheses to be proposed. According to (Achmad Rudzali, 2020), using the Likert scale method as below.

Table 1 Scoring / Scoring Likert scale

No.	Response	Score	
		Favorable	**Unfavourable**
1.	Strongly agree (SS)	5	1
2.	Agree (S)	4	2
3.	Doubtful (R)	3	3
4.	Disagree (TS)	2	4
5.	Strongly Disagree (STS)	1	5

The form of the Likert Scale above is presented in a questionnaire in the form of multiple choices using 5 (five) alternative answers that must be chosen by each respondent. The determination of the instrument on the Likert scale uses a format that researchers often use in measuring data. (Choice et al., 2015; Isma et al., 2020).

Instrument test using reliability test and validity test. The reliability test was applied in this study with the internal consistency method, namely by presenting the test once, so that it can be avoided researchers from the emergence of the problem of presentation repetition. The test was carried out using the Cronbach alpha technique through a Likert scale with an item processing system with SPSS V.25 for windows, in obtaining data on the relationship between the dependent variable and the independent variables which were examined in the study. The test determines that there is a significant relationship between the independent variable (X) and the dependent variable (Y) being analyzed and correlated (Yusup, 2018; Isma, 2020).

Table 2. Research Instruments

Variable	Indicator	Measurement Scale
Startup Capital (Purwanti, 2012)	The amount of business capital used Sources of venture capital Increase in business capital for each sale	Likert
Social interactions (Miraningsih, 2013)	Communication Cooperate Empathy Support or Motivation	Likert
Level of education (Lestari, 2016)	formal education Informal education	Likert
Land area (Reza, 2016)	Land quality and position Land area owned Leased land area	Likert
Income (Danang, 2017)	Profit Satisfaction Revenue comes from operations Ability to reciprocate	Likert

Source: Data Processing Results (2022)

All research tools are defined by their effectiveness and reliability. The validity of an instrument indicates how well the instrument is suitable for a measurement, whereas reliability indicates that the measurement can be relied upon for its stability. A device is said to be valid if it can accurately reflect variable data and does not differ from an existing truth. Devices that can provide valid data are considered trusted (Yusup, 2018). Variables are problems with symptoms that arise which in practice distinguish one population element from other related elements,

therefore the variable concerned must have a fundamental variation in value (Komarasari, 2016).

Multiple linear regression is used in the data analysis method with the SPSS V.25 program analysis tool. The following multiple regression equation is used, namely: Y = α + β1X1 + β2X2 + β3X3 + β3X4...

Where:

Y = The dependent variable is income of seaweed cultivators

A = Constant

β = Regression coefficient parameter

X1 = Free variable venture capital

X2 = Independent variable of social interaction

X3 = Independent variable t level of education

X4 = Free variable land area

Hypothesis:

H1 = Business capital has a positive impact on the income of seaweed farmers

H 2 = Social interaction has a positive effect on the income of seaweed farmers

H 3 = The level of education has a positive impact on the income of seaweed farmers

H 4 = Land area positive impact on the income of seaweed farmers.
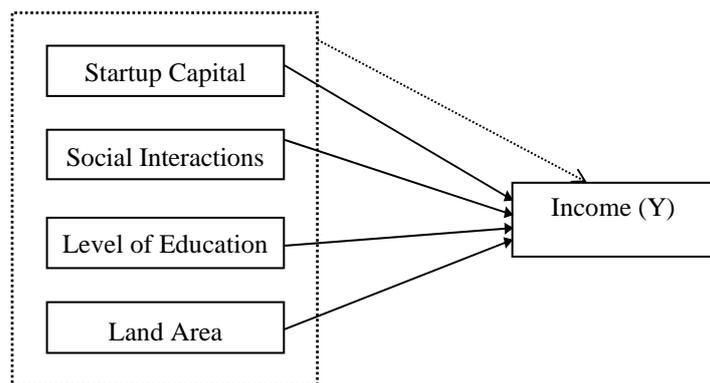
→ : Partial Influence
- - - ► : Simultaneous Influence

3. RESULTS AND DISCUSSION

3.1. Characteristics of Respondents

To see an overview of the characteristics of the respondents, there are 30 seaweed cultivators in Binamu District, Jeneponto Regency. The following will be presented in the form of tables and diagrams.

3.1.1. Age of Seaweed Cultivator

As for data regarding the age of seaweed cultivators in the Pabiringa Village, Binamu District, Jeneponto Regency, namely:

Table 3. Age Group of Seaweed Cultivators

Group Age	Amount Respondents	
	People	Percentage (%)
18-24 Years	5	16.5%
2 5-44 Year	10	33%
45-54 Year	1	3.3%
55-64 Year	7	23.1%
65-74 Year	7	23.1%
Total	30	100%

Source: Primary data processed in 2022

The characteristics of the average age of seaweed cultivators are old age, which means that they are beyond working age but still have the ability to generate income. Based on the above table, there are 5 seaweed cultivators aged 18-24 years, then seaweed cultivators aged 25-44 are 10 people, then seaweed cultivators aged 45-54 are 1 person, then the age of grass cultivators Seaweed cultivators aged 55-64 totaled 7 people and seaweed cultivators aged 65-74 totaled 7 people.

3.1.2. Gender of Seaweed Farmers

Data against gander seaweed cultivator in Pabiringa Village, Binamu District, Jeneponto Regency, namely:

Table 4. Gender Group of Seaweed Cultivators

Group Gender	Amount Respondents	
	People	Percentage (%)
Boy	19	63.3%
Woman	11	36.7%
Total	30	100%

From the characteristics of the gander there are those who cultivate seaweed 2 gander namely women and men. It can be seen from the table above that the number of males in seaweed cultivators is 19 people, while the number of females in seaweed cultivators is 11 people.

3.1.3. Last Education Seaweed Cultivator

As for data regarding the last education of seaweed cultivators in the Pabiringa Village, Binamu District, Jeneponto Regency as follows:

Table 5. Seaweed Cultivator Education Level Group

Education Level Group	Amount Respondents	
	People	Percentage (%)
SD	10	33%
SMP	3	10%
SMA/SMK	16	53.4%
S1	1	3.3%
Total	30	100%

Source: Primary data processed in 2022

Based on these statistics, 10 seaweed farmers in Pabiringa Village, Binamu District, Jeneponto Regency have graduated from elementary school or equivalent, 16 have graduated from high school, 3 have graduated from junior high school, and 1 has graduated from bachelor 's degree. level.

3.1.4. Types of Seaweed Produced

The following table shows the characteristics of the respondents according to the type of seaweed produced:

Table 6. Types of seaweed produced

Group Types of Seaweed	Amount Respondents	
	People	Percentage (%)
Green Algae	1	3.3%
Eucheuma Cottonii	29	96.7%
Total	30	100%

Source: Primary data processed in 2022

Based on the characteristics of the types of seaweed produced by seaweed farmers, there are 2 types namely green algae and eucheuma cottonii. It can be seen from the table above that the number of types of green algae produced by seaweed cultivators is 1 person, while the number of types of eucheuma cottonii seaweed produced by seaweed cultivators is 29 people.

3.1.5. Monthly Income of Seaweed Cultivators

The following table provides information on the monthly income of seaweed farmers in Pabiringa Village, Binamu District, Jeneponto Regency:

Table 7. Income of seaweed cultivators per sale

Group Income	Amount Respondents	
	People	Percentage (%)
1-5 Million	11	36.3 % _
6-10 Million	13	42.9%
11-15 Million	6	19.8%
Total	30	100%

Source: Primary data processed in 2022

From the data in the table it can be seen that the income of seaweed cultivators is 11 respondents who earn 1-5 million per month, 13 respondents who earn 6-10 million per month and 6 respondents who earn 10-15 million per month.

3.1.6. Monthly Seaweed Cultivator Expenditures

The monthly expenditure data for seaweed cultivators in Pabiringa Village, Binamu District, Jeneponto Regency can be seen in the following table:

Table 8. Expenditures of seaweed cultivators per sale

Group Expenditure	Amount Respondents	
	People	Percentage (%)
1 million	10	30%
2 million	15	49.5%

3 million	3	9.9%	
4 million	1	3.3%	
5 million	1	3.3%	
Total	30	100%	

Source: Primary data processed in 2022

Through table data can It can be seen that in Pabiringa Village, Binamu District, Jeneponto Regency, the expenditure of seaweed cultivators is 10 respondents whose expenses are 1 million per month, 15 respondents whose expenses are 2 million per month, 3 respondents whose expenses are 3 million per month, 11 respondents whose expenditure is 4 million per month and 1 respondent who earns 5 million per month.

3.2 Instrument Validation Test

Reliability and validity tests were carried out in research to ensure that the tools used for data collection are practical and reliable. Therefore, the findings of the validity and reliability tests will be discussed in the following section.

3.2.1. Instrument Validity Test

Table 9. Results of Testing the Validity of Business Capital Instruments (X1)

No.	Variable	r-count	r-table	Keterangan
1	Business Capital	0.853	0.361	Valid
		0.860	0.361	Valid
		0.869	0.361	Valid
		0.820	0.361	Valid
		0.824	0.361	Valid
		0.86 0	0.361	Valid
		0.872	0.361	Valid
		0.558	0.361	Valid
		0.853	0.361	Valid
2	Social interactions	0.506	0.361	Valid
		0.789	0.361	Valid
		0.803	0.361	Valid
		0.898	0.361	Valid
		0.815	0.361	Valid
		0.781	0.361	Valid
		0.695	0.361	Valid
		0.803	0.361	Valid
3	Level of education	0.772	0.361	Valid
		0.651	0.361	Valid
		0.824	0.361	Valid
		0.799	0.361	Valid
		0.892	0.361	Valid
		0.815	0.361	Valid
		0.827	0.361	Valid
		0.876	0.361	Valid
		0.772	0.361	Valid
4	Land area	0.577	0.361	Valid
		0.847	0.361	Valid

		0.834	0.361	Valid
		0.856	0.361	Valid
		0.857	0.361	Valid
		0.835	0.361	Valid
		0.871	0.361	Valid
		0.725	0.361	Valid
5	Income	0.725	0.361	Valid
		0.429	0.361	Valid
		0.666	0.361	Valid
		0.508	0.361	Valid
		0.700	0.361	Valid
		0.799	0.361	Valid
		0.586	0.361	Valid
		0.698	0.361	Valid

Source: Results of Data Processing (2022)

From the validity test table above, it can be seen that all the questions that have been distributed through questionnaires to respondents can be declared valid. This proves that the question can be tested as evidenced by $r_{count} > r_{table}$ at a significance of 0.05, namely 0.361 which proves that the measuring instrument used has proven to be accurate.

3.3. Instrument Reliability Test

The reliability test evaluates the degree of dependence of applied research tools. If the test consistently succeeds in assessing the desired outcome, the research instrument is considered to have a high dependability value. *Alpha Cronbach* coefficient is used to test the reliability of the instrument.

The decision rule for the reliability test is that an instrument is said to be reliable if the rcount results have the same or higher value than the rcount value (rcount rtable), or it is said to be unreliable if the rcount result is lower than the rcount value (rcount rtable). IBM SPSS version 25 is used to assist instrument reliability testing. Based on the test results, each part of the statement so that each variable is used in the research included in the dependent.

Table 9. Instrument Reliability Test Results

No	Variable	Cronbach's Alpha	Conclusion
1	Venture capital	0.929	Reliable
2	Level of education	0.895	Reliable
3	Technology	0.923	Reliable
4	Land area	0.917	Reliable
5	MSME performance	0.752	Reliable

Source: Data Processed Results (2022)

3.4. Hypothesis testing
3.4.1. Multiple Linear Regression Test

Equations for multiple regression analysis where used in research based on the results of the analysis carried out using IBM SPSS version 25.

$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4$

$= 7.147 + (0.846)X_1 + (0.395)X_2 + (-0.206)X_3 + (-0.361)X_4$

= 7.147 + 0.846X $_1$ + 0.395X $_2$ + -0.206X $_3$ + -0.361X $_3$

Based on the regression equation, it can be concluded that if the constant value obtained is 7.147, the dependent variable is seaweed cultivator income of 7.14% with the independent variables namely business capital, social interaction, level of education, and land area.

Based on the regression equation, it can be concluded that if the independent variables are considered constant and business capital increases by 1%, the dependent variable, namely the income of seaweed farmers, will increase by 84%. This is indicated by the regression coefficient for the venture capital variable of 0.846.

Based on the regression equation, it can be concluded that if the other independent variables are fixed and social interaction is increased by 1%, then the income of seaweed farmers as the dependent variable will increase by 39%. This is what is meant by the regression coefficient for the social interaction variable of 0.395.

Based on the regression equation, it can be concluded that if the other independent variables are fixed and the education level is increased by 1%, then the dependent variable, namely the income of seaweed farmers, will decrease by 20%. The regression coefficient for the education level variable has a value of 0.206.

Based on the regression equation above, it can be concluded that when the regression coefficient for the variable land area is 0.361, the dependent variable, namely the income of seaweed farmers, will decrease by 36% if the other independent variables remain constant and the level of education increases by 1%.

3.4.2. Partial Test (t test)s

the t test is a partial test which is carried out in order to measure the partial effect of the independent variable on the dependent variable. The results of the analysis of the t test or partial test between the independent variables Business capital X1, Social Interaction X2, Land area X4, and education level X3 on Income Y obtained the following results:

Table 10. Partial Test Results (t test)

No.	Variable	t $_{count}$	t $_{table}$	Significance
1.	Startup Capital	3,963	1,708	0.003
2	Social interactions	2,965	1,708	0.004
3	Level of education	-1,260	1,708	0.219
4	Land area	1,776	1,708	0.005

Source: Data Processed Results (2022)

3.5. Instrument Reliability Test

3.5.1. Effect of Business Capital (X1) on Income of Seaweed Cultivators (Y)

Based on the results of hypothesis testing, it can be seen that the working capital variable (X1) partially has a significant value of 0.003. While the value of the correlation coefficient for the results of tcount is 3.963. So that the significance value is less than the probability of 0.05 (0.003 <0.05) and the tcount value is greater than ttable (3.963 > 1.708). By concluding that the t value is important, it can be said that Ha is accepted and Ho is rejected. Because working capital (X1) partially has a beneficial and significant effect on the income of seaweed cultivators, hypothesis 1 (H1) is tested in this study.

3.5.2. Effect of Social Interaction (X2) on Income of Seaweed Cultivators (Y)

The results of hypothesis testing stated that the partial significance value was 0.004 for the social interaction variable (X2). The results of tcount have a correlation value of 2.965. Ho was declared invalid and Ha was accepted because the t value obtained was not significant and the significance value was lower than the probability of 0.05 (0.004 > 0.05) and the tcount was higher than the ttable 1.708 (2.965 1.708). Consequently, the second hypothesis (H2) evaluated in this study indicates that social contact (X2) has both beneficial and insignificant effects on producer people who do seaweed cultivation.

3.5.3. Education Level (X3) to Income of Seaweed Cultivators (Y)

The educational level variable (X3) has a partial significance value of 0.219 based on the results of the hypothesis test. The tcount results have a correlation coefficient of 1.260. Because Ha is rejected and Ho is accepted, the t value obtained can not be considered significant. The tcount value is smaller than ttable (1.708), and the significance value is greater than the probability of 0.05 (0.219 > 0.05). (1.260 1.708). In this study, the third hypothesis (H3)—that education level (X3) has only a small effect on the income of seaweed farmers—is tested.

3.5.4. Land Area (X4) to Income of Seaweed Cultivators (Y)

Based on the findings of the hypothesis test, the significance value of the education level variable (X3) is partially 0.005. While the correlation coefficient for the results of tcount is 1.776. Ha is accepted and Ho is rejected, which shows that the t value obtained is significant. The significance value is the same as the probability of 0.05 (0.005 > 0.05) and the tcount value is greater than the ttable of 1.708 (1.776 1.708). Therefore, hypothesis 4 (H4) was tested in this study, and it is known that land area (X4) is significant and has a partial impact on the income of seaweed cultivators.

3.5.5. Simultaneous Test (Test F)

The F test determines the variables of business capital, social interaction, level of education, and land area simultaneously which are significantly influenced by the income of seaweed cultivators. This is a simultaneous (combined) test. The following table shows the analysis findings:

Table 1 2. Simultaneous Test Results (Test f)

No.	f count	f table	Significance
1.	11,060	2.76	0.000

Through simultaneous test results it can be concluded that the significance value of 0.000 is less than the probability of 0.05 (0.000 0.05) and the fcount value is 11.060 greater than the ftable of 2.76 (11.060 > 2.76). This leads to the conclusion that the independent variable venture capital (X1), social contact (X2), land area (X4), and level of education (X3) have a significant effect on the dependent variable income of Seaweed Farmers simultaneously (together) (Y).

The following will review how each independent variable impacts the dependent variable through the results of hypothesis testing.

3.5.6. Effect of Business Capital on Income of Seaweed Cultivators

In Pabiringa Village, Binamu District, Jeneponto Regency, the results of hypothesis testing show that business capital is partially significant and has a positive effect on the income of grass farmers. This suggests that the venture capital variable has a large effect on the income needed by grass farmers to survive and function in Pabiringa Village, Binamu District, Jeneponto Regency. This is comparable to the message conveyed by Rosita et al (2020) At the macro level, capital is the main driver for increasing investment in both the production process and production infrastructure, which can encourage increased productivity and output. Capital is a production factor that has a strong influence in obtaining productivity or output. The Seaweed Business has the ability to improve facilities and infrastructure to support business continuity if it has sufficient financial resources. These facilities and infrastructure include more advanced production equipment, wider land, marketing and sales tools, more qualified human resources, and others. (Hasanah et al., 2020).

The increase in business income is a factor that greatly influences the amount of business capital for seaweed cultivators. According to Setiaji & Fatuniah (2018), an increase in the amount of capital used will affect the income generated because the company to be established requires quite large capital. Through more capital, companies will be able to expand or increase productivity, which will result in higher sales and higher income (Ekasari & Pardi, 2020).

3.5.7. Effect of Social Interaction on Income of Seaweed Cultivators

Interaction with other people is the second. Based on the results of hypothesis testing, social interaction in Pabiringa Village, Binamu District, Jeneponto Regency is significant and has a positive effect on the income of seaweed farmers. Similar research was conducted by Anggrainy Ratna Pratiwi (2016), and the findings show that there is a strong correlation between social interaction between co-workers and employee performance.

Social interaction is when people act towards something based on how they would act or feel towards other people. therefore the interaction between him and his peers is the source of his behavior. Interaction occurs in people's social lives when they act in ways that elicit responses from others. Therefore, the social interaction that occurs in the community has an impact on how members behave. Social interaction has four main components: relationship, mutual understanding, cooperation, and communication.

3.5.8. Effect of Education Level on Income of Seaweed Cultivators

The third point is the level of education. The results of hypothesis testing show that the income of grass farmers in Pabiringa Village, Binamu District, Jeneponto Regency is only slightly significant and is positively influenced by the level of education. This is similar to the research by Frima & Surya (2021) which found that the performance of MSMEs is not directly affected by their level of education. It can be said that alternative metrics are more reliable to explain this phenomenon. The manager's business management experience could be this variable. It cannot be denied that the education level of a manager is not a guarantee of his ability to manage the company effectively. However, a manager's business sense develops with experience.

In contrast to what was stated by Ekasari & Pardi (2021) that there is a correlation between the income of seaweed cultivators and their level of education. Through a system of education, training and development that is guaranteed productivity, human resources can

improve their quality of life. for more work. Because it is difficult for people with low education to access banking services, the level of education is not significant and has a positive effect on the income of seaweed cultivators.

3.5.9. Effect of Land Area on Income of Seaweed Cultivators

The level of land area is the fourth point. The results of hypothesis testing show that in the Pabiringa Village, Binamu District, Jeneponto Regency, the land area is significant and has a positive effect on grass cultivator income to a lesser extent. The findings of this study support the findings of Manatar et al. (2017), Arifin (2015), and Novianti et al. (2017) that land tenure affects farmers' income. The status of agricultural land ownership has an impact on the results or income received.

4. CONCLUSIONS AND SUGGESTION

Capital in Pabiringa Village, Binamu District, Jeneponto Regency is partially significant and has a positive effect on the income of seaweed cultivators. Social interaction in Pabiringa Village, Binamu District, Jeneponto Regency partially has a significant and positive influence on the profitability of seaweed cultivators.

The income of seaweed farmers in Pabiringa Village, Binamu District, Jeneponto Regency is not significantly and positively influenced by the level of education. The income of seaweed farmers in Pabiringa Village, Binamu District, Jeneponto Regency is positively and significantly affected. The income of seaweed farmers in Pabiringa Village, Binamu District, Jeneponto Regency is positively and significantly affected by the land area.

In Pabiringa Village, Binamu District, Jeneponto Regency, business capital, social interaction, education level, and land area simultaneously have a partially positive and substantial effect on the income of seaweed producers. Sixth, the variable level of education has no real impact or influence because other variables besides the variable level of education affect the partial income of seaweed producers which is positive and can be seen in Pabiringa Village, Binamu District, Jeneponto Regency.

Suggestion for seaweed cultivator, must further increase their productivity so they can manage seaweed cultivation land so that the land can still be developed so that seaweed production can be increased again and ultimately income can also increase. For future researchers, they can carry out similar follow-up research with a more specific analysis of the variables to be used. The government should pay more attention to the welfare of seaweed cultivators with various policies such as ensuring boat assistance for the smooth running of seaweed cultivation and ensuring the stability of the selling price of seaweed.

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