Analysis of Entrepreneurial Attitudes and Skills Towards Increasing the Income of Organic Coconut Sugar Agroindustry in the Central Agro Lestari Joint Business Group

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Abstract. Agroindustry has a great contribution to the country's economy, this needs to be supported by the development of agro-industry. Craftsman entrepreneurship as a business actor in the cultivation sector is still less attention so far. For the advancement of craftsmen, this is very important. This study was conducted to analyze entrepreneurial attitudes and entrepreneurial skills to increase the income of organic coconut sugar agroindustry in the Central Agro Lestari Joint Business Group. implementing survey methods with 37 artisans. The findings revealed that Central Agro Lestari was founded on September 5, 2017, with 361 assisted craftsmen, the majority of whom have been operating a business for more than 16 years. The level of entrepreneurship indicates that entrepreneurial attitudes, entrepreneurial skills, and increased income are in the good category, each with a score of 1,689, 814, and 430. The results of the hypothesis test indicated that both entrepreneurial attitude (X1) and entrepreneurial skills (X2) have a significant positive impact on the income of organic coconut sugar craftsmen. Keywords: entrepreneurship, agroindustry, coconut sugar.

1 Introduction

The nation's economic growth is significantly influenced by the agricultural sector, namely 1.84% (year on year) in 2021 and a contribution of 13.28% to the national economy [1]. The largest portion of Indonesia's economy comes from the plantation sub-sector, which is an important part of the agricultural sector [2].

Plantations are one of the sectors driving the food processing industry or agroindustry. There is no doubt that Indonesian plantations, particularly coconut plantations, have significant potential. This is evidenced by the vast land area of 3,475,547 hectares, with Indonesia's coconut production being the highest in the world at 17.13 million metric tons [3]. One of the provinces in Indonesia with the highest coconut production is Central Java Province. Central Java's coconut industry is stable, especially in Purbalingga Regency, which makes coconut sugar [4]. Bumisari Village in Purbalingga Regency is one of the main

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production centers for coconut sugar in Central Java. Bumisari Village has a cooperative business group (KUB), namely KUB. Central Agro Lestari, established to support the prosperity of coconut sugar artisans in Bumisari Village. To ensure the sustainability of the coconut sugar agroindustry in Bumisari Village, specifically the Central Agro Lestari joint business group (KUB), it is crucial to consider factors influencing the agroindustry, one of which is entrepreneurship development.

Entrepreneurship development is necessary to empower artisans. Artisans' entrepreneurship as business actors in the cultivation sector has not received much attention so far. However, this is very important for the advancement of artisans. A study conducted by [5] found that artisans' creativity and productivity can increase as a result of entrepreneurship. Currently, it is crucial to make efforts to raise artisans' awareness of becoming entrepreneurs. Research conducted by [6] found that the level of entrepreneurship among artisans can influence how well their businesses are run. As explained by Dumasari [5] artisans' entrepreneurship fails in certain situations that hinder sustainability.

Entrepreneurship is one of the most important components for business performance, along with business growth and profits [7]. Entrepreneurial attitude is an important component of entrepreneurship. Attitude is defined as a relatively stable mental disposition to respond to a particular object or stimulus, which can be positive, neutral, or negative, and is related to cognitive, affective, and behavioral aspects, and also serves to regulate behavior. Due to increasing competition and globalization, the agroindustry must perform well in order to survive. Entrepreneurial skills are one of the factors that can influence the performance of agro-industrial businesses, in addition to entrepreneurial attitudes. These skills can serve as the foundation for creating a successful business or enterprise. This is considered important for businesses, especially agroindustries, as business owners must possess quality skills to ensure their businesses can survive [8]. In order to determine their influence on income growth in the organic coconut sugar agroindustry within the Central Agro Lestari joint business group, an examination of entrepreneurial attitudes and abilities was carried out.

Central Agro Lestari Joint Business Group is an organic farming company that produces organic coconut sugar blocks, powder, and nectar. It was founded in 2017. KUB. Central Agro Lestari was established as a form of local economic empowerment, agricultural potential development, and helping craftsmen access wider markets. To date, the total number of KUB. Central Agro Lestari members is 361 craftsmen. Before the existence of KUB. CAL, craftsmen only produced molded sugar and were limited to selling to the local market. In line with the establishment of KUB. CAL, craftsmen's income increased by 30-40%. In this case, the role of attitudes and craft skills to increase income is very important to explainAccording to the above description, the goal of this study is to examine entrepreneurial attitudes and abilities in order to boost the Central Agro Lestari Joint Business Group's (KUB) revenue from organic coconut sugar.

2 Research method

A study on the influence of entrepreneurial attitudes and entrepreneurial skills on income growth was conducted at KUB. Central Agro Lestari, Bumisari Village, Bojongsari District, Purbalingga Regency. The research location was selected purposively, taking into account the geographical location. The research method used was descriptive qualitative and quantitative. The technique used in this study was a survey. The population in this study was coconut sugar craftsmen under the guidance of KUB. Central Agro Lestari. Simple random sampling was the method of sampling employed in the present research. Because sample members are chosen at random from the population without taking population classes into account, this method is referred to as "simple”. The acceptable sample size for each research method, one of which uses a 10% sample of the population. Therefore, the sample size is:

$$s = 10\% \times n = 10\% \times 361 = 36,1$$

The number of samples taken was rounded up to 37. The figure 361 represents the total population of artisans supported by KUB. Therefore, the number of artisans to be sampled in this study is 37 organic coconut sugar artisans who are members of the Central Agro Lestari Joint Business Group (KUB).

2.1 Location and Time of Research

The research was conducted at KUB. Central Agro Lestari, Bumisari Village, Bojongsari District, Purbalingga Regency. The research period was 6 months (December 2024 – June 2025).

2.2 Data Type and Source

Both primary and secondary data were collected for this research. Direct observation and interviews are the sources of primary data. Secondary data, on the other hand, comes from sources like as books, research journals, and the Purbalingga Regency Central Statistics Agency.

2.3 Data Analysis Technique

The data analysis techniques used in this study employed several approaches. Descriptive analysis was used to determine the social conditions of organic coconut sugar producers in KUB. Central Agro Lestari, Bumisari Village. The data collected focused on the history of KUB Central Agro Lestari, including its location, year of establishment, number of members, and vision and mission. Meanwhile, the artisan profiles focused on the respondents' age, highest level of education, length of business operation, type of work, number of family dependents, total production, land ownership, and type of sugar.

The level of entrepreneurship was measured using a Likert scale (5 scores), a measurement tool used to assess the level of agreement or disagreement of respondents with statements regarding entrepreneurial attitudes (12 indicators), entrepreneurial skills (6 indicators), and income growth (3 indicators). The following is a classification of the levels of entrepreneurship:

Table 1. Classification of Entrepreneurship Attitude Levels

Classification of entrepreneurial attitudes	Score
Entrepreneurial attitude is very poor	444 – 799
Entrepreneurial attitude is poor	799,01 – 1154
Entrepreneurial attitude is neutral	1154,01 – 1509
Entrepreneurial attitude is good	1509,01 – 1864
Entrepreneurial attitude is very good	1864,01 – 2220

The table above shows the classification of the entrepreneurial attitudes of organic coconut sugar producers in the KUB Central Agro Lestari in Bumisari Village.

Table 2. Classification of Entrepreneurship Skill Levels

Classification of Entrepreneurship Skill Levels	Score
Entrepreneurial skill is very poor	222 – 400
Entrepreneurial skill is poor	400,01 – 578
Entrepreneurial skill is neutral	578,01 – 756
Entrepreneurial skill is good	756,01 – 934
Entrepreneurial skill is very good	934,01 – 1110

The table above shows the classification of entrepreneurial skills of organic coconut sugar craftsmen in KUB. Central Agro Lestari, Bumisari Village.

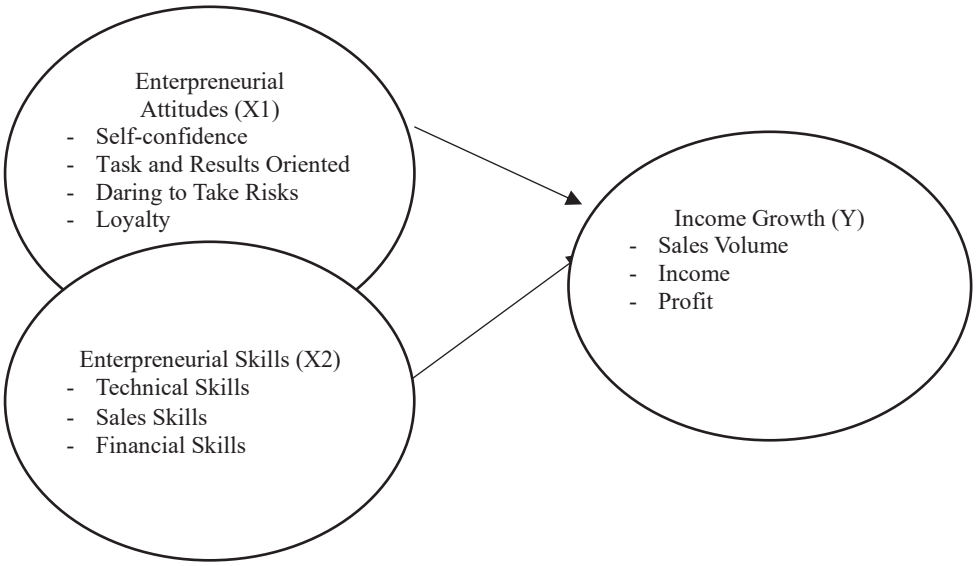
Table 3. Classification of Income Growth Levels

Classification of Income Increases	Score
Increase in Revenue is very poor	111 – 200
Increase in Revenue is poor	200,01 – 289
Increase in Revenue is neutral	289,01 – 378
Increase in Revenue is good	378,01 – 467
Increase in Revenue is very good	467,01 – 555

The table above shows the classification of income growth levels for organic coconut sugar producers in KUB. Central Agro Lestari, Bumisari Village.

Analysis of entrepreneurial attitudes, entrepreneurial skills, and income growth using qualitative descriptive methods. The analysis consists of qualitative descriptions of entrepreneurial attitudes and skills in the production process.

The effects of variables X1 and X2 on Y were ascertained using quantitative analysis. In this work, quantitative analysis was carried out using SmartPLS SEM (Partial Least Square - Structural Equation Modeling) software was used to perform quantitative analysis in this study. The following represents the conceptual framework of this study using the Structural Equation Modeling (SEM) approach:



Picture 1. Model of Structural Equation Modeling (SEM)

PLS can perform analyses and explain the relationships between variables. The inner model, outer model, and hypothesis testing are the three phases of PLS analysis. Tests for validity and reliability are part of outer model measurement. The standardized loading factor value indicates validity. When the loading factor value is more than or equal to 0.7, an indicator is deemed acceptable. Cronbach's Alpha and Average Variance Extracted (AVE) values are used to evaluate reliability. When the AVE value is at least 0.5 and the Cronbach's Alpha value is more than or equal to 0.7, a construct is deemed dependable. R-Square and F-Square are used in inner model measurement, while a 5% alpha threshold is used for hypothesis testing.

3 Result and Discussion

3.1 Profile of Central Agro Lestari Joint Business Group (KUB)

Organic agricultural products, especially organic coconuts, are grown and processed at KUB Central Agro Lestari. KUB. CAL's organic coconuts consist of three types of products: organic powder, organic flakes, and organic liquid. These products are highly sought after in both local and international markets. The founder of KUB. CAL is Mr. Sutomo, established on September 5, 2017, and located in Bumisari Village, Bojongsari, Purbalingga, Central Java. This farmer based organic business was established to enhance the prosperity of village coconut farmers. In 2025, KUB. CAL is led by Mr. Fery Sapto Wibowo with 14 employees and 361 trained artisans. The products produced include block sugar, powdered sugar, and liquid sugar. KUB Central Agro Lestari has obtained quality certifications, including the GMP Certificate from Sucofindo International in 2019, as well as organic control standards from the USDA Organic, EU, and JAS.

3.2 Profile of Organic Coconut Sugar Artisans Respondents

The social situation in this study is an overview of the situation of organic coconut sugar producers in their social environment.

Table 4. Characteristics of Respondents Working in Organic Coconut Sugar Production

Characteristics	N	Percentage (%)
Age (years)		
20-35	4	11
36-50	20	54
51-65	13	35
Length Of Business		
5-10	4	11
11-15	7	19
16-20	13	35
21-25	6	16
26-30	7	19
Land Ownership Status		
Own land	5	14
Lease	15	40
Own & Lease	17	46
Number Of Coconut Trees		
10-20	15	40
21-30	21	57
31-40	1	3

Characteristics	N	Percentage (%)
Type Of Sugar		
Powder	17	46
Block	4	11
Powder & Block	16	43
Production Volume (kg)		
5-10	29	78
11-15	8	22

Based on Table 4, the age of organic coconut sugar craftsmen is predominantly between 36 and 50 years old, accounting for 54% of the total, with the longest duration of business being 30 years and the shortest being 5 years. The majority of craftsmen have been in business for 16 to 20 years, totaling 13 people (35%). This indicates that organic coconut sugar artisans have been operating for a considerable period and possess the necessary skills. The majority of artisans' land ownership status is a combination of self-owned and leased land, totaling 17 individuals (17%). This suggests that many artisans do not yet own their own coconut land. Despite leasing the land, artisans actively manage the land, such as clearing weeds in the area. The cost for renting land for one month ranges from Rp 16,000 to 20,000 per tree. The majority of organic coconut sugar producers have 21-30 coconut trees to produce sap, totaling 21 people (57%). The processed coconut sugar comes in block and powder forms. Most artisans produce powdered sugar, totaling 17 people (46%). Those who only produce block sugar number 4 people (11%). Organic coconut sugar artisans who produce both types of sugar (powder and block) total 16 people (43%). Most organic coconut sugar artisans produce 5–10 kg of sugar per day, totaling 29 people (78%). The total production of 11–15 kg per day is produced by 8 people (22%). On average, artisans produce 9 kg of sugar per day.

3.3 Level of Entrepreneurial Attitude, Entrepreneurial Skills, and Income Growth

The level of entrepreneurship was calculated using a Likert scale, and the results for each variable are shown below.

Table 5. Level of Entrepreneurship

Variables	Score	Description
Entrepreneurial Attitude	1629	good
Entrepreneurial Skills	814	good
Income Growth	430	good
Total Score	2873	good

Based on the table above, it shows that the level of entrepreneurship is at a good level, namely 2,873, with an entrepreneurial attitude variable score of 1,629, an entrepreneurial skill score of 814, and an income increase score of 430.

3.4 Conditions Attitude, Entrepreneurial Skills, and Income Increase

The entrepreneurial conditions of organic coconut sugar producers can be seen in the indicators below:

a. Self-confidence

Organic coconut sugar producers in Bumisari Village, Bojongsari Subdistrict, always believe in the success of their business. These producers have confidence in themselves, which stems from their mastery of the business through skills they continuously

develop. These skills include expertise in climbing coconut trees to collect sap and the ability to cook the sap properly, such as managing the cooking time. This aligns with research conducted by [9] on how rice farmers act independently when implementing integrated crop management (ICM). The results showed that 68.7% of respondents, or 57 people, believed they could implement components of integrated pest management (IPM).

b. Task and Results Oriented

Organic coconut sugar artisans are task- and results-oriented, meaning that they work in a structured and diligent manner. Their task- and results-oriented attitude is reflected in their routine scheduling of the sap collection process, which takes place in the morning and afternoon to install the pongkor. Once the sap has been collected, it is immediately cooked by the artisan or the artisan's wife. Additionally, the artisans are committed to maintaining the high quality of organic coconut sugar for sale. The artisans also consistently attend socialization sessions organized by KUB.CAL, including a socialization session on the organic coconut sugar production process held on Sunday, June 3, 2025, at KUB. Central Agro Lestari. This aims to enhance the artisans' skills. In line with the research conducted by [10], the third indicator having the initiative to perform tasks well (X2.3) showed that the majority of respondents agreed (36%), strongly agreed, or were neutral (32%), with none stating they disagreed or strongly disagreed. [10] states that task and outcome orientation is an attitude where someone always wants to achieve and has strong motivation to reach a specific goal with the expected results.

c. Daring to Take Risks

The organic coconut sugar craftsmen of Bumisari Village have the courage to take risks, namely continuing to climb coconut trees to collect sap even during drizzle. The drizzle makes the coconut trees slippery, but the craftsmen remain brave enough to take the risk of climbing the trees. This courage is driven by the craftsmen's need to earn an income. This courage exposes them to the risk of minor injuries, and the rainy season also reduces the quality of the sap. This is supported by another researcher [11], who states that being willing to take risks is an important factor in increasing one's intention to start a business. The research shows that taking risks influences the intention to engage in entrepreneurship. Taking risks means being prepared to make decisions, such as starting a business, and everything must begin to measure the success of those decisions.

d. Loyalty

Organic coconut sugar producers demonstrate their loyalty to KUB. Central Agro Lestari, as the majority of producers have been members of KUB since its inception to the present day. This commitment stems from trust in the KUB, the relatively high prices offered by the KUB to the artisans, and the numerous assistance programs provided by the KUB to the artisans (such as clean kitchen facilities, including pots, pans, and tiles). Additionally, the artisans have chosen to remain organic coconut sugar artisans for years, partly due to the tradition of the craft being passed down through generations and the proximity to their families.

e. Technical Skills

The technical skills of craftsmen are the mastery of craftsmen in running their businesses, and craftsmen have good skills. This includes the ability to make high-quality organic coconut sugar products. The following are the technical skills possessed by craftsmen:

1. Laru process: craftsmen use lime and mangosteen peel in the production of laru. Adding crushed dried mangosteen peel makes the nira more durable. The container used is a clean, food-grade pongkor (pongkor provided by KUB). In addition, during the rainy season, the pongkor is covered to prevent rainwater from entering.
2. Collection and processing of sap: Sap is collected in the morning between 6:30 and 11:00 a.m. To prevent the sap from quickly becoming rancid, it is filtered and then immediately cooked in an open pot over low to medium heat. The fuel used is firewood and blarak (dried coconut leaves). However, craftsmen prefer to use firewood because it does not burn out quickly. Additionally, the stability of the fire must be monitored to prevent it from suddenly going out. A flame that frequently goes out will affect the quality of the processed sap. Sap of lower quality is made into block sugar, with the process involving cooking the sap, cooling it, and then molding it. If the sap is of good quality, it is made into powdered sugar, which requires a longer process than block sugar production, including additional grinding and sieving steps.
3. Land monitoring: The majority of land planted with coconut trees is leased land. All of this land is registered as organic, meaning it is not contaminated with chemicals or other pesticide-contaminated plants, uses organic fertilizers, and is not adjacent to polluted rivers. The land is monitored monthly by the ICS (Internal Control System) and the landlords/landowners. Additionally, every 6–12 months, an inspection is conducted by the Organic Certification Body, which includes assessing the condition of the land.

f. Sales Skills

Organic coconut sugar producers sell directly to KUB, but a few sell through collectors. Selling through collectors does not mean that the price at which producers sell to collectors is cheaper than selling to KUB. The prices sold to middlemen and KUBs are the same: Rp17.000/kg for block sugar and Rp23.000/kg for powdered sugar. Artisans can sell block or powdered sugar ranging from 7 kg to 13 kg per day. However, their sales skills are still limited as they only sell to middlemen/KUB.

g. Financial Skills

Craftsmen are able to use their capital wisely and save around Rp50.000-100.000 per day from their business income. However, on the other hand, there are some craftsmen who spend their business income on necessities or to pay off debts.

h. Increase in Income

The majority of organic coconut sugar producers have seen an increase in income over the past six months, particularly in powdered sugar sales. Over the past six months, the price of powdered sugar has increased from Rp20.000/kg to Rp23.000/kg. The majority of producers have predominantly produced powdered sugar rather than granulated sugar over the past six months. This is because the quality of the sap is good for making powdered sugar, and the selling price of powdered sugar has also increased. However, unlike block sugar, the price of block sugar decreased in May, dropping by Rp1.000/kg from the initial price of Rp18.000/kg to around Rp17.000/kg. Despite the decline in block sugar prices, the income of sugar craftsmen over the past six months has not decreased; instead, it has continued to increase. Over the past six months, the average income of sugar craftsmen has risen from approximately Rp3.000.000–Rp5.000.000 to around Rp4.000.000–Rp6.000.000. However, some artisans' income remained neutral (neither increasing nor decreasing). This was due to factors such as some artisans losing their desire to engage in entrepreneurship (wanting to take a break) for one month, and others experiencing health issues that prevented them from carrying out production processes.

3.5 Quantitative Analysis

a. Analysis Outer Model
1. Convergent Validity

Table 6. Convergent Validity Results

Variables	Indicator	Outer Loading Value	Conclusion
Entrepreneurial Attitude	X1.1	0.914	Valid
	X1.2	0.893	Valid
	X1.3	0.809	Valid
	X1.4	0.860	Valid
	X1.5	0.786	Valid
	X1.6	0.792	Valid
	X1.7	0.837	Valid
	X1.8	0.755	Valid
	X1.9	0.777	Valid
	X1.10	0.784	Valid
	X1.11	0.755	Valid
	X1.12	0.803	Valid
Entrepreneurial Skills	X2.1	0.769	Valid
	X2.2	0.791	Valid
	X2.3	0.743	Valid
	X2.4	0.771	Valid
	X2.5	0.797	Valid
	X2.6	0.707	Valid
Income Growth	Y.1	0.797	Valid
	Y.2	0.925	Valid
	Y.3	0.793	Valid

The table above shows the results of the convergent validity test. Of the three variables, namely Entrepreneurial Attitude, Entrepreneurial Skills, and Income Increase, containing a total of 24 indicators, all of these indicators are declared valid, as their values are greater than 0.7.

2. Discriminant Validity (Fornell-lacker Criterion)

Table 7. Discriminant Validity Results

Variables	Entrepreneurial Skills	Income Growth	Entrepreneurial Attitude
Entrepreneurial Skills	0.764		
Income Growth	0.731	0.840	
Entrepreneurial Attitude	0.679	0.792	0.815

Based on the above discriminant validity test, the findings of the discriminant test utilizing the Fornell-Larcker Criterion. Data is categorized as having good discriminant validity if each highest loading factor is compared with the loading factor for other latent variables. This indicates that each latent variable shows good discriminant validity.

3. Composite Reliability

Table 8. Composite Reliability Results

Variables	Composite Reliability	Conclusion
Entrepreneurial Attitude	0.959	Reliable
Entrepreneurial Skills	0.893	Reliable
Income Growth	0.878	Reliable

The preceding table indicates that each research variable's composite reliability value is higher than 0.7. Good reliability is defined as a composite reliability rating greater than 0.7. Thus, it may be said that every research variable has a high degree of reliability. This indicates that the study's questionnaire is reliable.

4. Avergae Variance Extracted (AVE)

Table 9. AVE Results

Variables	Average Variance Extracted (AVE)
Entrepreneurial Attitude	0.665
Entrepreneurial Skills	0.583
Income Growth	0.706

Based on the calculations above, the AVE values for all variables, namely entrepreneurial attitude (0.665), entrepreneurial skills (0.583), and income increase (0.706), can be concluded. Therefore, it can be concluded that all variables have met the criteria and have potential reliability for further testing.

5. Cronbach’s Alpha

Table 10. Cronbach’s Alpha Results

Variables	Cronbach's Alpha
Entrepreneurial Attitude	0.954
Entrepreneurial Skills	0.858
Income Growth	0.791

The information is clear from the above table's data that every variable has a Cronbach's alpha value greater than 0.6. If a Cronbach's alpha value is more than 0.6, it is regarded as good. These findings show that every variable satisfies the criteria for a Cronbach's alpha value.

b. Inner Model Analysis

1. R-Square

Table 11. R-Square Results

Variables	R -Square	R -Square Adjusted
Income Growth	0.697	0.679

The data above (income increase variable) can be explained by all independent variables (entrepreneurial attitude variable and entrepreneurial skills variable) of 67.9%, according to the table above. The remaining 100% minus 67.9%, or 32.1%, is explained outside of this research model. This indicates that the Adjusted R-Square value is 0.674.

2. F-Square

Table 12. F-Square Result

Variables	Income Growth
Entrepreneurial Skills	0.229
Entrepreneurial Attitude	0.535

The F-Square value is interpreted as follows: small for ≥ 0.02, medium for ≥ 0.15, and large for ≥ 0.35 [12]. The Entrepreneurial Skills variable has a modest goodness of fit model towards the Income Increase variable, with an F-Square value of 0.229, according to the F-Square values in the above table. The Entrepreneurial Attitude variable's F-Square value of 0.535 indicates that it has a large goodness of fit model towards the Income Increase variable.

c. Hypothesis Testing

Tabel 13. Hypothesis Testing

Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Entrepreneurial Skills (X2) -> Income Growth (Y)	0.359	0.371	0.156	2.296	0.011
Entrepreneurial Attitude (X1) -> Income Growth (Y)	0.548	0.549	0.150	3.654	0.000

Based on Table 13 above, the results of the hypothesis testing from the PLS analysis are as follows:

1. The Effect of Entrepreneurial Attitude on Income Increase
   As shown in Table 13, the hypothesis test findings show that entrepreneurial attitude has an impact on income growth. The hypothesis test analysis yielded a route coefficient (O) of 0.548 and a T-statistic of 3.654. This value exceeds both the P-value of 0.000 and the t-table value of 1.96. This indicates that Organic Coconut Sugar Crafters' Income Increase is significantly positively impacted by an entrepreneurial attitude (H1 is accepted). The findings of research by [10], which demonstrate that the entrepreneurial mindset variable has a considerable impact on the income of SMEs in the M, support this. stated the Samarinda region. A stronger entrepreneurial attitude will increase

income increase. According to entrepreneurial attitudes, self-assurance, task and results focus, risk-taking, and loyalty are markers that affect income growth. Additionally, analytical results from other studies support it, demonstrating that entrepreneurial attitudes have a favorable effect of 0.310 with a significance of 0.017 <0.05 [13].

2. The Effect of Entrepreneurial Skills on Income Increase
   As seen in Table 13, the hypothesis test findings show how entrepreneurial skills affect income growth. A route coefficient (O) of 0.359 and a T-statistic of 2.296 were obtained from the hypothesis test study. Since the P-value (0.011) is less than 0.05 and this number is more than the t-table value (1.96), H2 is acceptable. This suggests that entrepreneurial skills have a major influence on the income increase of organic coconut sugar crafters (H2 is accepted). Additional study demonstrating the beneficial impact of entrepreneurial skills on business success lends credence to this [14].

4 Conclusion and Recommendation

Characteristics of organic coconut sugar craftsmen are mostly aged 36-50 years, education level is dominated by elementary school graduates, main occupation as organic coconut sugar craftsmen with a dominant length of business 16-20 years. Based on land ownership, it is dominated by a combination of rented and self-owned land, namely 17 people, Based on total production/day, the majority of craftsmen produce 5-10 kg/day. Based on the number of trees, the majority of craftsmen have 21-30 coconut trees. Based on the type of sugar produced by craftsmen, the majority is powdered sugar. Craftsmen's entrepreneurship in terms of attitude, skills, and income increase is at a good level. The condition of the craftsmen's entrepreneurial attitude shows good results, namely the application of indicators of self-confidence, daring to take risks, task and result orientation, and loyalty during running the organic coconut sugar business. The condition of entrepreneurial skills shows that craftsmen are skilled in running their businesses, both in terms of technical, sales, or finance. The income of craftsmen for 6 months has mostly increased and some are stable.

Quantitative analysis was calculated using SmartPLS with testing using outer and inner analysis. The outer analysis shows that the validity test on 24 indicators is valid because the value is >0.7; the discriminant validity test demonstrates that each latent variable has good discriminant validity; the composite reliability test >0.7 is considered to have good reliability; the AVE test with a value >0.5 indicates that the construct can explain at least 50% of the variance of its items; and the Cronbach's alpha value test is good because it is >0.6. The internal analysis then shows that all independent variables account for 67.9% of the data, with an R-Square adjusted value of 0.679. According to F-Square, there is a moderate model goodness of fit for the entrepreneurial skills variable (0.229) and a significant model goodness of fit for the entrepreneurial attitudes variable (0.535). The hypothesis test thus indicates that both entrepreneurial skills and entrepreneurial attitude have a positive and significant impact on increasing income.

It is recommended that entrepreneurship levels increase and reach a very good level. This can be achieved through rewards, which can include cash, one month's land rental, or entrepreneurial support tools. These rewards are awarded to artisans with the highest production levels and consistently high-quality products. In addition, intensive and equitable training on organic coconut sugar production is provided to coconut sugar artisans. Furthermore, support from KUB, Central Agro Lestari, and the government can provide safety protection facilities for artisans, such as safety belts.

References

1. M. N. Izza and D. Purnomo, Analysis of Economic Growth Patterns and Regional Potential Sectors in Grobogan Regency Central Java in 2017–2021. Atlantis Press International BV, 2024. https://doi.org/10.2991/978-94-6463-204-0_7
2. M. A. Pujiyanto, D. H. Darwanto, and J. H. Mulyo, Leading Agricultural Subsectors in South Sumatra Province Before and During The COVID-19 Pandemic, Agro Ekon., **33**, 1, 45, (2022), https://doi.org/10.22146/ae.72177
3. J. Burton, The World Leaders In Coconut Production, worldatlas.com.
4. R. H. Putri and S. Budiningsih, Competitive Advantages and Strategies of the Brown Sugar Industry in Purbalingga. KnE Soc. Sci., **2021**, 134–143 (2021). https://doi.org/10.18502/kss.v5i7.9329
5. D. Dumasari, Kewirausahaan Petani Dalam Pengelolaan Bisnis Mikro Di Pedesaan. Ajie, **3**, 3, 196–202 (2014). https://doi.org/10.20885/ajie.vol3.iss3.art4
6. Y. Tita and N. Ifdal, Analisis Faktor-Faktor yang Berhubungan dengan Jiwa Kewirausahaan Petani Kakao di Kota Sawahlunto. J. Agribisnis Kerakyatan, **4**, 1, 25–35 (2014).
7. S. Z. A. Shah and M. Ahmad, Entrepreneurial orientation and performance of small and medium-sized enterprises: Mediating effects of differentiation strategy. Compet. Rev., **29**, 5, 551–572 (2019). https://doi.org/10.1108/CR-06-2018-0038
8. S. A. Fazal et al., Entrepreneurial Motivation, Competency and Micro-Enterprise Sustainability Performance: Evidence from an Emerging Economy. Sustain., **14**, 19 (2022). https://doi.org/10.3390/su141912615
9. J. Sasmita and N. Mohd Suki, Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. Int. J. Retail Distrib. Manag., **43**, 3, 276–292 (2015). https://doi.org/10.1108/IJRDM-02-2014-0024
10. R. Devi, Pengaruh Modal Usaha Dan Sikap Kewirausahaan Terhadap Pendapatan Usaha Kecil (Mikro) Di Kawasan M. Said Samarinda," J. Adm. Bisnis Fisipol Unmul, **9**, 1, 36 (2021). https://doi.org/10.54144/jadbis.v9i1.4768
11. A. Hidayatul, Pengaruh Kebebasan Dalam Bekerja, Lingkungan Keluarga Dan Keberanian Mengambil Risiko Terhadap Minat Berwirausaha, E-Jurnal Ris. Manaj., **110**, 9, 1689–1699 (2020).
12. A. Juliandi, Structural Equation Model Partial Least Square (SEM-PLS) Menggunakan SmartPLs. Jangan Belajar, **1**, was, 1–4 (2018). https://doi.org/10.5281/zenodo.1243777
13. N. Aini and I K. Suardika, Pengaruh Sikap Kewirausahaan Dan Kompetensi Kewirausahaan Terhadap Keberhasilan Usaha Pada Umkm Tempe Di Taman Sari. Jnana Satya Dharma, **11**, 2, 125–131 (2023). https://doi.org/10.55822/jnana.v11i2.376
14. K. A. Iskandar, Pengaruh keterampilan wirausaha dan pengalaman usaha terhadap keberhasilan kewirausahaan, **21**, 1, 14–20 (2020).