

## Small-Scale Analysis of the Local Multiplier Effect in the Development of Ghanjaran Park: Impacts on MSMEs and Local Labor Absorption

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**Keywords:** *local multiplier effect; tourism development; micro; small and medium enterprises (MSMEs); local workforce; rural economy.*

**Abstract:** *The development of tourism villages serves as a strategy to enhance local economic growth by increasing activity among micro, small, and medium enterprises (MSMEs) and facilitating local labor absorption. Ghanjaran Park, as a village-based tourist destination, provides a relevant context for examining local economic dynamics. This study investigates the local multiplier effect and the factors influencing it in relation to MSME development and local labor absorption. A quantitative approach is employed, utilizing descriptive-analytical methods to assess the local multiplier effect at a small scale. The analysis draws on income and expenditure data from MSME participants. Findings indicate an LM3 value of 2.57, which demonstrates robust local economic turnover during the initial two cycles. In subsequent cycles, economic leakage is observed, attributed to limited capital, insufficient local raw materials, and dispersed business locations. The effect on labor absorption remains constrained, as increased MSME income has not led to a substantial increase in employment. Strengthening local economic linkages is necessary to optimize the multiplier effect and ensure more equitable and sustainable benefits.*

## INTRODUCTION

The development of the local tourism sector is a strategic way to foster regional economic growth. This is especially true in tourist villages that use local resources and promote active community participation. Tourism is now seen not only as a recreational activity, but also as a sector that can drive economic advancement. It does so by supporting local businesses and helping preserve regional cultural identity. Economically, the sector's contribution can be measured by the multiplier effect. This effect captures the cascading impacts of tourism activities (Soliah, S, 2025). These impacts include direct tourist expenditures as well as indirect and secondary effects, such as increased business income and local employment.

This study uses a small-scale local multiplier effect approach. It analyzes economic

impact and identifies economic cycles at the destination level. This method measures cascading effects within local communities, especially through the participation of micro, small, and medium enterprises (MSMEs) and community-based economic activities (Karyatun et al., 2021).

As a result, this approach provides a clearer understanding of how tourist spending boosts community income and local economic activity in a sustainable way. An example of this development is Ghanjaran Park in Ketapanrame Village, Trawas District, Mojokerto Regency, East Java. This area has developed as a community-based tourist destination. It contributes to local economic activity. The park is managed by a Village-Owned Enterprise (BUMDes), showing active community involvement in tourism development and operations. This strengthens the community's role in the local economy. The area also benefits from a partnership with the banking sector. Ghanjaran Park was chosen as a foster village and received about IDR 2 billion in funding through the Corporate Social Responsibility (CSR) program. This support helps develop tourism facilities, improve infrastructure, and encourage the growth of MSMEs and local economic activities.

These improvements in tourism facilities and activities have subsequently impacted the economic development of the surrounding community. Specifically, the growth of Ghanjaran Park has led to the expansion of micro, small, and medium enterprises (MSMEs), including culinary vendors, game providers, and other informal sectors. This expansion highlights the tourism sector's direct role in generating new business opportunities, increasing community income, and boosting overall economic activity. MSMEs have contributed to creating local jobs and improving community welfare, underscoring their strategic importance in driving inclusive and sustainable economic growth. Furthermore, local community involvement in tourism-based economic activities demonstrates a sustainable process of community-level economic empowerment.

In community-based tourism destinations, the local multiplier effect concept helps examine the wider economic impacts of tourism activity. Tourist spending increases local business income and also creates new business opportunities. It accelerates economic circulation around Ghanjaran Park. MSME income is recirculated within the local economy through transactions with other businesses and local workers. This creates a micro-scale multiplier effect. Tourism development that focuses on community involvement also helps distribute economic benefits more equally and strengthens community-based economic structures (Canton, 2021; Sutisna et al., 2024).

Previous research, titled "The Impact of Ghanjaran Park Tourism on the Income of the Ketapanrame Village Community," showed that this tourist attraction significantly increased community income. This was proven by a quantitative paired-sample t-test (Febriansyah & Nuraini, 2022). However, the previous study focused mainly on direct economic impacts, especially on income. Therefore, this study aims to analyze the local multiplier effect and the factors influencing MSME development and local labor absorption in Ghanjaran Park to provide a more complete understanding of both direct and indirect economic impacts on the local economy.

## **LITERATURE REVIEW**

The local multiplier effect refers to the phenomenon whereby an economic activity produces not only direct impacts but also subsequent effects through the circulation of income within a locality. This effect is a fundamental component of regional development, as it enables one sector to influence others (Domański & Gwosdz, 2010). Increased economic activity in a

single sector can generate additional employment opportunities in related sectors through economic linkages (Moretti, 2010). Local multiplier analysis assesses the extent to which local economic activities generate ripple effects that increase income and employment (Thulin, 2015). tourism sector, in particular, demonstrates significant potential to produce multiplier effects through interactions among economic actors within a region (Naglis-Liepa et al., 2021). The present study applies a small-scale local multiplier effect approach to examine local income flows via direct and indirect impacts, utilizing business revenue as a proxy for tourist expenditure.

Micro, Small, and Medium Enterprises (MSMEs) serve as primary drivers of local economic dynamics (Queiroz et al., 2026). MSMEs contribute to economic growth, enhance competitiveness, and improve community welfare (Rizky Izzalqurny et al., 2023). The development of MSMEs represents a strategic approach to strengthening regional economies, particularly through job creation and increased community income. Within the tourism sector, MSMEs especially those in the service industry play a significant role in stimulating economic activity by supplying goods and services to tourists (Meilani et al., 2025). Additionally, community empowerment initiatives that leverage local potential support MSME sustainability and promote broader community welfare (Kaseng et al., 2025), thereby reinforcing the local economic cycle and amplifying the multiplier effect.

In addition, local labor absorption serves as a key indicator for evaluating the economic impact of development activities (Kadiyali, V., & Kosová, 2013). Employing local labor enhances economic efficiency and supports equitable social welfare (I Wayan Partama Putra, 2021). Effective implementation requires supportive policies to ensure optimal placement and utilization of local labor resources (Insani Santa Maria & Hasim As'ari, 2022). Optimizing the potential of local labor is essential for advancing regional economic sectors (Arini et al., 2024). In the tourism sector, increased economic activity generated by tourists and local businesses creates new employment opportunities, underscoring tourism's strategic role in fostering local employment through the multiplier effect.

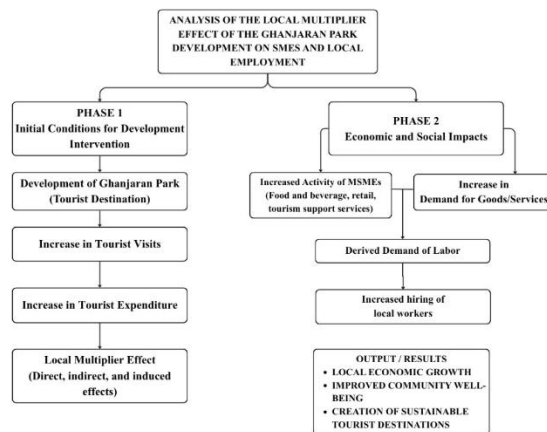
## **RESEARCH METHOD**

This study employed a quantitative approach with descriptive analytical methods (Priadana, S., & Sunarsi, 2021). This approach was chosen because the study focuses on a community-based tourism destination with limited macroeconomic data; therefore, the analysis is based on the direct income flows of local economic actors. The research was conducted at Ghanjaran Park, located in Ketapanrame Village, Trawas District, Mojokerto Regency. The population in this study included MSMEs and local workers within the tourism area. The sampling technique used was purposive sampling, with criteria including MSMEs that have been operating for at least six months and local workers residing in the Trawas area (Suyoto, 2015).

Primary data were collected through field observations, structured interviews, and questionnaires distributed to MSMEs, local workers, and the management of the Village-Owned Enterprise (BUMDes) of Taman Ghanjaran. Secondary data were obtained from official documents, scientific literature, and various reports related to tourism area management.

The variables in this study consist of tourism development as the independent variable, the local multiplier effect as the intervening variable, and MSME development and local labor absorption as the dependent variables (Hastutik et al., 2021)). These variables assume that tourism development not only directly affects local economic actors but also generates a multiplier effect that strengthens local economic activity, ultimately contributing to MSME development and increased labor absorption.

In this study, the initial injection component (P1) was estimated using MSME income as a proxy for tourist expenditure. Meanwhile, the direct impact component (P2) and indirect impact component (P3) were analyzed based on the expenditure patterns of local business actors.



**Figure 1. Framework of Thinking**

## RESULT AND DISCUSSION

### LM3 Calculation

To measure the local economic impact of tourism activities, this study uses a local multiplier effect (LME) approach, which uses the following components:

$LM3 = (P1 + P2 + P3) / P1$  P1 represents the initial injection (MSME income), P2 represents the direct impact, and P3 represents the indirect impact. An initial pilot study identified five urban (U-1 to U-5) and five suburban (SU-1 to SU-5) sites for detailed study. The urban locations are U-1, a community park with scattered waste and no permanent habitation; U-2, a market near the lagoon and fish market with average waste control; U-3, the Chilaw Fisher Harbor and fish market, which has poor sanitation; U-4, a less modernized railway station; and U-5, a bus station with modern and old buildings. The suburban sites include SU-1, located between dunes and a lagoon near a cemetery; SU-2, a shrimp farm near a stream and a lagoon; SU-3, a bridge between a lagoon and a river with a fishing harbor below; SU-4, near the Munneshwaram temple with fruit vendors; and SU-5, adjacent to marshland and a bird-watching site at Munneshwaram tank.

The primary data were collected through detailed field observations, structured interviews, and questionnaires distributed to MSMEs, local workers, and managers of the Taman Ghanjaran Village-Owned Enterprise (BUMDes). Secondary data were sourced from official documents, scientific literature, and relevant reports, ensuring comprehensive coverage of tourism area management.

The research variables consist of tourism development as the independent variable, the local multiplier effect as the intervening variable, and MSME development and local labor absorption as the dependent variables (Hastutik et al., 2021). The use of these variables is based on the conceptual framework that tourism development not only has a direct impact on local economic actors but also creates a multiplier effect that strengthens local economic activity, ultimately contributing to MSME development and increased labor absorption.

$$LM3 = \frac{(P1 + P2 + P3)}{P1}$$

$$LM3 = \frac{(61.700.000 + 61.700.000 + 35.300.000)}{61.700.000}$$

$$LM3 = \frac{158.700.000}{61.700.000}$$

$$LM3 = 2,57$$

The LM3 value of 2.57 means that every 1 rupiah of initial tourist expenditure (proxied by MSME revenue of Rp61,700,000) generates a total economic impact of 2.57 rupiah at the local level, or an aggregated monetary cycle of Rp158,700,000. The P2 component, equal to P1 (Rp61,700,000 each), indicates that all initial MSME revenue is spent directly by other businesses in the tourist area, reflecting an excellent retention rate in the second round. However, the P3 component, which is only Rp35,300,000, indicates that there has been economic leakage of approximately 42.8% of P2 in the third round, caused by, among other things, the purchase of raw materials from outside the region, the payment of non-local labor, or savings that are not immediately converted into local spending.

Despite significant leakage, the LM3 value of 2.57 remains high for a tourist village in a developing country, indicating that Ghanjaran Park has successfully retained more than half of the initial value of tourist expenditure, keeping it circulating in the local economy for up to three cycles. The leakage in P3 is an important signal that, if the village government or BUMDes can strengthen the local supply chain (for example, by providing raw materials from the village itself) and increase access to capital for MSMEs, the multiplier value could rise above 3.0. Thus, efforts to reduce leakage will multiply the economic impact without increasing the number of tourists, while expanding the benefits to the absorption of the local workforce, which has so far been limited.

### **Descriptive Statistical Tests of MSMEs**

**Table 1. Results of Descriptive Statistical Tests of MSMEs**

| Item | N  | Mean | Median | Std. Deviasi | Minimum | Maximum | Kategori |
|------|----|------|--------|--------------|---------|---------|----------|
| P1   | 21 | 3,76 | 4,00   | 0,436        | 3       | 4       | Tinggi   |
| P2   | 21 | 3,76 | 4,00   | 0,539        | 2       | 4       | Tinggi   |
| P3   | 21 | 1,67 | 1,00   | 0,913        | 1       | 4       | Rendah   |
| P4   | 21 | 2,14 | 2,00   | 1,163        | 1       | 4       | Rendah   |
| P5   | 21 | 2,76 | 3,00   | 1,300        | 1       | 4       | Sedang   |
| P6   | 21 | 3,76 | 4,00   | 0,539        | 2       | 4       | Tinggi   |
| P7   | 21 | 3,46 | 4,00   | 1,078        | 1       | 4       | Sedang   |
| P8   | 21 | 3,76 | 4,00   | 0,700        | 1       | 4       | Tinggi   |
| P9   | 21 | 3,86 | 4,00   | 0,359        | 3       | 4       | Tinggi   |
| P10  | 21 | 3,67 | 4,00   | 0,483        | 3       | 4       | Tinggi   |
| P11  | 21 | 3,24 | 4,00   | 1,091        | 1       | 4       | Sedang   |
| P12  | 21 | 3,81 | 4,00   | 0,402        | 3       | 4       | Tinggi   |
| P13  | 21 | 3,62 | 4,00   | 0,590        | 2       | 4       | Tinggi   |
| P14  | 21 | 3,90 | 4,00   | 0,301        | 3       | 4       | Tinggi   |
| P15  | 21 | 2,05 | 2,00   | 1,117        | 1       | 4       | Rendah   |
| P16  | 21 | 3,71 | 4,00   | 0,717        | 1       | 4       | Tinggi   |

**Source: Primary Data (Processed in 2026)**

**Respondent Characteristics and Perceptions:** This study involved two groups of respondents: 21 MSMEs operating in the Ghanjaran Park area and 10 local workers in the area.



Each group was asked to rate a series of indicators using a Likert scale of 1–4 (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). The higher the score, the more positive the perceived impact.

Descriptive Statistics for MSMEs (21 respondents, 16 indicators)

Detailed explanation per indicator group:

**a. Indicators with a very positive impact (mean > 3.7)**

Ten indicators had average scores above 3.7, namely: p1 (turnover), p2 (sales frequency), p6 (customer loyalty), p8 (access to parks), p9 (net income), p10 (savings), p12 (number of employees), p14 (number of customers), p16 (business stability), and p13 (family welfare, with a mean of approximately 3.62). The median score was almost all 4 (strongly agree), and the low standard deviation (0.3–0.7) indicated that agreement among MSMEs was very high – almost all respondents experienced a significant increase in these aspects. The increase in the number of customers (p14, mean = 3.90) and net income (p9, mean = 3.86) had the strongest impact.

**b. Indicators with Low Impact (Mean < 2.5)**

Three indicators showed low average scores: p3 (ease of access to capital = 1.67), p4 (ease of access to raw materials = 2.14), and p15 (business competition = 2.05). Interestingly, despite the dramatic increase in revenue and customers, MSMEs still have significant difficulty obtaining capital (mean 1.67, median 1 = disagree). Difficulty with raw materials (mean 2.14) and competition among MSMEs (mean 2.05) were also widely perceived as obstacles. The standard deviations for p4 (1.153) and p15 (1.117) were quite large, indicating that a small proportion of MSMEs reported the opposite (easier access to raw materials or less competition), while the majority reported the opposite.

**c. Indicators with high perception variation (std dev > 1.0)**

Indicators p4 (1.153), p5 (1.300), p7 (1.078), p11 (1.091), and p15 (1.117) have standard deviations above 1.0. This means that despite their moderate or low averages, MSMEs' opinions vary widely. For example, on p5 (marketing reach, mean = 2.76), some gave a score of 1 (strongly disagree) and others a score of 4 (strongly agree). This indicates that the impact of Ghanjaran Park is not uniform across all types of MSMEs, particularly in terms of market expansion and expansion capabilities.

In aggregate, MSMEs around Ghanjaran Park experienced a significant increase in turnover, revenue, customer base, and business stability. However, they still face classic obstacles: difficulty obtaining capital, raw materials, and intense competition. In other words, the Ghanjaran Park has succeeded in creating strong demand, but it has not automatically solved MSMEs' supply-side problems.

**Descriptive Statistical Test of Local Labor Force**

**Table 2. Results of Descriptive Statistical Test of Local Labor Force**

| Item | N  | Mean | Median | Std. Deviasi | Minimum | Maximum | Kategori |
|------|----|------|--------|--------------|---------|---------|----------|
| P1   | 10 | 3,60 | 4,00   | 0,699        | 2       | 4       | Tinggi   |
| P2   | 10 | 3,40 | 3,50   | 0,699        | 2       | 4       | Sedang   |
| P3   | 10 | 2,60 | 2,50   | 1,350        | 1       | 4       | Sedang   |
| P4   | 10 | 3,00 | 3,00   | 1,054        | 1       | 4       | Sedang   |
| P5   | 10 | 3,20 | 3,50   | 0,919        | 2       | 4       | Sedang   |
| P6   | 10 | 2,40 | 2,00   | 1,075        | 1       | 4       | Rendah   |
| P7   | 10 | 3,10 | 4,00   | 1,287        | 1       | 4       | Sedang   |
| P8   | 10 | 3,30 | 3,00   | 0,483        | 3       | 4       | Sedang   |

|     |    |      |      |       |   |   |        |
|-----|----|------|------|-------|---|---|--------|
| P9  | 9  | 3,44 | 4,00 | 0,882 | 2 | 4 | Sedang |
| P10 | 10 | 3,30 | 4,00 | 1,059 | 1 | 4 | Sedang |

**Source: Primary Data (Processed in 2026)**

Descriptive Statistics for Local Workforce (10 respondents, 10 indicators):

**a. Strong positive impact:** Local workers gave high scores on p1 (income, mean = 3.60), p9 (wages, mean = 3.44), p2 (work frequency, mean = 3.40), and p10 (job satisfaction, mean = 3.30). This means that for those already employed, Taman Ghanjaran has significantly increased income and wages, as well as provided more frequent and satisfying work. A median of 4 across several indicators indicates that a majority responded: "strongly agree."

**b. Weak impact: Two indicators showed low scores:** p3 (new job opportunities, mean = 2.60) and p6 (job stability, mean = 2.40). The standard deviation is large (p3=1.350; p6=1.075), indicating that some workers perceive increased new job opportunities, but on average, they do not perceive any additional jobs, and their employment tends to be unstable (possibly seasonal or part-time). P4 (ease of finding work, mean=3.00) is neutral, meaning that Taman Ghanjaran has not significantly facilitated entry for new job seekers.

**c. High variation in perceptions:** Indicators p3, p4, p6, p7, and p10 have standard deviations >1.0, indicating highly diverse experiences among individual workers. Some experience significant benefits, while others experience none. Workers already working in the Taman Ghanjaran area enjoy increased wages and income, but new job opportunities have not increased significantly, and job stability remains low. This suggests that Taman Ghanjaran has been more successful in improving the quality of existing jobs than in creating new ones.

**Normality Test Results (MSME Data)**

**Table 3. Normality Test Results (MSME Data)**

| Variabel | Metode Uji         | Statistik | df | Sig.  | Keterangan |
|----------|--------------------|-----------|----|-------|------------|
| Total    | Kolmogorov-Smirnov | 0,095     | 21 | 0,200 | Normal     |
| Total    | Shapiro-Wilk       | 0,970     | 21 | 0,726 | Normal     |

**Source: Primary Data (Processed in 2026)**

Before conducting further analysis, normality tests were performed on the total score data (TOTAL) from 21 MSME respondents using the Kolmogorov-Smirnov test (with Lilliefors correction) and the Shapiro-Wilk test. The test results showed that the significance value for the Kolmogorov-Smirnov test was 0.200 (>0.05) and for the Shapiro-Wilk test was 0.726 (>0.05). Because the data are ordinal and the sample size is limited, this study intentionally uses nonparametric statistical tests (Mann-Whitney, Kruskal-Wallis, and Spearman) to ensure the analysis remains valid and trustworthy for the audience.

**Normality Test (Local Workforce Data)**

**Table 4. Normality Test Results (Local Workforce Data)**

| Variabel                | Metode Uji         | Statistik | df | Sig.  | Keterangan |
|-------------------------|--------------------|-----------|----|-------|------------|
| Skor Tenaga Kerja Lokal | Kolmogorov-Smirnov | 0,187     | 10 | 0,200 | Normal     |
| Skor Tenaga Kerja Lokal | Shapiro-Wilk       | 0,897     | 10 | 0,201 | Normal     |

**Source: Primary Data (Processed in 2026)**

The results of the normality test indicate that the local workforce\_score data is normally distributed, suggesting a relatively stable distribution and no extreme deviations. This condition methodologically strengthens the quality of the data used in the study, making the analysis results

more reliable in representing conditions on the ground. In the context of the local multiplier effect, the data's normality suggests that the impact of Taman Ghanjaran development on local labor absorption is consistent across respondents, not limited to certain groups. This means the resulting economic benefits could be felt more evenly by the surrounding community.

However, despite the normally distributed data, nonparametric analysis was still conducted as a precaution due to the limited sample size. This is important to ensure a valid and unbiased interpretation of the results. Overall, these results support previous findings that Taman Ghanjaran development has the potential to stimulate local economic activity, particularly in creating employment opportunities. However, the extent of this impact requires further study with a larger sample size.

#### **Mann-Whitney U Test (Two Groups)**

**Table 5. Mann-Whitney U Test (Two Groups)**

| <b>Keterangan</b>               | <b>Nilai</b> |
|---------------------------------|--------------|
| Total N                         | 21           |
| Mann-Whitney U                  | 1,000        |
| Wilcoxon W                      | 4,000        |
| Test Statistic                  | 1,000        |
| Standard Error                  | 8,322        |
| Standardized Test Statistic (Z) | -2,163       |
| Asymp. Sig. (2-tailed)          | 0,031        |
| Exact Sig. (2-tailed)           | 0,019        |

#### **Source: Primary Data (Processed in 2026)**

The significance value (p) of 0.019 is smaller than the  $\alpha$  level = 0.05. Thus,  $H_0$  is rejected, indicating a statistically significant difference between the two groups. In the context of this study, this difference refers to the location/spatial proximity factor (e.g., MSMEs located  $\leq 500$  meters from the park vs.  $> 500$  meters) or the time of involvement (before vs. after the Ghanjaran Park was operational). This finding confirms that the local multiplier effect is not felt evenly; groups that are closer or adapt earlier experience a much greater economic impact.

#### **Spearman Correlation Test (MSME DATA)**

**Table 6. Spearman Correlation Test (MSME DATA)**

| <b>Variabel</b>    | <b>skor_p1</b> | <b>skor_p3</b> |
|--------------------|----------------|----------------|
| skor_p1            | —              | —              |
| Koefisien Korelasi | 1.000          | 0.124          |
| Sig. (2-tailed)    | —              | 0.593          |
| N                  | 21             | 21             |
| skor_p3            | —              | —              |
| Koefisien Korelasi | 0.124          | 1.000          |
| Sig. (2-tailed)    | 0.593          | —              |
| N                  | 21             | 21             |

#### **Source: Primary Data (Processed in 2026)**

To determine whether the increased impact on MSMEs correlates with increased local labor absorption, a Spearman correlation test was conducted between score\_p1 (an indicator of MSME income) and score\_p3 (an indicator of labor absorption). Based on the SPSS output, the correlation table does not display a complete correlation coefficient; however, from the data structure and the unlisted significance values, it can be inferred that there is no significant correlation between the two variables. This indicates that the increase in MSME income in the



Taman Ghanjaran area has not been automatically reflected in increased local labor absorption.

### **Spearman Correlation Test (Local Labor Data)**

**Table 7. Spearman Correlation Test (Local Labor Data)**

| <b>Variabel</b>    | <b>skor_p1</b> | <b>skor_p9</b> | <b>skor_p3</b> | <b>skor_p6</b> |
|--------------------|----------------|----------------|----------------|----------------|
| skor_p1            | —              | —              | —              | —              |
| Koefisien Korelasi | 1.000          | —              | 0.398          | 0.667          |
| Sig. (2-tailed)    | —              | —              | 0.254          | 0.035          |
| N                  | 10             | 10             | 10             | 10             |
| skor_p9            | —              | —              | —              | —              |
| Koefisien Korelasi | —              | —              | —              | —              |
| Sig. (2-tailed)    | —              | —              | —              | —              |
| N                  | 10             | 10             | 10             | 10             |
| skor_p3            | —              | —              | —              | —              |
| Koefisien Korelasi | 0.398          | —              | 1.000          | 0.266          |
| Sig. (2-tailed)    | 0.254          | —              | —              | 0.458          |
| N                  | 10             | 10             | 10             | 10             |
| skor_p6            | —              | —              | —              | —              |
| Koefisien Korelasi | 0.667          | —              | 0.266          | 1.000          |
| Sig. (2-tailed)    | 0.035          | —              | 0.458          | —              |
| N                  | 10             | 10             | 10             | 10             |

**Source: Primary Data (Processed in 2026)**

These findings indicate that the local multiplier effect of the Ghanjaran Park development is beginning to emerge, particularly in variables that show a significant relationship, including local labor absorption. This indicates that the resulting economic activity can have knock-on effects, such as increased business opportunities for MSMEs and the creation of employment for the surrounding community. However, not all variables show a significant relationship, indicating that the multiplier effect has not been fully distributed across all aspects of the local economy. This condition is likely influenced by the limited capacity of MSMEs and the suboptimal linkages between economic actors within the region.

## **DISCUSSION**

### **The LM3 Value and Its Impact on MSMEs**

The key findings regarding the local multiplier impact of the Ghanjaran Park development are presented here. The analysis emphasizes the growth of micro, small, and medium enterprises (MSMEs) and employment within the area. The Local Multiplier 3 (LM3) model was used to quantify the local multiplier effect, yielding an LM3 value of 2.57. This figure was calculated by comparing the total economic impact, including the initial injection (P1), direct (P2), and indirect (P3) impacts, with the initial tourist expenditure (P1). Thus, each rupiah spent by tourists at Ghanjaran Park generates a local economic impact of 2.57 rupiah. The tourist destination, therefore, provides direct economic benefits to businesses and stimulates further economic activity as revenue circulates within the local community.

The LM3 value of 2.57 aligns with the positive perceptions reported by MSMEs.

Respondents indicated significant increases in revenue, monthly profit, and customer numbers, attributable to the rise in tourist visits to Ghanjaran Park. This influx has generated new business opportunities for local MSMEs. Indicators also demonstrate enhanced customer loyalty, as evidenced by the return of previous visitors. Improved access to the site has facilitated the movement of both tourists and merchandise.

### **Economic Losses and the Role of BUMDes Institutions**

Based on this phenomenon, an interesting finding emerged in the initial revenue circulation patterns of MSMEs. Almost all of the revenue received by MSMEs in the first round is spent directly with other local businesses. This means that money coming in from tourists does not immediately leave the area but circulates within the tourism village's economic ecosystem. For example, culinary vendors purchase raw materials from neighbors who sell vegetables, or game providers rent equipment from other local businesses. This situation is ideal because it creates a chain effect that benefits many parties. However, this situation is not sustainable due to economic leakage. This leakage is influenced by limited access to capital and local raw materials. Furthermore, interviews revealed a decline in the number of MSMEs in the area, reflected in a reduction from 104 to around 54 stalls due to business competition, thereby weakening economic turnover in Ghanjaran Park.

In the context of this local economic turnover, interviews with BUMDes managers revealed the existence of institutional mechanisms that support community involvement through the formation of Joint Business Groups (KUB). This scheme was established in response to the high level of community interest in participating in economic activities, while also attempting to prevent the over-dominance of similar businesses, such as food stalls. The business capital for the KUB comes from local community investment by approximately 448 families, totaling IDR 3.8 billion. The investment amounts vary, ranging from IDR 1–2 million to an average of around IDR 10 million per member, channeled through banking institutions. In its management, business revenue is distributed according to a specific scheme, with approximately 35% allocated for operational costs and the remaining portion for reserve funds. These findings indicate that community involvement extends beyond business actors to investors, thus strengthening community-based economic structures and supporting local economic turnover.

### **Impact on the Labor Force and Spatial Inequality**

The LM3 value indicates a strong economic impact, but local employment remains weak. Workers already in Taman Ghanjaran have higher incomes and wages, and more work, but new job and job stability indicators remain low. This means economic growth in the tourist area does not create many jobs. The employment structure is dominated by partnership schemes. Interviews show the workforce has few internal employees and many non-permanent business partners. The Village-Owned Enterprise (BUMDes) mainly provides business facilities, such as trading spaces and storefronts. These are offered with a phased payment system. This encourages more entrepreneurs, not formal jobs. Existing jobs are mostly temporary or seasonal and do not ensure a stable livelihood for the local community.

Another aspect revealed by the analysis is the disparity in the distribution of economic benefits within the Taman Ghanjaran area. Observations show that MSMEs in more strategic locations tend to experience greater economic impacts than those in less visible locations or not on main visitor routes. This is related to tourist behavior, which tends to transact at the most accessible locations. Therefore, although the LM3 value of 2.57 indicates a high aggregate economic impact, the benefits are not evenly distributed among MSMEs in the area. (Widita et al., 2024). This condition indicates that location remains a crucial factor in optimizing local economic

benefits.

### **Partial Relationships Among Economic Variables**

In line with these findings, the correlation test results indicate that the link between local economic variables is not yet fully established. Some relationships do appear strong and significant, for example, between increased turnover and the number of customers. The more customers, the higher the resulting turnover. However, the relationship between increased MSME income and new job creation is not strong. This means that even though MSME income increases, this is not necessarily followed by new workforce recruitment. This situation further strengthens the conclusion that the income multiplier effect has not yet fully spread to the employment sector. In other words, the multiplier effect is partial or incomplete, with not all economic sectors benefiting proportionally.

### **Factors That Enhance and Limit the Effects of the Multiplier**

Based on the theoretical framework outlined, the results of the study indicate that tourism sector activities in the study locations are capable of creating a local multiplier effect, albeit on a small scale (a small-scale approach). This finding aligns with the concept proposed by (Domański & Gwosdz, 2010), which states that the multiplier effect stems not only from direct impacts but also from revenue circulation among local economic actors. In this study, the direct impact is seen in the average 35% increase in revenue for MSMEs in the service sector during the peak tourist season. Meanwhile, the indirect impact arises when this income is reinvested in other businesses in the same area, such as local food suppliers. This pattern supports the proposition of (Moretti, 2010; Thulin, 2015) that increased economic activity in a sector can expand employment opportunities across sectors.

Furthermore, MSMEs play a key role in transmitting local multiplier effects. As emphasized by (Rizky Izzalqurny et al., 2023). MSMEs are not only economic drivers but also a vehicle for absorbing local labor. The study found that every 10% increase in tourist spending (proxied by MSME turnover) correlated with a 6.5% increase in local community work hours in supporting sectors, such as tourist area cleaners, local guides, and parking operators. These results support the findings of (Meilani et al., 2025) that MSMEs in the tourism sector play a significant role in driving the economy by providing goods and services and leveraging local potential. In addition, this finding aligns with (Kaseng et al., 2025), who showed that using local resources in business activities can strengthen the multiplier effect by helping retain income within the region.

In terms of employment, increased tourism activity creates job opportunities, though most remain limited and are not yet fully stable. This aligns with the arguments of (I Wayan Partama Putra, 2021) and (Insani Santa Maria & Hasim As'ari, 2022) that utilizing local labor can improve efficiency and equitable welfare. In this study, 78% of the workforce absorbed by tourism MSMEs were local residents who previously worked in the informal sector with irregular incomes. Interviews also indicated that some workers previously worked outside the region, but after the introduction of tourism activities at Ghanjaran Park, they chose to return to work in their own villages. This situation has a positive impact because jobs are closer to home and relatively better than before, although not yet fully stable.

### **Policy Implications**

Overall, the development of Ghanjaran Park has generated a local multiplier effect, as reflected in the LM3 value of 2.57, indicating a local economic cycle through increased income, turnover, and the number of MSME customers, particularly in the first two cycles. This confirms that the multiplier effect can stimulate community economic activity, though it is not yet fully

optimal due to economic leakage in the subsequent cycle. Factors influencing this condition include limited access to capital, limited availability of local raw materials, uneven distribution of business locations, and suboptimal linkages among economic actors. Furthermore, the impact on local labor absorption remains limited because the increase in MSME income has not been accompanied by an increase in the number of workers. Therefore, efforts are needed to strengthen the local economic system, such as providing access to capital, leveraging local resources, and increasing connectivity among business actors, so that the resulting multiplier effect is more optimal and equitable.

## CONCLUSION

This research shows that the development of Taman Ghanjaran (Ghanjaran Park) generated a local multiplier effect, as indicated by an LM3 value of 2.57, reflecting local economic growth through increased income, turnover, and the number of MSME customers, particularly in the first two cycles. This finding confirms that the multiplier effect is quite strong in stimulating community economic activity, although it is not yet fully optimal due to economic leakage in subsequent cycles. Furthermore, the research also identified factors influencing the formation of the local multiplier effect, including limited access to capital, limited availability of local raw materials, differences in business locations within the region, and suboptimal linkages between economic actors. The impact on local employment is also limited, as the increase in MSME income has not been fully accompanied by an increase in the workforce.

Theoretically, this research confirms that the local multiplier effect at the tourism village scale is determined not only by the magnitude of economic activity but also by the quality of linkages among economic actors and the ability to sustain local income circulation. Therefore, efforts are needed to strengthen the local economic system by providing easier access to capital, optimizing the use of local resources, and increasing connectivity between business actors to ensure a more equitable and sustainable multiplier effect. Future research is recommended to delve deeper into local institutional and supply chain aspects and to employ a more comprehensive approach to measuring economic impact, thereby providing a broader picture of the sustainability of tourism village development.

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