The Community Resilience Measurement of Tourism Village in The Special Region of Yogyakarta against The COVID-19 Pandemic

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Abstract

This article or articles aims to measure the resilience index of tourist village communities in DIY, especially in independent and developed tourist villages, and find the factors that influence it. The problem is focused on the biggest impact of the COVID-19 pandemic faced by local communities that have a large dependence on tourism activities. This research is quantitative. Data was collected through a questionnaire survey conducted with the community of tourism village entrepreneurs in DIY. This research focuses the sample on independent and developed tourist villages that are more prepared to face the pandemic. A total of 130 samples were taken with a confidence level of 92% based on the Slovin formula. The first research objective was analyzed by adopting the HCRI (Household Climate Resilience Index) calculation and the second objective was analyzed using multiple linear regression analysis. HCRI calculations are analyzed with the help of tables, percentages, and HCRI models which are used to assess community resilience based on respondents' responses to 31 resilience indicators. Resilience weights of 1-5 are given to indicators classified on a Likert scale, namely very high (5), high (4), medium (3), low (2), and very low (1), which means household resilience increases as the calculated value increases. The final results of this calculation are classified into five categories starting from very low resilience to very high resilience. The results of the analysis show that communities in developed and independent tourist villages in DIY have relatively high resilience in facing the COVID-19 pandemic. This resilience is influenced by economic, institutional, and social capital factors. However, tourist villages in DIY still need to be aware of the threat of vulnerability that may still occur during the COVID-19 pandemic in 12 indicators related to the economic condition of the community. These results have implications for the need to increase community resilience in developed/independent tourist villages by considering vulnerability factors in this research. In this case, both the government and tourist village managers are advised to focus more on programs to improve the quality of tourism business actors' resources and also the ability to mitigate economic losses after the COVID-19 pandemic to maintain the stability and sustainability of the economy of tourist village communities.

Keywords: Resilience Factor; Tourism business actors; Tourism Village; COVID-19

INTRODUCTION

The recent Covid-19 pandemic has had a serious impact on the global tourism sector (Gabriel-Campos et al., 2021). This impact is felt not only in tourist destinations but also by local organizations and communities. The biggest impact is faced by local communities who have a large dependence on tourism activities. This impact can be positive or negative. The perceived negative impact could be the collapse of the local economy (Damanik et al., 2022; Everingham & Chassagne, 2020). The positive impact of Covid-19 is the demand for change for the better, such as the importance of reserve funds, environmental health, product and technology innovation, cooperation, youth participation, additional facilities, and management changes (Alghamdi & Alghamdi, 2022; Candia & Pirlone, 2022; Jeon & Yang, 2021; Movono & Scheyvens, 2022; Nam & Pardo, 2011; Panzer-Krause, 2022; Tawai et al., 2021; Zhang et al., 2020). This impact occurs both in pilot tourism villages and independent tourism villages. In this case, no tourist village is truly safe from the COVID-19 pandemic (Putri, 2023).
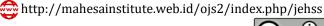
With the Covid-19 pandemic, the tourism sector is inevitably required to change and develop new strategies. Before that, tourist villages must be able to identify their respective strengths. Therefore, it is necessary to measure the level of resilience of this tourist village to determine the strategies needed in the future. This is in line with the increasing urgency of resilience due to the increasing number of shocks experienced in tourism and other industries around the world (Gabriel-Campos et al., 2021; Koliou et al., 2020). There have been many studies that have tried to measure community resilience to the COVID-19 pandemic (Ariyani et al., 2023; Astuti et al., 2022; Prayitno et al., 2022) but no one has specifically discussed it in the context of independent/advanced tourism villages as model tourism villages in Indonesia. This research aims to fill this gap and obtain a comprehensive picture of community resilience from independent/developed tourist villages facing the COVID-19 pandemic. The results of this research can be a guide for the development of advanced/independent tourist villages after the COVID-19 pandemic.

Previous research states that institutional strength, economic conditions, and social capital are factors that shape community resilience in facing COVID-19 (Anwar et al., 2017; Liu et al., 2023; Partelow, 2021; Purwaningsih et al., 2021). In this case, the participation of private institutions, the community, governance/ institutional capabilities, the strength of social networks, community activeness, innovation, and the persistence of leaders in instilling resilience are important (Anwar et al., 2017; Wang et al., 2022). Adequate reserve funds, use of technology, diversification of livelihoods, effectiveness of government assistance, risk management systems, and disaster-based spatial planning are also other inseparable parts of building resilience (Anwar et al., 2017; Jabbari et al., 2022; Jamshidi et al., 2022; Liu et al., 2023; Putri & Permana, 2023; Sina et al., 2019).

Other research adds that human capital/demographic conditions, nature, and infrastructure also contribute to shaping community resilience (Rahman, 2021). In this case, economic factors are the most influential factor in determining community resilience during the COVID-19 pandemic (Jamshidi et al., 2022; Rahman et al., 2022). Although there have been many studies that have tried to measure community resilience, no one has done so in the Special Region of Yogyakarta (DIY) so this research still needs to be carried out. Yogyakarta Special Region (DIY) is known for its diversity of tourist villages. This tourist village in DIY has four levels based on the stage of development. The independent and developed tourist village category is considered the village most prepared to face the COVID-19 pandemic. Therefore, this research focuses on developed and independent tourist villages. This research aims to measure the resilience index of tourist village communities and also find the factors that influence it.

RESEARCH METHODS

In general, this research is classified as quantitative research. The data used is a type of primary data. Data was collected through a questionnaire survey with several tourism business people in four independent and developed tourism villages that received the 2021 ADWI award

during the COVID-19 pandemic. The four tourist villages are Kakilangit Tourism Village (Bantul Regency), Nglanggeran Tourism Village (Gunungkidul Regency), Tinalah Tourism Village (Kulonprogo Regency), and Pentingsari Tourism Village (Sleman Regency). These four tourist villages were chosen because they are the aim of this research, namely measuring the level of resilience of tourist villages which are considered more advanced in development and better prepared to face the Covid-19 pandemic. Apart from that, these four tourist villages have also been proven to have received awards during the Covid-19 pandemic. Thus, these four tourist villages are interested in exploring their level of resilience in facing the Covid-019 pandemic and finding the factors that influence it. Thus, this can be used as a learning reference for other categories of tourist villages to develop their resilience in fighting the pandemic.

The population in this study is approximately 400 tourism business actors with the assumption that each tourist village has 100 tourism business actors. So, the samples taken based on the Slovin formula were 130 samples with a confidence level of 92%. These samples were taken using a stratified simple random sampling technique. In this study, the inclusion criteria applied were residents who lived in the tourist village area for a minimum of 10 years with a minimum age classification of 17 years. These criteria are applied to obtain accurate answers. Furthermore, to specify the respondents, exclusion criteria were also applied in this research. These criteria are residents who work as tourism entrepreneurs or residents who seek income from tourism activities. This criterion was set because business actors are one of the parties most affected by the pandemic.

The first objective of this research is analyzed by adopting the HCRI (Household Climate Resilience Index) calculation *(Ohwo & Frank Evwienure, 2021).* Data were analyzed with the help of tables, percentages, and HRI models as follows:

$$\textbf{HRI} = \sum_{i=1}^{n} \frac{R_i}{N}, i = 1,2,3,\dots,\dots,14$$

$$\textbf{Where } R_i = \sum_{i=1}^{n} = 1 \frac{n_j\,(w_j)}{t_i}, j = 1,2,3,4,5$$

HRI = household resilience index, R_i = resilience weight index of unit indicator, w_j = resilience unit weight, t_i = total respondents, N = number of indicators, $\sum$ = summation. The range of the HRI is 1-5 points, where: very high silence = 4,0 – 5,0; high silence = 3,0 – 3,99; medium resilience = 2,50-2,99; low resilience = 1,50-2,49; and very low resilience = 1,0-1,49. Next, the analysis technique used to answer the second objective in this research is multiple linear regression. This method is used to test the factors that influence the resilience of tourist village communities in facing the COVID-19 pandemic.

In this case, if the R Square value is closer to 1, the more the independent variable can explain the dependent variable. In other words, the greater the R Square value, the better the model formed in estimating the value of the dependent variable. Apart from that, to determine the strength of influence of Tourism Institutions (X1), Economic Conditions (X2), and Social Capital (X3) on Community Resilience (Y) is carried out by looking at the following test criteria:

    - Reject Ho if sig < 0.05 or if t count > t table

    - Accept Ho if sig > 0.05 or if t count < t table

With a sample size (n) of 130 and several independent variables (k) 3, then df1=k=k 3 and df2=n-k-1=130-3-1=126, the t table is 1.979.

RESULTS AND DISCUSSION
Community Resilience Index

Determining the community resilience ranking begins by calculating the percentage of respondents' responses to the resilience indicators used in this research. The calculations in Table 1 show the responses of tourism business actors to 31 resilience indicators. Previously, this indicator had undergone a selection process by considering its suitability/relevance to the context of the reference field the resilience measurement scale, and operational ease.

Table 1. Households Response to Resilience Indicators to Climate Change

No	Resilience Indicators	Very Low	Low	Medium	High	Very High
				Response (%)		
X1.1	Early warning/information	0.0	0.0	3.8	43.8	52.3
X1.2	Community activity level	0.0	0.0	7.7	30.8	61.5
X1.3	Innovation	0.0	3.1	16.2	38.5	42.3
X1.4	Comprehensive control action plan	0.0	0.0	3.8	33.1	63.1
X1.5	Community leaders capacity	0.0	0.0	4.6	43.1	52.3
X1.6	Vulnerable community groups monitoring	0.0	1.5	9.2	45.4	43.8
X1.7	Community Independence	0.0	0.0	12.3	46.2	41.5
X1.8	Assistance in accessing health services	0.0	0.8	8.5	40.8	50.0
X1.9	Communication skills of community leaders	0.0	0.0	3.1	33.1	63.8
X1.10	Actively involving the community	0.0	0.0	3.8	45.4	50.8
X1.11	Adequate community support	0.8	2.3	17.7	40.0	39.2
X1.12	Technological transformation	0.0	7.7	13.8	35.4	43.1
X1.13	Cooperation	0.8	0.0	9.2	40.0	50.0
X1.14	The trust level of community leaders	0.0	1.5	1.5	53.1	43.8
X2.1	Economic sufficiency	0.8	11.5	20.8	48.5	18.5
X2.2	Economic stability	1.5	13.1	18.5	49.2	17.7
X2.3	Economic sustainability	2.3	10.8	23.8	38.5	24.6
X2.4	Availability of reserve funds	2.3	8.5	16.2	50.8	22.3
X2.5	Ability to mitigate economic losses	1.5	2.3	23.8	54.6	17.7
X2.6	Insurance access	0.8	6.9	13.1	53.1	26.2
X2.7	Availability of community resources	0.8	2.3	23.1	47.7	26.2
X2.8	Availability of economic assistance	0.0	0.0	6.2	65.4	28.5
X3.1	The level of public awareness	0.0	0.0	4.6	38.5	56.9
X3.2	Solidarity level between communities	0.0	0.0	0.0	27.7	72.3
X3.3	Confidence in the community's ability to recover	0.0	0.0	0.8	33.8	65.4
X3.4	Social communication level between communities	0.0	0.0	0.0	35.4	64.6
X3.5	The trust level between communities	0.0	0.0	0.0	39.2	60.8
X3.6	Relations quality between communities	0.0	0.0	0.8	33.8	65.4
X3.7	Level of community participation	0.0	0.0	0.0	33.8	66.2
X3.8	Community contribution in contributing ideas	0.0	0.0	16.2	37.7	46.2
X3.9	The level of community compliance with applicable norms	0.0	0.0	0.0	33.1	66.9
X3.10	A sense of belonging to the community	0.0	0.8	0.0	43.1	56.2
X3.11	Community readiness in facing a crisis	0.0	0.0	0.8	43.1	56.2

Source: Data Processing Result

Community resilience, which adopts the HCRI calculation, integrates respondents' answers to each of the 33 indicators and produces a value in the range of 1-5 points to determine the average level of resilience of tourist destination communities to the COVID-19 pandemic in DIY. By using the HCRI equation, the resilience weight index for each indicator can be seen in Table 2 below.

Table 2. Indicator Rating and Calculate Community Reliance

No	Resilience Indicators	Very Low unit weight (1)	Low unit weight (2)	Medium unit weight (3)	High unit weight (4)	Very High unit weight (5)	Resilient Weight Index of Unit Indicator (Ri)
X1.1	Early warning/information	0,00	0,00	0,12	1,75	2,62	4,48
X1.2	Community activity level	0,00	0,00	0,23	1,23	3,08	4,54
X1.3	Innovation	0,00	0,06	0,48	1,54	2,12	4,20
X1.4	Comprehensive control action plan	0,00	0,00	0,12	1,32	3,15	4,59
X1.5	Community leaders capacity	0,00	0,00	0,14	1,72	2,62	4,48
X1.6	Vulnerable community groups monitoring	0,00	0,03	0,28	1,82	2,19	4,32
X1.7	Community Independence	0,00	0,00	0,37	1,85	2,08	4,29
X1.8	Assistance in accessing health services	0,00	0,02	0,25	1,63	2,50	4,40
X1.9	Communication skills of community leaders	0,00	0,00	0,09	1,32	3,19	4,61
X1.10	Actively involving the community	0,00	0,00	0,12	1,82	2,54	4,47
X1.11	Adequate community support	0,01	0,05	0,53	1,60	1,96	4,15
X1.12	Technological transformation	0,00	0,15	0,42	1,42	2,15	4,14
X1.13	Cooperation	0,01	0,00	0,28	1,60	2,50	4,38
X1.14	The trust level of community leaders	0,00	0,03	0,05	2,12	2,19	4,39
X2.1	Economic sufficiency	0,01	0,23	0,62	1,94	0,92	3,72
X2.2	Economic stability	0,02	0,26	0,55	1,97	0,88	3,68
X2.3	Economic sustainability	0,02	0,22	0,72	1,54	1,23	3,72
X2.4	Availability of reserve funds	0,02	0,17	0,48	2,03	1,12	3,82
X2.5	Ability to mitigate economic losses	0,02	0,05	0,72	2,18	0,88	3,85
X2.6	Insurance access	0,01	0,14	0,39	2,12	1,31	3,97
X2.7	Availability of community resources	0,01	0,05	0,69	1,91	1,31	3,96
X2.8	Availability of economic assistance	0,00	0,00	0,18	2,62	1,42	4,22
X3.1	The level of public awareness	0,00	0,00	0,14	1,54	2,85	4,52
X3.2	Solidarity level between communities	0,00	0,00	0,00	1,11	3,62	4,72
X3.3	Confidence in the community's ability to recover	0,00	0,00	0,02	1,35	3,27	4,65
X3.4	Social communication level between communities	0,00	0,00	0,00	1,42	3,23	4,65
X3.5	The trust level between communities	0,00	0,00	0,00	1,57	3,04	4,61
X3.6	Relations quality between communities	0,00	0,00	0,02	1,35	3,27	4,65
X3.7	Level of community participation	0,00	0,00	0,00	1,35	3,31	4,66
X3.8	Community contribution in contributing ideas	0,00	0,00	0,48	1,51	2,31	4,30
X3.9	The level of community compliance with applicable norms	0,00	0,00	0,00	1,32	3,35	4,67
X3.10	A sense of belonging to the community	0,00	0,02	0,00	1,72	2,81	4,55
X3.11	Community readiness in facing a crisis	0,00	0,00	0,02	1,72	2,81	4,55

Source: Data Processing Result

Based on Table 2 we can calculate the community resilience index with the formula:

$$\text{HRI} = \sum_{i=1}^{n} \frac{Ri}{N} = \frac{142,93}{32} = 4,33 \ points$$

Based on the HRI interpretation scale stated in the research method, it can be said that the tourist village community in DIY has relatively high resilience in fighting the COVID-19 pandemic. The calculation results show that the tourist village community in DIY received resilience points, namely 4.33. This result is quite high because the calculated HRI result is 4.33 points from the highest scale, namely 5 points. This point is classified as very high based on 32 indicators of the resilience of tourist village communities in fighting the COVID-19 pandemic adopted for this research. These results are new findings in the world of literature regarding the resilience of tourist villages to the COVID-19 pandemic. There has never been previous research that calculated the community resilience index in the context of the COVID-19 pandemic, especially in tourist villages in DIY. However, the index value produced in this research was measured in the context of the Covid-19 pandemic. Thus, this value may change over time and conditions.

Based on the calculation results in Table 2, there are still 14 resilience indicators that have a resilience weight index below 4.33 points. These results indicate that tourist village communities in DIY still face the threat of vulnerability in these 14 indicators. The economic stability indicator is the lowest-rated resilience indicator with a calculated resilience weight index of 3.68.

On the other hand, the indicator of the level of solidarity between communities is the indicator that gets the highest score with a resilience weight index of 4.72 on a 5-point scale. These results confirm previous research which states that social capital and economic conditions contribute to increasing or decreasing vulnerability or capacity and can influence community resilience (Anwar et al., 2017; Partelow, 2021). This result is also reinforced by the fact that all indicators on social factors have a value above 4.33 points.

The first indicator which still has a value below 4.33 points is the innovation indicator to recover during the pandemic. This indicator is closely related to human resources. This result was possible because it was not easy to mobilize the community, especially the older generation. This can also be related to their background, namely as farmers who find it difficult to change their mindset as tourism entrepreneurs. This finding is in line with previous research which states that innovation is still an obstacle faced by tourist villages in DIY (Putri, 2023).

The second indicator which also has a value below 4.33 points is the indicator of community independence in facing crisis conditions. This can be related to the previous indicators, the large impact of the COVID-19 pandemic, and the limited reserve funds owned by tourist villages. However, this indicator has a value that is not too far from 4.33 points. This means that not all tourist village communities have the same conditions as the Nglanggeran and Pentingsari Tourism Villages, which relatively still have reserve funds to survive and adapt. The lack of this indicator also becomes an important lesson for tourist villages to pay more attention to their financial management.

Indicators of the independence of tourist village communities and the adequacy of community support in facing the pandemic also still need to be improved in DIY. In the indicator of adequacy of community support, the low value of this indicator can also be caused by the non-participation of private institutions, the role of the community and local leaders as mentioned by previous research. (Anwar et al., 2017).

This is also related to indicators of reserve fund availability. Tourist villages that have large reserve funds may not necessarily be used to help affected communities. Nglanggeran Tourism Village, for example, has chosen to use its reserve funds for operational activities and improving tourist infrastructure. This is also explained by previous research (Putri, 2023). Apart from that, the lack of value for these two indicators can also be caused by the public's minimal knowledge of mitigating economic losses from tourism activities so that existing reserve funds are prioritized for repairing the damage. This condition is in line with previous research that mentions disaster-based risk management and spatial planning systems (Anwar et al., 2017).

The above conditions are also supported by the fact that not all tourist villages have adequate reserve funds to deal with COVID-19, so this is also a lesson in itself for tourist villages. The amount of assistance from the government has not been able to eliminate their losses. This factor is considered to have the greatest influence on the resilience of the tourist community

(Jabbari et al., 2022). This condition is also not yet supported by the capacity of individual tourist village communities. This can be seen from the low level of insurance access indicators so that there is no preparation to face a crisis. Previous research said that it is important for people to be far-sighted by using methods such as insurance and savings to face the COVID-19 pandemic situation (Jamshidi et al., 2022).

On the other hand, technological transformation is also a problem for tourist villages in Indonesia. This research shows that this indicator also has a value below 4.33 points. Not all developed and independent tourist villages have had the technological transformation needed during the Covid-19 pandemic. In this case, it is only the Nglanggeran and Tina Tourism Villages that have carried out technological transformation during COVID-19. Pentingsari and Kakilangit Tourism Villages still have their limitations, especially in terms of human resources in technology development. This is in line with previous research which states that technological factors are the capital that tourist village communities must have to survive (Jamshidi et al., 2022).

The next indicator can be linked to economic factors. Economic sufficiency and economic stability can be linked to tourism activities as a main or side income. The COVID-19 pandemic will also affect economic adequacy and economic stability if tourism activities are used as the main income (Jamshidi et al., 2022). Thus, tourism actors after the Covid-19 pandemic are advised to diversify their livelihoods to overcome this impact as mentioned in previous research (Liu et al., 2023). In this case, building livelihood resilience to natural disasters is the key to obtaining sustainable income (Sina et al., 2019).

Another indicator, namely economic sustainability, can be linked to the scale of visitors as revealed in previous research (Putri, 2023). During the pandemic, tourism activities that can run are small-scale visitor activities. The Covid-19 pandemic has also had an impact on people's economic profits which have not yet improved.

Apart from the 12 indicators above, there are also other indicators with points above 4.33. This means that these indicators contribute to the high resilience of tourist village communities in DIY. These results support and complement previous research which states that governance/institutional capabilities, the strength of social networks, community activeness, innovation, and the persistence of leaders in instilling resilience are important factors in facing the Covid-19 pandemic (Wang et al., 2022).

Community Resilience Factors

The first step in determining the factors that influence the resilience of tourist village communities in DIY is to test the validity and reliability of the data used. According to the validity test, the data in the research can be said to be valid and can accurately describe actual conditions. This can be seen in Table 3 which shows the value of count> table. In this case, the rtable value for df=128 and a confidence level of 0.1 is 0.1449. Apart from that, based on the results of the reliability test it can be said that the data used in this research is a consistent and reliable measuring tool. This can be seen from Cronbach's Alpha value which is more than 0.6, namely 0.912.

Table 3. Indicator Rating and Calculate Community Reliance

Variable	R-count	R-table	Crobanch's Alfa	Conclusion
X1.1	0,658	0,1449	0,907	Valid and Reliable
X1.2	0,593	0,1449	0,908	Valid and Reliable
X1.3	0.531	0,1449	0,909	Valid and Reliable
X1.4	0,422	0,1449	0,910	Valid and Reliable
X1.5	0,435	0,1449	0,910	Valid and Reliable
X1.6	0,429	0,1449	0,910	Valid and Reliable
X1.7	0,686	0,1449	0,907	Valid and Reliable
X1.8	0,674	0,1449	0,907	Valid and Reliable
X1.9	0,544	0,1449	0,909	Valid and Reliable
X1.10	0,655	0,1449	0,907	Valid and Reliable
X1.11	0,635	0,1449	0,907	Valid and Reliable

X1.12	0,682	0,1449	0,906	Valid and Reliable
X1.13	0,488	0,1449	0,909	Valid and Reliable
X1.14	0,419	0,1449	0,910	Valid and Reliable
X2.1	0,636	0,1449	0,908	Valid and Reliable
X2.2	0,642	0,1449	0,908	Valid and Reliable
X2.3	0,643	0,1449	0,908	Valid and Reliable
X2.4	0,532	0,1449	0,910	Valid and Reliable
X2.5	0,451	0,1449	0,911	Valid and Reliable
X2.6	0,524	0,1449	0,910	Valid and Reliable
X2.7	0,718	0,1449	0,906	Valid and Reliable
X2.8	0,575	0,1449	0,908	Valid and Reliable
X3.1	0,405	0,1449	0,910	Valid and Reliable
X3.2	0,340	0,1449	0,911	Valid and Reliable
X3.3	0,311	0,1449	0,911	Valid and Reliable
X3.4	0,292	0,1449	0,912	Valid and Reliable
X3.5	0,355	0,1449	0,911	Valid and Reliable
X3.6	0,444	0,1449	0,910	Valid and Reliable
X3.7	0,370	0,1449	0,911	Valid and Reliable
X3.8	0,383	0,1449	0,912	Valid and Reliable
X3.9	0,329	0,1449	0,911	Valid and Reliable
X3.10	0,500	0,1449	0,909	Valid and Reliable
X3.11	0,440	0,1449	0,910	Valid and Reliable

Based on Table 4, it is known that tourist village institutions, economic conditions, and social capital are factors that have quite a strong influence in determining community resilience variables in the case of tourist villages in DIY facing the COVID-19 pandemic. These results were obtained based on the test criteria used in this research.

1. The Institutional Variable (X1) has a sig value of 0.044 with a calculated t value of 2.038. Because the sig value is (0.044) < 0.05 and t count (2.038) > t table (1.979), Ha accepts that Tourism Institutions (X1) have a significant influence on Community Resilience (Y).
2. The Economic Conditions variable (X2) has a sig value of 0.000 with a calculated t value of 9.057. Because the sig value is (0.000) < 0.05 and t count (9.057) > t table (1.979), Ha accepts that Economic Conditions (X2) have a significant influence on Community Resilience (Y).
3. The Social Capital variable (X3) has a sig value of 0.037 with a sig value of 2.109. Because the sig value is (0.037) < 0.05 and t count (2.109) > t table (1.979), Ha accepts that Social Capital (X3) has a significant influence on Community Resilience (Y).

Table 4. Multiple Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-5.133	1.109		-4.631	.000
X1 (Institutional)	.378	.186	.144	2.038	.044
X2 (Economic)	1.127	.124	.610	9.057	.000
X3 (Social Capital)	.541	.257	.138	2.109	.037

Source: Data Processing

These results also strengthen previous research that these three variables are included in the resilience dimension (Liu et al., 2023; Purwaningsih et al., 2021). In these results, previous research adds that human capital and natural capital are also influential variables (Jamshidi et al., 2022). The factor that has the greatest contribution to shaping the resilience of tourist village communities in DIY is economic factors. These results are in line with previous research (Jamshidi et al., 2022).

In this case, adequacy, economic stability, economic sustainability, availability of reserve funds, mitigation of economic losses, and availability of resources both within the tourist village community and individually are important aspects to pay attention to in building resilience.

However, this factor still has low assessment points in the context of developed/independent tourist villages in DIY.

Based on the regression results, it can also be seen that the coefficient of determination produced in this study shows a lift of 55.6%. In Table 5, around 56% of the resilience of tourist village communities in DIY in facing COVID-19 was formed by institutional strength, economic conditions, and social capital. The remaining 44% is influenced by other factors outside the variables used in this research. This could be influenced by infrastructure factors and demographic conditions that have not been included in the model, such as demographic factors, natural conditions, and infrastructure (Rahman et al., 2022).

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.745[a]	.556	.545	.80287

a. Predictors: (Constant), X3 (Social Capital), X2 (Economic Condition), X1 (Tourism Village Institutional)
Source: Data Processing

These results are interesting so that they can be a lesson for other tourist villages in DIY that want to increase community resilience in facing pandemics or other possible crises in the future, so they must consider the economic institutional conditions and social capital between communities in the tourist village community. These results support previous research which states that governance/institutional capabilities, strength of social networks, community activeness, innovative development mechanisms, and persistence in cultivating resilience are important factors.

CONCLUSION

Village communities in the advanced and independent tourist village category in DIY have high resilience in facing the COVID-19 pandemic. The high resilience of tourist village communities in DIY in facing the COVID-19 pandemic is influenced by 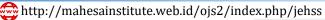three variables, namely social capital, institutions, and economic conditions. In this case, the variable that has the greatest contribution to shaping the resilience of the tourist village community in DIY is the economic factor. Even so, this economic factor has the lowest resilience index. This condition can be influenced by the high level of dependence of people's livelihoods on tourism activities, the low quality of human resources and technological transformation, the lack of involvement of other stakeholders, and the lack of community preparation in facing the pandemic. Thus, tourist villages in DIY still need to be alert and intervene against threats of vulnerability that may still occur during the Covid-19 pandemic on 12 indicators related to economic factors, namely economic adequacy, economic stability, economic sustainability, availability of reserve funds, ability to mitigate economic losses, access to insurance, availability of community resources, availability of economic assistance, adequate community support, technological transformation, community independence, and innovation. Based on these conditions, community resilience in developed/independent tourist villages still needs to be improved by considering the value index produced by this research. This can be done by developing alternative community livelihoods, increasing product diversification through innovation, increasing awareness of the quality of community resources through training, increasing institutional capacity, improving tourism village management through increasing the proportion of reserve funds and disaster mitigation planning, expanding social networks, and strengthening social capital. and implementing technological developments that can help tourism business processes. This research can be a suggestion for tourist villages and local governments in developing strategies for developing tourist villages, as well as other stakeholders who assist in the post-pandemic recovery and development process of tourist villages. Apart from that, this research also provides an overview of the biggest priorities needed by tourist village communities in facing the COVID-19 pandemic. Thus, these results can have implications for increasing the effectiveness of efforts to handle and recover tourist village communities in facing future pandemics, namely by focusing more on
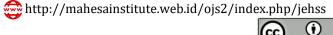
programs to increase stability and sustainability as well as the ability to mitigate economic losses in tourist village communities. Future research can include variables not included in this study.

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