



Article history:

Received: 24 December 2024

Revised: 06 March 2025

Accepted: 11 September 2025

Available online: 16 September 2025

Analysis of Determinants of Sustainability of MSMEs in the Tourism Sector of Kerinci Regency

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ABSTRACT

This study aims to analyze the factors that influence the income of MSME traders in the tourism sector in Kerinci Regency, and analyze the prospects for the sustainability of MSMEs in the tourism sector in Kerinci Regency. The first analysis method used is multiple linear regression data analysis, the multiple linear regression model is used to measure the influence of independent variables, namely capital, working hours, length of business, labor and education on the dependent variable, namely MSME income, and secondly, Multidimensional Scaling (MDS) analysis is used, to analyze the prospects for the sustainability of MSMEs in the tourism sector in Kerinci Regency. The results of this study concluded that simultaneously the variables of capital, working hours, business duration, and labor have a positive and significant influence on the income of traders. However, partially only the labor variable does not have a significant effect on the income of MSME traders in the tourism sector in Kerinci Regency. This study also concluded that the analysis of the sustainability of tourism sector businesses in Kerinci Regency was obtained multidimensionally with a fairly sustainable category for MSMEs in the tourism sector in Kerinci Regency.

Keywords: MSMEs traders, tourism, multidimensional scaling, sustainability

ABSTRAK

Penelitian ini bertujuan untuk menganalisis faktor-faktor apa saja yang mempengaruhi pendapatan pedagang UMKM sektor pariwisata di Kabupaten Kerinci, dan menganalisis prospek keberlanjutan UMKM sektor pariwisata di Kabupaten Kerinci. Metode analisis pertama yang digunakan adalah analisis data regresi linier berganda, model regresi linier berganda digunakan untuk mengukur pengaruh variabel bebas yaitu modal, jam kerja, lama usaha, tenaga kerja dan pendidikan terhadap variabel terikat yaitu pendapatan UMKM, dan kedua digunakan analisis Multidimensional Scaling (MDS), untuk menganalisis prospek keberlanjutan UMKM sektor pariwisata di Kabupaten Kerinci. Hasil penelitian ini menyimpulkan bahwa secara simultan variabel modal, jam kerja, durasi usaha, dan tenaga kerja memiliki pengaruh positif dan signifikan terhadap pendapatan pedagang. Namun secara parsial hanya variabel tenaga kerja yang tidak berpengaruh signifikan terhadap pendapatan pedagang UMKM sektor pariwisata di Kabupaten Kerinci. Penelitian ini juga menyimpulkan bahwa analisis keberlanjutan usaha sektor pariwisata di Kabupaten Kerinci diperoleh secara multidimensi dengan kategori cukup berkelanjutan pada UMKM sektor pariwisata di Kabupaten Kerinci.

Kata Kunci: Pedagang UMKM, pariwisata Multidimensional Scaling (MDS, keberlanjutan

INTRODUCTION

MSMEs have a very important role in the economy and provide many benefits for economic development. MSMEs are one of the largest job generators that allow people to earn additional income and improve community welfare, this can help reduce poverty levels and increase people's purchasing power (Martasudira et al., 2025). Jambi Province is one of the areas that has prospective MSMEs potential, especially MSMEs in the tourism sector and more specifically in Kerinci Regency. However, the problem that occurs is that Jambi Province is a region that is less well-known in the tourism sub-sector but is known as an area rich in dense forests, mining, and oil palm plantations, in fact Jambi Province has diverse and beautiful tourism potential accompanied by rich cultural customs and history

that makes Jambi Province have tourism potential and attractions, this is proven based on data on tourist visitors in Jambi Province which continues to increase, The following is tourist visitor data:

Table 1
Number of Foreign and Domestic Tourists In Jambi Province 2018-2023

Year	Wisman (Soul)	Development (%)	Wasnus (Soul)	Development (%)
2018	1.965.482		161.820	
2019	2.026.010	3,08	162.030	0,13
2020	1.110.600	-45,18	79.290	-51,06
2021	1.440.000	29,66	110.000	38,73
2022	2.309.503	60,38	130.000	18,18
2023	2.400.000	47,94	140.000	5,98
Jumlah	11.251.595	95,88	783.140	11,96

Sumber : BPS Jambi Province, 2023

It can be seen in the Table above that in Jambi Province every year the number of tourists always increases. The data proves that Jambi Province has very prospective tourism potential, one of the areas in Jambi Province that has a tourist attraction is Kerinci Regency because Kerinci Regency is geographically strategic and the condition of the diversity of natural, cultural and historical tourism, in each region is a special attraction for domestic and foreign tourists and travelers.

The main problem of MSMEs in the tourism sector in Kerinci Regency is the unique challenge of sustainability, where the number of tourist visits only increases during holidays while on weekdays the number of tourist visits decreases so that it has an impact on the income of MSMEs in the tourism sector, where the income of MSMEs in tourism on holidays is high while on weekdays the income of MSMEs is low, the picture of the difference can be seen in the following table:

Table 2
Survey of MSMEs Income in the Tourism Sector Kerinci Regency

No	Name	Income/month (Rupiah)	Eid Income (Rupiah)	Location
1	Melani	5.000.000	8.000.000	Kerinci Lake
2	Noviyanto	1.500.000	8.000.000	Kerinci Lake
3	Magdalena	2.000.000	8.000.000	Kerinci Lake
4	Derma	4.000.000	11.000.000	Kerinci Lake
5	Sondang	5.000.000	15.000.000	Semurup Hot Water
6	Novfriyanti	2.500.000	8.000.000	Semurup Hot Water
7	Valdy	2.500.000	6.500.000	Semurup Hot Water
8	Rahma	1.000.000	13.000.000	Semurup Hot Water
9	Nafriani	4.000.000	17.500.000	Semurup Hot Water
10	Silva	5.000.000	14.000.000	Telun Berasap Waterfall
11	Deri	3.000.000	10.000.000	Telun Berasap Waterfall
12	Nur Azizah	2.000.000	11.000.000	Telun Berasap Waterfall
Amount		37.500.000	130.000.000	
Avarage		3.125.000	10.833.333	

Source: Direct Survey

From the data description above, it can be seen the results of the survey of income of tourism sector traders in Kerinci Regency. From 12 people who were met, it showed that the average income of tourism sector traders in Kerinci Regency on weekdays was IDR 2,917,667 within a period of one month and the average income on Eid day could reach IDR 11,000,000 within a period of one week. From the data that has been presented and the problems in the field, it was found that there is a very significant difference between income on weekdays and Eid day, from this phenomenon it becomes an interesting thing what is the factor in the difference in income and then whether with income on weekdays in the future MSMEs can still survive for sustainability in the long term.

The urgency of this study is the importance of knowing the factors that influence the significant difference in income between weekdays and holidays, then the importance of knowing the prospects for the sustainability of MSMEs in the tourism sector in Kerinci Regency, based on theories and research

that have been conducted previously, problems that often arise in MSMEs are usually related to limited capital. Therefore, the capital factor is important but not the main thing. in carrying out business activities. In addition to capital, factors that influence income are working hours, which are the most common part that must be present in a business (Rosmadi, 2019). The higher the working hours spent to open a business, the higher the probability of net income received by the entrepreneur.

Furthermore, the length of the business is the length of time the trader has been running his business. Another factor that can influence the income of traders is the number of workers. Workers are said to be the most important resource in developing the quality of an MSMEs products and services to consumers with the aim of making a significant contribution to the economic development of a country and the production process of the industry it self (Yuniasih, 2021). Social and cultural factors, such as education levels and awareness of the importance of developing sustainable tourism, can also influence the development of MSMEs in the tourism sector. Education and training related to tourism business management may be needed to increase the knowledge capacity of local MSMEs (Amirullah et al., 2023): Then the study of MSMEs sustainability can be studied by analyzing the dimensions related to sustainability, including economic, ecological, social, technological and institutional dimensions. The aim of this study is to determine what factors influence the income of MSME traders in the tourism sector in Kerinci Regency, and the prospects for its sustainability.

METHOD

The study used primary and secondary data. Primary data was conducted by researchers using a survey method to collect information and data from respondents who had been sampled. obtained from conducting interviews and questionnaires with tourism MSMEs traders in Kerinci Regency. While secondary data is data that has been provided by related agencies obtained from the Kerinci Regency MSMEs Service, Kerinci Regency BPS , Bank Indonesia and Jambi Province BPS.

The data analysis technique used in this study is Quantitative and Descriptive data analysis, the quantitative approach is an analysis that uses a calculation approach and uses analytical tools both statistically, mathematically and econometrically. In this study, it is used to analyze the effect of capital, working hours, length of business, labor on income in the Kerinci Regency tourist area. While descriptive analysis is an analysis that describes the condition of the object being studied, in this study it allows researchers to see how the development of the Kerinci Regency Tourism Object Area has an impact on the Sustainability of Kerinci Regency tourism MSMEs.

The sampling technique in this study amounted to 52 people, because the population was not greater than 100 respondents, the author took 100% of the population, namely 52 respondents from the tourism sector traders. Thus, the use of the entire population without having to draw research samples as observation units is called a census technique. For the business sustainability sample, the researcher took 50 respondents obtained from related agencies or services that were in accordance with the title of the research being studied.

Data Collection Technique This study uses data collection techniques through filling out questionnaires. The scale used is a five-level Likert scale with answer choices ranging from strongly disagree to strongly agree. This study used multiple linear regression data analysis method. Multiple linear regression model is used to measure the influence of independent variables, namely capital, working hours, length of business, labor on the dependent variable, namely the income of MSMEs traders.

The following is the estimation model for this research.

$$Y = \beta_0 + \beta_1 \text{MDL} + \beta_2 \text{JK} + \beta_3 \text{LU} + \beta_4 \text{TK} + \varepsilon$$

Information: Y = Trader's income; β_0 = Constant; $\beta_1, 2, 3, 4$ = Regression coefficient; MDL= Capital; JK = Working Hours; LU = Length of Business; TK = Labor Force; and ε = *error term*

Then the second analysis method uses *Multidimensional scaling (MDS)* which is an analysis technique that can be used to determine the position of an object based on its similarity. This study uses the *Rapfish (Rapid Appraisal for Fisheries)* technique, MDS analysis is basically used to research perceptions or marketing research and consumer preferences. However, currently MDS analysis has been used to research other phenomena such as sustainability analysis. Sustainability analysis has three stages that need to be done, namely: 1) Determining attributes consisting of five dimensions, namely ecological, economic, social, technological, and institutional dimensions; 2) Assessment or scoring of each attribute contained in each dimension. Each attribute in each dimension is given a score with a

score range of 1-5 ranging from bad (1) to good (5); 3) Compilation of index values and sustainability status. The score value of each attribute will be analyzed multidimensionally to determine the sustainability position. If the sustainability index value is less than or equal to 50, then it is said to be unsustainable. If the sustainability index value is more than 50 to 100, then it is said to be *sustainable* .

RESULTS

Table 3
Respondent Characteristics

Characteristics	Number of respondents	Percentage (%)
Working hours		
7 Hours	3	5.77
8 Hours	17	32.69
9 Hours	23	44.23
10 Hours	9	17.31
Labor		
1	17	32.69
2	28	53.85
3	4	7.69
4	3	5.77
Business years (LU)		
< 5	11	21.15
6-10	15	28.85
11-15	10	19.23
>16	16	30.77
Capital		
< 1,000,000	2	3.85
1,000,000-4,999,999	28	53.85
5,000,000-9,999,999	14	26.92
>10,000,000	8	15.38
Income		
< 1,000,000	6	11.54
1,000,000-4,999,999	37	71.15
5,000,000-9,999,999	6	11.54
>10,000,000	3	5.77
Total	52	100.00

Source: data processing

Based on Table 3, it can be seen that of the 52 respondents, the group of respondents who had the most working hours was 9 hours in one day with a total of 23 respondents, while the group of respondents who had the least working hours was 7 hours in one day with a total of 3 respondents. Traders had the largest number of workers, at 28 respondents. Meanwhile, the smallest number was 3, at 2 respondents. This is because the majority of traders in Kerinci Regency's tourism sector are married couples or unpaid workers. Table 3 also shows that the majority of respondents (15 respondents) have been running their businesses for approximately 6-10 years, and the fewest (9 respondents) have been running their businesses for 11-15 years. This is due to several respondents continuing family businesses that have been passed down to their children. It was also found that 8 respondents had the largest capital, and 2 respondents had the smallest capital. Finally, the majority earned more than Rp. 10,000,000, representing 3 respondents, representing 5.7%. The fewest respondents earned less than Rp. 1,000,000, representing 6 respondents. This is because large incomes are derived from substantial capital. Most traders tend to be reluctant to invest large sums of capital, as income tends to be uncertain on normal days, unlike during Eid, when it can increase many times over.

Table 4
Multiple Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4946223.	1376510.	-3.593307	0.0008
MD	0.290867	0.113722	2.557706	0.0138
JK	336899.2	106317.0	3.168818	0.0027
LU	700350.9	161048.4	4.348698	0.0001
TK	7560.663	186646.9	0.040508	0.9679
R-squared	0.737738	Mean dependent var		4980769.
Adjusted R-squared	0.498396	S.D. dependent var		1867476.
S.E. of regression	1322621.	Akaike information criterion		31.11934
Sum squared residual	8.22E+13	Black criterion		31.30696
Log likelihood	-804.1028	Hannan-Quinn critter.		31.19127
F-statistic	13.66847	Durbin-Watson stat		1.191858
Prob(F-statistic)	0.000000			

Source: data processing

Based on Table 4, the multiple regression equation obtained is as follows:

$$PD = 4946223 + 0.290867MD + 336899.2JK + 700350.9LU + 7560.663TK$$

The coefficient of determination analysis is used to determine how much the independent variables influence the dependent variable, expressed as a percentage. The R-Square value is 0.737738, meaning 73.77% of the variation in traders' income is explained by the independent variables in the model, while the remainder is explained by other variables outside the study.

The F-test was conducted to determine the significance of the simultaneous influence of independent variables on the dependent variable, often referred to as the linearity test of the regression equation. The F-test in Table 4 yielded a significance value of $0.000000 < 0.5$. This means that the independent variables of capital, working hours, business duration, and labor simultaneously or jointly have a significant effect on the dependent variable, namely trader income. In other words, the variables of capital, working hours, business duration, and labor are able to explain the magnitude of the dependent variable, namely trader income.

t-test is conducted to determine whether the independent variables individually (partially) significantly influence the dependent variable. If the significance level is $< 5\%$, then capital, working hours, length of business, and labor partially influence trader income. The capital variable has a significant effect on the income of traders in Kerinci Regency tourism. This shows that traders need to add additional capital, because the more capital they spend, the greater the possibility of income that business actors will get in running their business. This also has implications for the program carried out by the Kerinci Regency Cooperatives and Manpower Service which provides capital assistance to MSMEs in Kerinci Regency.

The length of business variable has a significant effect on the income of traders in tourism in Kerinci Regency. This shows that the length of business has an important role in business, because the longer business actors carry out business activities, the more opportunities they have to get regular customers. The longer a trader continues his business, the more income he earns. Even though the company has been operating for a long time, if it is not supported by tenacity and a business plan, it will be far behind its competitors (Khoirunnisa & Kosadi, 2021).

The variable working hours has a significant effect on the income of traders in Kerinci Regency tourism. This shows that working hours also have an important influence because the longer the working hours used, the more opportunities there are to produce a business or production and the longer traders open their business, the opportunity to get turnover as well. will get bigger (Obe et al., 2021). This research aligns with the research Rasmusi & Maghfira (2018) which states that the variable of working hours has a direct relationship with the income of traders, meaning that the longer the working hours, the greater the income of traders. Meanwhile, the labor variable is not significant, this is because the workforce in the tourism sector of Kerinci Regency is still not optimally managed to increase the income of MSMEs. Therefore, government policies are needed to improve the skills of craftsmen in Kerinci Regency.

Tabel 5
The sustainability index value of Kerinci Regency Tourism Business 2024

No.	Dimensions of sustainability	Index	Indicator
1	Ecoogy	64.58	Quite sustainable
2	Economy	74.94	Quite sustainable
3	Social	55.34	Quite sustainable
4	Technology	63.92	Quite sustainable
5	Institution	68.68	Quite sustainable
	Average	65.49	Quite sustainable

Source: data processing

Table 5 shows that the average sustainability index value for Kerinci Regency's tourism businesses is 63.22%; this means that the analysis of the five dimensions of sustainability index indicates that the average index value is fairly sustainable. Therefore, this index value can be maintained and improved to a highly sustainable status in the future (Muslim et al., 2024). The highest index is in the economic aspect, this illustrates that the majority of Kerinci Regency Traders' income is in the tourism sector, and followed by the institutional aspect as facilities and infrastructure for licensing or infrastructure fulfillment, then the ecological aspect as natural resources which are the main priority for tourism utilization, the technological aspect by conducting promotions to various mass media and the internet as a selling point for the community to attract tourists, then the lowest is the social aspect, this is the impact of the unequal distribution of community welfare due to tourism because only a portion of the surrounding community feels it (Yehekel et al., 2016).

CONCLUSION

The results of this study concluded that simultaneously, the variables of capital, working hours, business duration, and labor had a positive and significant influence on trader income. However, partially, only the labor variable had no effect on the income of MSME traders in the tourism sector in Kerinci Regency. This study also concluded that the analysis of the sustainability of tourism sector businesses in Kerinci Regency using MDS (Multi Dimensional Scaling) analysis was obtained multidimensionally with a fairly sustainable category, which indicates the need to improve the quality of each dimension of sustainability.

REFERENCES

- Amirullah, S., Sellang, K., Ikbal, M., 2023. Penerapan Fungsi Manajemen Terhadap Pengembangan Objek Wisata Laburang Gallang Di Desa Batu Mila Kecamatan Maiwa Kabupaten Enrekang. *JIA: Jurnal Ilmiah Administrasi*, 11(2), 45–57.
- Badan Pusat Statistik (BPS) Provinsi Jambi, 2023, *Statistik Daerah Provinsi Jambi 2023*
- Khoirunnisa, N., Kosadi, F., 2021. Pengaruh Pemahaman Akuntansi, Sosialisasi SAK EMKM dan Persepsi Pelaku UMKM Terhadap Penerapan SAK EMKM. *Jurnal WIDYA*, 4(April), 226–239.
- Martasudira, Y., Lubis, T. A., Masriani, I., 2025. Pengaruh Jiwa Kewirausahaan dan Inovasi terhadap Keterlibatan Pegawai dengan Pengembangan Karir sebagai Moderasi pada Badan Kepegawaian Daerah (BKD) Provinsi Jambi. *Ekonomis: Journal of Economics and Business*, 9(1), 318–325.
- Muslim, A., Kantun, W., Nursyahrana, 2024. Keberlanjutan sumber daya akuatik pada kawasan ekowisata mangrove lantebung makassar. *Jurnal Akuakultur, Teknologi dan Manajemen Perikanan Tangkap dan Ilmu Kelautan Vol*, 7(2), 140–153.
- Obe, L., Lalang, D., Lakapeni, V., Fatim, D. (2021). Pengaruh Jumlah Anak Terhadap Pendapatan Hasil Perkebunan Kemiri di Desa Maikang Kecamatan Alor Selatan Tahun 2020 Menggunakan Metode Chi Kuadrat. *Jurnal Ilmiah Wahana Pendidikan*, 7(6), 378–384.
- Rosmadi, M. L., 2019. Analisis Faktor-faktor Penunjang Pengembangan Usaha Mikro Kecil dan Menengah (UMKM). *SNEB : Seminar Nasional Ekonomi dan Bisnis Dewantara*, 1(1), 41–48.
- Rusmusi, I. M. P., Maghfira, A. N., 2018, Pengaruh Modal, Jam Kerja Dan Lama Usaha Terhadap Pendapatan Pedagang Di Pasar Ikan Hias Mina Restu Purwokerto Utara, *Jurnal Ekonomi, Bisnis, dan Akuntansi (JEBA)*, 20(4)
- Yehekel, Y., Rumagit, G., Mandei, J., 2016. Strategi Pengembangan Usahatani Stevia Di Desa Kolongan Atas Dua Kecamatan Sonder Kabupaten Minahasa. *AGRIRUD*, 6(2), 1–23.

Deby Anggun Sari, Liona Efrina S, Bella Hartati, Deki Irawan: *Analysis of Determinants of Sustainability of MSMEs in the Tourism Sector of Kerinci Regency*

Yuniasih, K., 2021. Pengaruh Modal Awal, Lama Usaha, dan Jenis Dagangan Terhadap Pendapatan Pedagang di Pasar Tos 3000 Batam. *Karya ilmiah*, 13–15, 56.