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Business Sustainability of Soy-Based MSEs during the Pandemic (Quadruple Bottom Line Approach)

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Abstract:

This research is motivated by the problem of business sustainability in soybean-based SMEs, especially during the pandemic. Soybean-based MSMEs have a strategic role in the Indonesian economy and are one of the products that have a strategic role but are experiencing business sustainability problems. This study aims to reveal the condition of small and micro-enterprises with a quadruple bottom line approach and compare business sustainability performance between small and medium enterprises. The business sustainability approach is a quadruple bottom line consisting of economic, social, environmental, and cultural sustainability. This research was conducted using a survey method to 86 tempeh and tofu craftsmen in the Garut Regency, the largest soybean producer in West Java. Data collection was carried out with instruments and interview guides. The collected data is then processed with descriptive statistics to obtain an overview of the unit of analysis. The research results state that cultural sustainability is the dominant dimension compared to other dimensions, and there are significant differences in the business sustainability capabilities of small and micro-businesses. Economic sustainability is mainly shown from the ability to meet market needs. Social sustainability is mainly indicated by high participation in the community, and the environmental dimension is indicated by the ability to save energy. The results of this study can be applied as basic information to strengthen the development of soybean-based small and medium enterprises regarding their strengths and weaknesses. This study examines the sustainability of MSMEs, and supplements previous studies examining large companies, it also contributed to new knowledge that cultural factors support the sustainability of MSMEs with typical products that have been passed from generation to generation.

Keywords: business, sustainability, quadruple; micro, small, and medium enterprises; bottom line.

大流行期间基于大豆的 MSE 的业务可持续性（四重底线方法）

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摘要:

这项研究的动机是基于大豆的中小企业的业务可持续性问题，尤其是在大流行期间。以大豆为基础的中小微企业在印尼经济中具有战略性作用，是具有战略性作用但遇到商业可持续性问题产品之一。本研究旨在通过四重底线方法揭示小微企业的状况，并比较中小型企业业务可持续发展绩效。业务可持续性方法是一个四重底线，包括经济、社会、环境和文化可持续性。这项研究是使用调查方法对西爪哇最大的大豆生产国加鲁特摄政区的86名豆豉和豆腐工匠进行的。使用仪器和访谈指南进行数据收集。然后使用描述性统计数据处理收集的数据，以获得分析单元的概述。研究结果表明，与其他维度相比，文化可持续性为主导维度，小微企业的业务可持续性能力存在显著差异。经济可持续性主要体现在满足市场需求的能力上。社会可持续性主要表现为社区的高度参与，而环境维度则表现为节能能力。本研究的结果可以作为基础信息，加强以大豆为基础的中小企业的发展，了解它们的优势和劣势。本研究考察了中小微企业的可持续性，并补充了以前对大公司的研究，它还提供了新的知识，即文化因素通过代代相传的典型产品支持中小微企业的可持续性。

关键词: 商业，可持续性，四倍； 中小微企业； 底线。

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in development in Indonesia. The number of MSMEs in Indonesia in 2019 reached 7,716,780 units with a growth of 13.98% per year. The contribution of MSMEs on a national scale includes employment of up to 15,676,504 people with a growth of 14.96% per year, the contribution to GDP is based on price valid for IDR 5,395,514.4 billion with a growth of 72.47% per year, and the acquisition of non-oil and gas exports of IDR 963,982.7 billion with a growth of 84.53% per year.

Indonesian soybean-based MSMEs are engaged in the community food sector. They have high market potential, including tempeh, tofu, soy sauce, and other processed soy products such as soy milk tauco and soy flour. Judging from the use of soybeans, 50% of all soybean offerings are processed in the form of tempeh, 40% accounts for tofu, and 10% for other processed soy products (soy sauce, soy milk, tauco, and soy flour).

This research on soybean-based SMEs is interesting because, in addition to having advantages and a strategic role, it also has weaknesses and is faced with various threats to the sustainability of its business. Soybean-based SMEs have advantages compared to other non-oil and gas SMEs, including (1). It is a non-oil and gas export commodity (djpen.kemendag.go.id). (2) It is a hereditary business that many people are involved in (Wahyuni, 2017). (3) Many enterprises employ workers, especially people with low levels of education (Hairun, 2016). (4) They are sources of income for subsistence level people (Agricultural Outlook, 2016). (5) They provide food sources that are cheap, easy, safe, and nutritious. (6) Commodities typical of Indonesia, (7) The waste produced is organic waste that is easy to recycle (Pipin et al., 2020). (8) Its production activity has become a deep-rooted habit so that its business tends to be stable, strong, and easy to develop.

Soy-based products are also a source of cheap, easy,

safe, and nutritious food. Soy-based products, especially tempeh, are a typical Indonesian commodity that has long been well-known to the public, widely consumed, and widely produced as a home-based business so that it is referred to as part of the nation's culture. In the book of Indonesian tempeh potpourri, it is stated that the term tempeh has been used in the *Serat Centhini Book* (12th and 13th centuries AD) and *Serat Sri Tanjung Banyumas* in the 18th century. Thus, tempeh for the Indonesian people is a food commodity and has cultural value, Tempe has a great potential for appearing on the list of UNESCO "Intangible Cultural Heritage of Humanity". For the people of Indonesia, tempeh is not just food, but have cultural values, history and economy of the nation. Because of its uniqueness, tempeh is eligible to become a symbol of Indonesian culture" (Indonesian Tempe Forum, 2015).

In addition to the advantages of soybean-based SMEs above, there are weaknesses and challenges in the form of obstacles related to the negative impact of business activities on the economic, social, environmental, and cultural dimensions. Therefore, it can reduce business sustainability marked by fewer business units. The business can be closed as a result of bankruptcy or due to a violation of these dimensions. The decline in business sustainability was initially overcome by increasing business performance to achieve economic goals. In its development, business sustainability is achieved by balancing the overall results, including the achievement of economic goals, concern for social conditions, the natural environment, and community culture or the quadruple bottom line (Silva, 2018), which is an extension of the triple bottom line concept by Elkington (1997). The quadruple bottom line, often referred to as the 4Ps, is the development of the 3P concept consisting of profit, planet, people, which is then given the addition of P, namely purpose. The last "P" is very diverse because it depends on the use.

In this study, the intended purpose is culture. One of

the quadruple bottom line concepts consists of economic (profit), social (people), environmental (planet), and cultural (culture) dimensions. The purpose of this quadruple bottom line is broader for the community's welfare. The importance of achieving business sustainability in SMEs lies in the necessity to know the influencing factors, including market orientation (MO) and entrepreneurial orientation (EO). Market orientation is indicated by innovativeness, proactive, risk-taking, while entrepreneurial orientation is indicated by customer-focused, coordinates & plans with marketing, and externally focused (Jansson & Nilsson, 2017).

Different scholars consider the following factors: (1) Performance, (2) Employees, (3) Owners, (4) Government, (5) Customers, (6) Stakeholders (Salimzadeh et al., 2013), (1) Entrepreneurial factors (2). Factors of poor business experience (3). Factors of managerial error (Haresankar, 2019), (1). Marketing strategy, (2). Research strategy, (3). Competition (Vaikunthavasan, 2019) and (1). Work experience, (2). Education (3) Consumer orientation (4). Resources, and the environment (5) Recycling (Hosseininia & Ramezani, 2016).

Based on the reasons for the importance of studying business sustainability in MSMEs, the research question is the business sustainability condition of Soy-based MSMEs in terms of economic, social, environmental, and cultural sustainability and the difference in sustainability performance between micro and small businesses in the unit of analysis. To answer this research question, a survey was conducted on small and micro-businesses, the largest business scale that produces tofu and tempeh in business centers in the Garut Regency.

2. Literature Review

2.1. Business Sustainability

Several opinions put forward the concepts of business sustainability. Among them, the concept of business sustainability is emphasized as (1) The purpose and process, (2) The scope, (3) Long-term value creation efforts. The concept of business sustainability which emphasizes goals and processes, was developed by Dyllick and Muff (2016), stating "a process by which firms manage their financial, social and environmental risks, obligations and opportunities".

The concept of business sustainability, which emphasizes its scope, was developed by Tseng et al. (2020). The scope of business sustainability includes economic, environmental, and social dimensions called the triple bottom line. This scope implies that the business will be sustainable if it pays attention to the economic, social, and environmental dimensions. In this case, the stakeholders whose welfare is considered are internal and external stakeholders, both the community and the environment. Business sustainability refers to

the integration of economic, environmental, and social considerations on the part of corporations (Tseng et al., 2020).

Moreover, it is also commonly discussed in terms of the 'triple bottom line' in a nod toward framing the associated discussions in language familiar to corporations given dominant attention in the corporate vernacular to the economic 'bottom line' (profits). The scope of the concept of sustainability is the development of the orientation of the economic business shifting towards the expansion of social and environmental goals. Tseng et al. (2020) stated that the scope of business sustainability consists of economic, social, and environmental dimensions, declared business sustainability, a company's economic, social and environmental efforts to implement and manage both its own and its business network's impact on the Earth's life and ecosystems. The scope of business sustainability is measured by the triple bottom line (Hourneaux Jr. et al., 2018).

Quadruple bottom line (Hourneaux Jr. et al., 2018) developed from the triple bottom line concept developed by the dimension of culture or governance known as the quadruple bottom line and adds a dimension of peace to the Penta bottom line which is widely adopted by multinational companies. In this study, business sustainability includes economic, social, environmental, and cultural dimensions. Because MSEs are based on soybean is a typical Indonesian food commodity. Economic sustainability, for example, the economic dimension, is indicated by the level of ability to reduce production costs, the level of ability to increase profits, the level of employment. Social sustainability is a social dimension indicated by the level of employee wages, participation in community activities, application of occupational safety and health rules, and product safety energy (Hosseininia & Ramezani, 2016). Environmental sustainability consists of processing energy, waste, and raw materials. Energy consists of the levels of ability to save energy and reduce CO2 emissions from energy use. The treatment of waste is indicated by the level of waste management technology, the level of use of products that can be recycled, and materials and resources seen from the use of certified inputs (Hosseininia & Ramezani, 2016).

2.2. Micro and Small Enterprises

There are several criteria for MSMEs, including according to Law No. 20 of 2008 concerning Small and Micro businesses, including 1) Micro Business Criteria are a) having a net worth of at most IDR 50,000,000 excluding land and buildings for business premises, or b) have annual sales of a maximum of Rp.300,000,000.00. c) have < 5 workers, including unpaid family workers. The criteria for Small Business are: a) a net worth of more than IDR 50,000,000.00 to IDR 500,000,000.00 excluding land and buildings where the business is located; b) annual sales of more

than IDR 300,000,000.00 to IDR 2,500,000,000.00; c) 5-19 employees.

3. Method

3.1. Research Approach

This study is descriptive verification research. Descriptive research aims to explain the condition of the variables studied, presented narratively, and supported with descriptive statistical analysis. It is also quantitative research, based on how the data is obtained; the method used is a survey method through several research phases.

3.2. Population and Sample

The unit of analysis in this study is the owner of the Micro and Small and Medium Enterprises (MSME) unit, namely tofu and tempeh craftsmen, totaling 86

craftsmen. The population in this study was tofu tempeh craftsmen in the Suci Village, Karang Pawitan sub-district because micro and small businesses are 97% of the total number of MSMEs in Garut Regency (Aulia & Fitria, 2018). The Garut Regency has 50 craftsmen and tofu craftsmen in Panyindangan village, Kec. Pakenjeng Garut Regency has 36 craftsmen. The reason for choosing the location in the Garut district is that this area is the largest soybean producer in West Java. Furthermore, the village is the center of tofu and tempeh in Garut Regency. The sampling technique taken is a saturated sample.

3.3. Collecting Data

Data was collected by distributing questionnaires and conducting interviews. The questionnaire was developed from the concept of variables and variable dimensions listed in Table 1.

Table 1. Questionnaire development

Variable	Dimension	Indicators	Scale	No. Item
Business Sustainability	Economic Sustainability	The ability to reduce production costs (E1)	Ordinal	1,2
		The ability to increase sales (E2)		3,4
		The ability to meet market needs (E3)		5,6
	Social Sustainability	The application of wage justice (S1)	Ordinal	7,8
		The use of additives in products (S2)		9,10
		The concern for safety and health (S3)		11,12
		The participation in community activities (S4)		13,14
	Environmental Sustainability	Saving energy use (v1)	Ordinal	15,16
		The ability to reduce CO2 emissions from energy use (V2)		17,18
		The ability to treat waste (V3) 4) the level of saving on the use of raw materials (v4)		19,20
		The ability to use recycled goods (v5) (Bank of Indonesia, 2017)		21,22
	Cultural Sustainability	The number of producers engaged in the soybean-based business (C1)	Ordinal	23,24
		The length of business in the field (C2) (Hosseini & Ramezani, 2016; Hourneaux, 2018)		25,26

Based on Table 1, the development of the questionnaire was carried out by detailing the concept of variables into dimensions, indicators, and statement items on an ordinal scale arranged on a Likert scale (choices 1 to 5).

3.4. Data Analysis

The data that has been obtained is then selected, scored, and analyzed by centralized tendency analysis. Data processing with SPSS 25 consists of descriptive statistics and compare means t-test independent sample.

4. Results and Discussion

This section describes the condition of the business sustainability of soybean-based SMEs in terms of economic, social, environmental, and cultural sustainability analysis, which dimensions and indicators have the largest and smallest values, considering the differences in business sustainability performance between small and micro-scale businesses.

4.1. Economic Sustainability

The first dimension of business sustainability is

economic sustainability, which is measured by 1) the level of ability to reduce production costs (E1), 2) the level of ability to increase sales (E2), 3) the level of ability to meet market needs (E3). The condition of business sustainability performance on each indicator in micro and small businesses is shown in Table 2.

Table 2. Performance of economic sustainability of MSEs (Primary research, 2020)

Indicator	N	Min	Max	Sum	Mean	Std. Deviation	Criteria
E1	86	1.00	2.00	139.00	1.6163	.48914	Middle
E2	86	1.00	4.00	137.00	1.5930	.56105	Low
E3	86	2.00	4.00	226.00	2.6279	.50982	High
N (listwise)	86						

Based on Table 1, the ability to reduce the production costs of tofu and tempeh SMEs is in the medium category. From the observations in the unit of analysis, craftsmen reduce production costs from fuel costs (using firewood/or paper waste), wage costs, and marketing costs. The craftsmen stated that it was difficult to reduce the cost of raw materials, especially during the covid-19 pandemic, the price of soybeans increased almost every two days.

In terms of the ability to increase sales, tofu and

tempeh SMEs were in a low category due to the demand for tofu and tempeh during the pandemic decreasing to 40% (results of interviews with craftsmen) because with this PSBB policy, restaurants and stalls are closed, and there are limitations in distributing products. Therefore, sales during the pandemic decreased. The ability of tofu and tempeh SMEs to meet market needs is in the high category. The attributes of tofu and tempeh products needed by consumers are affordable prices, fixed quality, and easy to obtain goods. Tempe and tofu SMEs, which are used as units of analysis, are in the size of small and micro-companies. The comparison of economic sustainability capabilities for small and micro-entrepreneurs is shown in Figure 1:

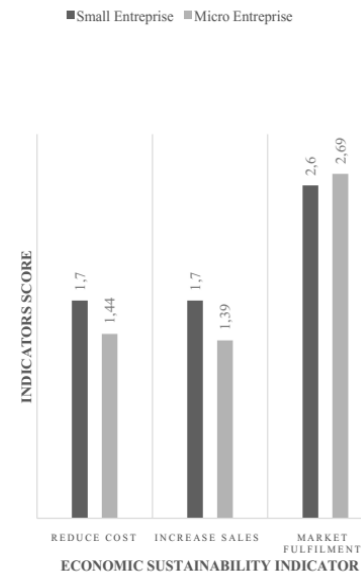


Figure 1. Economic sustainability comparison between small and micro enterprises

Graphically, there are differences between small and micro businesses in reducing economic and increasing sales indicators, where small businesses are better than micro-businesses. The independent t-test shows the significance of the difference in the performance of the indicator base (Table 3).

Table 3. Differences in economic sustainability performance between micro and small enterprises

Indicators	T-score		Significant		Decision
	Equal variance assumed	Equal variance not assumed	Equal variance assumed	Equal variance not assumed	
Reduce cost	2.88	2.82	0.05	0.06	Significant
Increase sales	2.99	3.06	0.04	0.003	Significant
Market Fulfillment	-1.027	-1.051	0.307	0.296	Non-significant

Based on Figure 1 and Table 3, the results of examining indicator 1, regarding the ability to reduce costs, small enterprises are significantly different from micro-enterprises. Small enterprises are better than micro-enterprises due to their ability to produce in large quantities. Thus, the possibility of an economy of scale is better. Indicator 2 is about the ability to increase sales enterprises are significantly different from micro-enterprises. Here small enterprises significantly differ from micro enterprises since small enterprises have a greater opportunity to access food producers such as restaurants, food stalls, and online food traders. The third indicator, regarding the ability to meet market needs, shows that micro enterprises do not differ from small enterprises. Graphically there is a slight difference because both small and micro-enterprises understand the product attributes needed by customers. Sustainability in small and micro businesses needs to be maintained during the COVID-19 pandemic, and MSEs are faced with a difficult situation. To continue to increase their production, the government needs support in providing strategic support, namely fair prices to their products, better quality customer service, and continuous job training (Asefa, 2019).

4.2. Social Sustainability

The second dimension of business sustainability is social sustainability. Social sustainability is the ability of MSEs to create sustainable value in the long term to their stakeholders, both internal stakeholders (employees and shareholders) and external stakeholders (consumers, society, and government). Social sustainability is measured from 1) the level of application of wage justice (S1) 2) the level of use of additives in products (S2) 3) the level of concern for safety and health (S3) 4) the level of participation in community activities (S4). The results of the social sustainability research are shown in Table 4.

Table 4. Performance of social sustainability of MSEs per indicator

Descriptive Statistics							
Indicator	N	Min	Max	Sum	Mean	Std. Dev	Criteria
S1	862.00	4.00	262.00	3.0465	.52931		High
S2	862.00	4.00	135.00	3.2093	.79877		Low
S3	861.00	4.00	231.00	2.6860	.85765		High
S4	862.00	4.00	281.00	3.2674	.71000		Very high
Valid N (listwise)	86						

The research results stated that the ability of MSEs to provide wages to employees was considered fair. MSEs provide wages based on the unit rate produced and the workload that has been completed. MSEs do not differentiate wages based on gender or family relationships. In the product processing process, the level of use of additives is in a low category. Since there are strict sanctions on tofu and tempeh products that use harmful additives such as formalin and borax as preservatives, many craftsmen do not avoid using these additives. Craftsmen use turmeric as a natural preservative, often replace tofu-soaked water, process products more hygienically, and try to sell tofu and tempeh quickly to consumers by expanding sales channels. The ability to maintain the safety and health of tofu and tempeh MSEs is in the high category. As MSEs whose employees are generally neighbors or family members, craftsmen have good abilities in caring for work safety and occupational health. The ability of MSEs to participate in community activities is at a very high criterion which is the highest ability. The position of tofu and tempeh MSEs in the community and playing a role in absorbing labor, MSEs participate in social activities, the provision of public self-help facilities, and economic activities in the surrounding environment. During the COVID-19 pandemic, which caused a decline in sales, several tofu and tempeh SMEs reduced the number of employees. A comparison of the ability to achieve social sustainability of small and micro-enterprises can be seen in Figure 2.

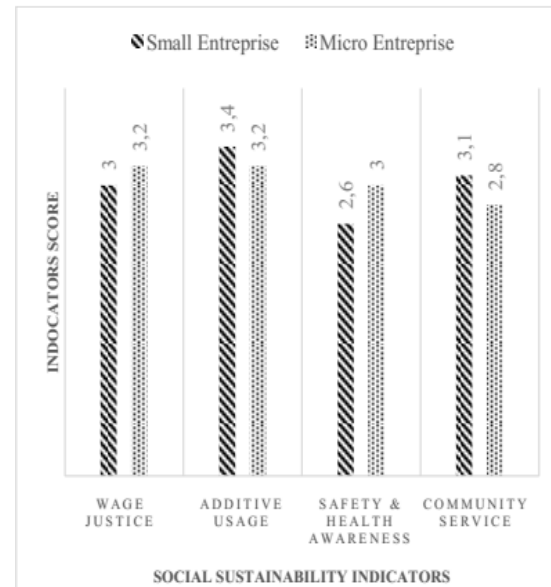


Figure 2. Social business sustainability comparison between small and micro enterprises

Graphically, in the indicators of the use of additives and community service, small businesses are better than micro-businesses: small businesses use less harmful additives, are participative, and are actively involved in community activities. Micro-enterprises are better than small-scale enterprises regarding wage equity and concern for security and health. The significance of differences in social sustainability performance is shown in Table 5.

The results of the different test data processing with the independence sample t of social sustainability performance between micro and small businesses are shown in Table 5. Based on the t-test, there are significant differences in the use of additives and the level of participation in the community, and wage equity and concern for safety and health are not different between small and micro-businesses.

Table 5. Differences in social sustainability performance between micro and small enterprises

Indicators	T score		Significant		Decision
	Equal variance assumed	Equal variance not assumed	Equal variance assumed	Equal variance not assumed	
Wage justice	-1.811	-1.774	0.74	0.9444440	Not Significant
Additive Usage	2.994	3.060	0.004	0.003	Significant
Safety-Healthy awareness	-1.708	-1.715	0.307	0.296	Not significant
Community Service	9.731	10.107	0.00	0.00	Significant

In terms of these four indicators used to measure social sustainability, in general, micro-entrepreneurship is better than small enterprises. From the indicators of wage justice, micro-enterprise is more equitable in providing wages; micro-enterprise provides wages based on the work achieved, regardless of gender, family ties, and considering wage eligibility. Wages are perceived to be fair by the work due to the openness of the owner's business skills and good communication from the owner to his employees. Microenterprise is also relatively low in the use of additives that need

monitoring in its use. Based on the interviews, this is due to the fear of micro-enterprise being blocked by the government, afraid of the product not selling, and not knowing what chemical additives do not change the original nature of tofu and tempeh products. Likewise, for indicators of concern for occupational health and safety, micro-entrepreneurs care more than small enterprises due to better supervision, a smaller production area, and very simple production equipment.

In indicators of the level of participation in the community, a small enterprise is better than a micro-

enterprise. Social sustainability in MSEs is necessary to provide value to internal and external stakeholders. Social sustainability in MSEs is demonstrated by their participation in society, community, and stakeholders, which can improve performance and customer satisfaction performance as well as employee satisfaction performance (Masocha, 2019).

4.3. Environmental Sustainability

The third dimension of business sustainability is environmental sustainability. This dimension shows the ability of craftsmen to behave in an environmentally friendly manner. Environmentally friendly behavior can provide long-term value for the community environment and the quality of people's lives. Environmental sustainability is measured from 5 indicators, namely 1) the level of saving energy use (v1) 2) the ability to reduce CO₂ emissions from energy use (V2) 3) the level of ability to treat waste (V3) 4) the level of saving on the use of raw materials (v4) 5) the level of ability to using recycled goods (v5). The results of the study can be seen in Table 6.

Table 6. Environmental sustainability of MSEs' performance per indicator

Descriptive Statistics							
Indicator	N	Min	Max	Sum	Mean	Std. Dev.	Criteria
V1	86	1.0	3.0	122.0	1.418	.583	High
V2	86	1.0	3.0	163.0	1.895	.7519	Middle
V3	86	1.0	3.0	171.0	1.988	.6596	Middle
V4	86	1.0	2.0	140.0	1.627	.486	Middle
V5	86	1.0	2.0	134.0	1.558	.4995	Low
Valid N (listwise)	86						

Based on the research results for all indicators, MSEs are relatively capable of saving in processing energy and low in the ability to use recycled goods. In

this case, the ability to reduce CO₂ emissions is moderate. The ability to treat moderate waste, save the use of medium raw materials, and the level of use of medium raw materials. Based on the results of the analysis unit's observations, the waste processing of tofu and tempeh is in the form of soybean skin tofu dregs, which are used as side dishes and animal feed. To save energy, use much firewood sold cheaply in the surrounding environment and uses very little electricity. This causes cost savings for energy. The low use of recycled goods is due to a lack of knowledge about the use of recycled goods. A comparison of environmental sustainability between small and micro enterprises can be seen in Figure 3.

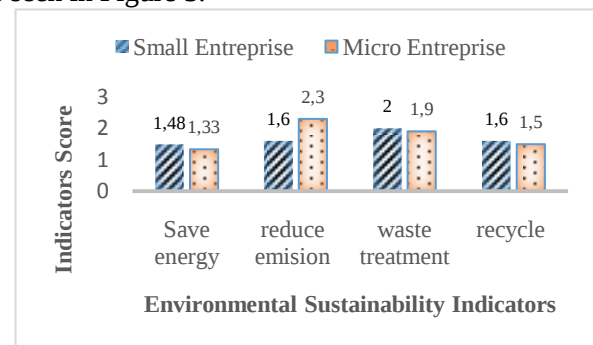


Figure 3. Environmental sustainability comparison between small and micro enterprises

Graphically, on the indicators of saving energy, managing waste, and using recycled goods, small businesses are better than micro-businesses, while reducing CO₂ emissions for micro-businesses is better than small businesses. The significance of differences in environmental sustainability performance can be found in Table 7.

Table 7. Differences in environmental sustainability performance between micro and small enterprises

Indicators	T-score		Significant		Criteria Decision
	Equal variance assumed	Equal variance not assumed	Equal variance assumed	Equal variance not assumed	
Save energy	-1.811	-1.774	0.74	0.90	Not Significant
Reduce CO ₂	-4.82	-4.82	0.00	0.00	Significant
Waste Management	0.854	0.875	0.396	0.384	Not significant
Raw material saving	1.294	1.286	0.199	0.201	Not Significant
Recycle goods	-0.756	-0.781	0.452	0.437	Not significant

In terms of environmental sustainability, small enterprises are better than micro-enterprises in their low emission capability, energy-saving, raw material saving, and recycling capability. Energy savings in small businesses are caused by having the technology to produce more energy-efficient products and obtaining profitable suppliers because most craftsmen in small businesses have communities to exchange ideas, share best practices, and share information. Environmental sustainability for MSMEs is complicated. It will be more difficult for small and medium enterprises (SMEs) to achieve sustainable companies. Due to lack of resources, SMEs should effectively utilize their limited

resources and prioritize performance factors (Hsu et al., 2017).

4.4. Cultural Sustainability

Cultural sustainability shows how the tempeh and tofu SMEs business has become a culture for the community in the research location. Cultural sustainability is an additional dimension to the triple bottom line (Silva, 2018). The tofu and tempeh producing business is said to have become a culture if 1) the number of producers engaged in the soybean-based business (C1) 2) the length of business in the field (C2). The results of the research on cultural sustainability are given in Table 8.

Table 8. Performance of cultural sustainability of MSEs per indicator

Descriptive Statistics							
Indicator	N	Min	Max	Sum	Mean	Std. Dev	Criteria
C1	86	2.0	4.0	234.	2.72	.67999	Very high
C2	86	2.0	4.0	235.	2.73	.75808	Very high
Valid N (listwise)	86						

Based on the results of the study, the number of tofu and tempeh producers in the analysis unit was in the medium category, where 84% of the people had a high livelihood in the tofu and tempeh business, both as craftsmen/owners and as laborers in tofu/tempeh factories. This shows that the tofu and tempeh business has become a village culture. In addition, a business becomes a culture because it is shown by the length of time the community has occupied the business. Tofu and tempeh business is an out-of-pocket business. If it is not passed down from generation to generation, then the length of the tofu and tempeh business is mostly 15 years and over. A comparison of small enterprise and micro-enterprise can be seen in Figure 3.

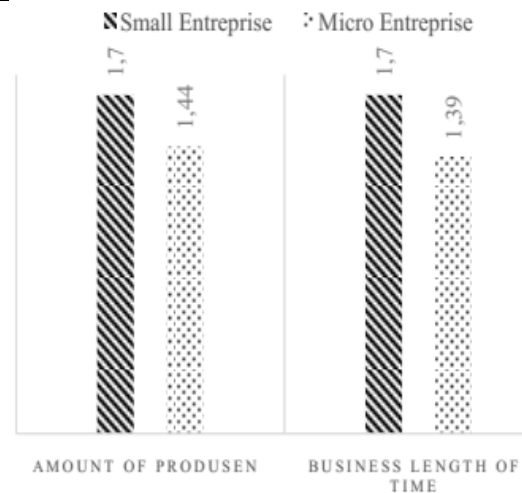


Figure 3. Cultural sustainability in small and micro enterprises

Based on Figure 3, small enterprises are generally better than micro enterprises. From the indicator of the number of producers, small enterprises are better than microenterprises. Likewise, for the duration of the business, both small and micro-enterprises are family businesses passed down from generation to generation.

Graphically, the indicators for the number of producers and the duration of small businesses are better than micro-businesses. The significance of differences in the performance of cultural sustainability can be found in Table 9.

Table 9. Differences in cultural sustainability performance between micro and small enterprises

Indicators	t-score		Significant		Decision
	Equal variance assumed	Equal variance not assumed	Equal variance assumed	Equal variance not assumed	
Number of products	6.135	6.474	0.00	0.00	Significant
Business length of time	2.337	2.486	0.022	0.015	Significant

5. Conclusion

During the Covid-19 Pandemic, soybean-based MSEs experienced a negative impact with a decline in business sustainability from the economic, social, environmental, and cultural dimensions. From the economic dimension, MSEs cannot reduce their production costs, there is a decline in sales, but SMEs can meet market needs. In decreasing ability, a small enterprise is better than a micro-enterprise. In social sustainability, MSEs are relatively better at participating and being actively involved in community activities.

There is a significant difference in the use of additives and the intensity of participation in society between micro and small businesses, where micro-businesses use lower additives than small businesses, while small businesses are better at participating in community participation.

From the environmental sustainability dimension, MSEs are relatively better in energy saving but relatively low in terms of using goods that can be recycled. In the ability to reduce CO2 emissions, there

is a significant difference, where small businesses are better than micro-businesses.

In cultural sustainability, the MSE is very high in this dimension compared to other dimensions, with a large number of producers and have been in business for a long time. There is a significant difference in the indicator of the number and duration of business between small and micro enterprises. This implies that tempeh and tofu businesses in the Garut district have become a strong culture in the community.

This study reveals business sustainability in MSEs, whereas in previous studies, many large companies were investigated through the Corporate Sustainability Index. The findings of this study contribute to providing additional knowledge about the behavior of MSEs in maintaining business continuity in connection with the limitations of the small size of the company, low capital, low competence, and technology.

In addition, this research enriches new knowledge by adding a cultural measure of the triple bottom line concept, so it is called the quadruple bottom line. This cultural measurement is carried out because the commodities discussed are businesses that have existed

since the time of their ancestors, which were designated as national cultural commodities by UNESCO. This study reveals that processing soybeans into tempeh and tofu is a strong culture for the Indonesian nation and encourages business continuity for a long time.

6. Limitations and Further Research

The limitations of this research are the lack of in-depth cultural studies in the MSME business and the need for breadth of study so that the results of this study have better axiology. For further researchers, it is hoped that research on business sustainability will continue for business fields that have become a mainstay and superior commodities in an area, causing the optimization of the use of commodities based on certain community cultures.

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