

## Research Article

# Upgrading Rural Community through Smart Ecotourism: An Indonesian Context

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**Abstract.**

The increasing role of tourism as an income-generating sector has led to environmental degradation, making ecotourism a crucial factor in preserving the environment. Ecotourism should involve communities and use information technology to support development and ecological preservation. To explore the relevance and use of information technology for ecotourism development in rural areas in Batu, Indonesia, we surveyed 151 micro, small, and medium enterprises (MSMEs). The results indicate that MSMEs play a significant role in enforcing smart ecotourism to support economic progress. Innovations in information technology should be developed to accommodate MSMEs, given the relatively young age and high education level of businessmen/women. Future research can focus on the impact of such innovations on the sustainability of ecotourism in rural areas.

**Keywords:** ecotourism, MSMEs, information technology

## 1. Introduction

Environmental crises due to the expansion of tourism are unavoidable as countries, including Indonesia, tend to push tourism as income generating sector. When the environment degrades, it may negatively impact society nearby, destroy social relationships, and bring material and life loss. Ecotourism can prevent excessive environmental destruction by creating a tourism sector that aligns with ecological preservation (Mega, 2013). Ecotourism is a form of travel involving natural attractions, focusing on nature conservation, having minimal environmental impact, and respecting local culture and lifestyles (Litheko and Potgieter, 2020; Arida and Pujani, 2018). Ecotourism also encourages local communities to participate in resources management by raising awareness

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of nature conservation (Ashok, Behera, and Tewari, 2019) as well as promoting local culture, traditions, and lifestyles to attract tourists to visit an area (Berzina and Tsoy, 2021). Some studies found that ecotourism can prevent environmental degradation, such as destroying geological features, erosion, pollution, contamination, over-extraction, and overharvesting resources (Buckley, 2015; Butarbutar, 2012; Soseco, 2022).

More specifically, its ability to support the environment can be explained through the interrelated ecosystem components, e.g., humans, animals, plants, soil, sun, and water. When they are ecologically balanced, the quality of the environment usually functions, and all components are involved in the action-reaction. With these roles, each member should not lose its functions in carrying capacity to balance the ecosystem. Hence, a conducive business climate through ecotourism should be aimed to support environmental balance. The conducive business should be disseminated continuously especially reaching younger generations to increase their awareness of ecotourism (Soekadji, 2010). To achieve this purpose, we need to identify tourist characteristics to observe the appropriate interventions required and potential challenges that may occur. In recent days, tourists are dominated by Generation Z, who were born between 1997 and 2012 or who are 11 to 26 years old. Their main characteristics are their integration with technology (Dangi and Gribb, 2018), including the use of technology in tourism (Eddyono et al., 2021).

Putting the ecotourism aspect in the interventions on them using technology can significantly impact the economy, society, and environment (Falah, 2014). This condition can be a guideline for businesses to promote themselves to support ecotourism, hence can be directed into smart tourism, which is defined as the information received by tourists during the travel process, and these information services can be accessed wherever they are (Herdiana et al., 2019). To help businesses to reorient themselves toward ecotourism, a collaboration between businessmen/women in the region is needed, both in production and marketing processes (Handayani et al., 2019). When the partnership is formed, they can go in the same direction as regional ecotourism activities, benefiting them through increased output and income (Roberto et al., De, and Monteros' university 2002). The collaboration itself can be formed digitally with the help of information technology. Some studies show the integration of IT in businesses can significantly help them to increase productivity, output, and income (Huang and Wang, 2022, Soseco et al., 2022).

However, some challenges may occur during the implementation of IT integration in business processes. First, even though IT is intensively used for communication among younger and older generations, IT is not optimally used for business collaboration,

especially with its relationship to ecotourism (Rivière and Tricaud, 2021). Second, existing information platforms cannot meet visitors' need for informative information, mainly due to their limitation to include local community empowerment. Third, the characteristics of micro, small, and medium enterprises (MSMEs) that work in conventional ways may prevent the introduction of new forms of production (Katsoni and Dologlou, 2017). This research contributes to the body of knowledge by providing information on increasing MSMEs' awareness of ecotourism by using IT as the media for collaboration with others. More specifically, we conduct quantitative and qualitative research methods on MSMEs in Bumiaji District in Batu, Indonesia, as this region is increasingly popular as a tourism destination, potentially accelerating environmental degradation.

This research aimed to achieve some research purposes: First, to investigate the contributors of micro, small, and medium enterprises in Batu. Second, to examine the perception of businessmen/women toward an ecotourism business process. We begin the following section by presenting the methods and data sources used in the analysis. Section 3 presents the empirical results and a discussion of the findings. Lastly, Section 4 concludes with policy recommendations and suggestions for future research.

## 2. Literature Review

The concept of "empowerment" has been a central focus in community tourism studies for several decades, as Scheyvens highlighted (Kristiana and Theodora 2016). It has gained significant popularity among scholars in political science and development studies. Beeton (Kurniawan and Zauhar 2017) sheds light on the origin of empowerment, tracing it back to political science discussions centered around restoring power to communities that have been forcibly stripped of it. On the other hand, Lenao and Basupi (Kusumo Wardani and Tri Wahyudi 2010) emphasize the widespread use of the empowerment concept in various fields of study, particularly in the realms of development and politics. As a result, scholars from academia have proposed different conceptual definitions of empowerment, contributing to its rich and diverse understanding.

In light of these perspectives, Lenao and Basupi (Nyoko and Fanggidae 2015) take a cautious approach to defining empowerment. Rather than providing their definition, they acknowledge the existing reports put forth by a few scholars in the past. On the other hand, Beeton (Nyoko and Fanggidae 2015) views empowerment as intertwined with power dynamics within groups. She raises significant concerns about the exclusion of active community members, the neglect of the most disadvantaged individuals who need empowerment, and the restriction of women to low-paying service roles

like cooks and cleaners (Latif, Aris, and Kamari 2020). This condition highlights the multidimensional nature of empowerment and motivates the present study to explore the extent to which the local community in the research site experiences change. In ecotourism research, two analytical frameworks have emerged to examine the impact of ecotourism on the livelihoods of local communities. These frameworks are the Longwe Empowerment Framework (LEF) introduced by Longwe (Lebr ao et al. 2021) and the Community Empowerment Framework (CEF) developed by Scheyvens (Mukhtar 2019). Over the years, both frameworks have proven valuable tools for analyzing community-based ecotourism, offering intriguing insights (Snyman 2017).

### 3. Methodology

We collected data from 151 small and medium enterprises in Batu, Indonesia. As one major tourist destination in Indonesia, Batu faces a challenging development that can increase its population welfare but simultaneously increase the chance of environmental degradation, e.g., floods, landslide, and warmer temperature. This study uses a mixed method, a combination of quantitative research (descriptive and regression), followed by a qualitative research design, as shown in Figure 1. Data for the quantitative part is obtained from a questionnaire distributed to 151 small and medium enterprises in Batu, Indonesia, that support ecotourism activities. The data covers the age of businessmen/women, income, ecotourism literacy level, attitude towards the benefits of IT, and the level of application of IT to their business, as well as the sustainability of their businesses.

The data is then analysed using ordered logistic estimation, a regression model for the ordinal dependent variable. For individual  $i$ , we specify:

$$y_i^* = x_i' \beta + \mu_i$$

where normalisation is that the regressors  $x$  do not include an intercept. For the very low value of the dependent variable,  $y^*$ , the condition refers to, let's say, poor; for  $y^* > \alpha_1$ , the dependent variable improves to fair; for  $y^* > \alpha_2$ , it enhances further to good; and so on if there were additional categories. For an  $m$ -alternative ordered model, we define:

$$y_i = j \text{ if } \alpha_{j-1} < y_i^* < \alpha_j, \quad j = 1, \dots, m$$

where  $\alpha_0 = -\infty$  and  $\alpha_m = \infty$ .

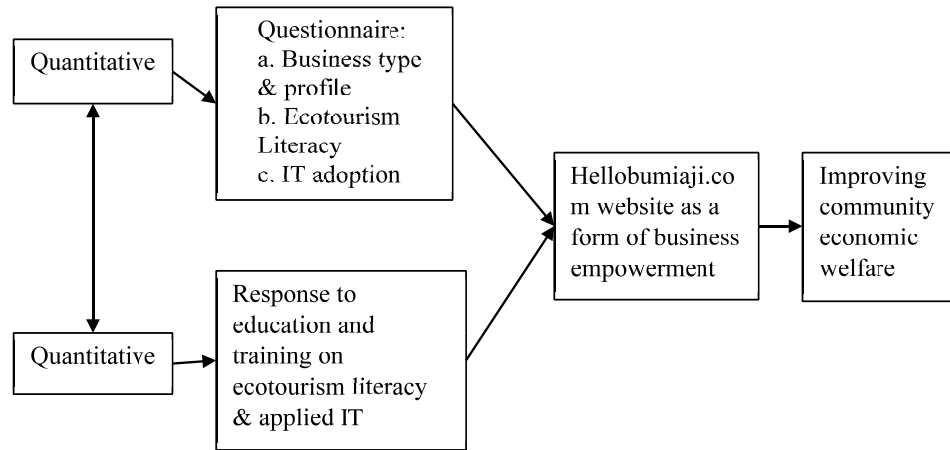


Figure 1: Research Design.

The analysis is then continued with qualitative research to explore the phenomenon of micro, small, and medium enterprises (MSMEs) in Batu in their activities in collaboration with other MSMEs, the use of information technology (IT) to support their businesses, and their support to ecotourism. We use education and training activities (*diklat*) and Forum Group Discussions (FGD) to achieve these purposes. The final product of the training and FGD activities is a website of “hellobumiaji.com”, which is expected to mediate collaboration between business actors to increase their business activities.

## 4. Results and Discussion

### 4.1. Descriptive Results

Our respondents have various types of businesses, with culinary as the primary business type (38,41%) followed by fashion (21.85%). Table 1 shows many companies rely on the environment for their production. Some are fruit and vegetable producers (e.g., apple, guava, coffee), flower producers, and their derivatives (e.g., cut flower suppliers, flower bouquets & gifts). Considering age, most businessmen/women are young, with the age of 20-25 years (56%) and with the age range 26-35 years (30%) as the second most considerable proportion (Table 2). Few are considered middle-aged (36-55 and older than 55) (Table 2).

From their education levels, most businessmen/women in Batu have senior high school (SMA) as their highest educational level, reaching 52.32%. The second biggest group is the undergraduate level (S1), with approximately 35.10% (Table 3). Observation

TABLE 1: Type of Businesses of MSMEs in Batu.

No.	Type of business	Frequency	Percentage
1.	Fashion	33	21.85
2.	Culinary	58	38.41
3.	Apple Garden	4	2.65
4.	Guava Garden	2	1.32
5.	Coffee Garden	1	0.66
6.	Orchid Garden	2	1.32
7.	Vegetable garden	1	0.66
8.	Strawberry Garden	1	0.66
9.	Storage	2	1.32
10.	Flower garden	10	6.62
11.	Cattle	4	2.65
12.	Art	4	2.65
13.	Online Shop	3	1.99
14.	Fruit Vegetable Supplier	3	1.99
15.	Organic fertilizer	1	0.66
16.	Beauty	2	1.32
17.	Cut Flower Supplier	2	1.32
18.	Flower Bouquets & Gifts	5	3.31
19.	Videography	2	1.32
20.	Wedding Service	1	0.66
21.	Handicrafts	1	0.66
22.	Convection & printing	2	1.32
23.	Tourism site	1	0.66
24.	Lodging	2	1.32
25.	Transportation	1	0.66
<b>Total</b>		<b>151</b>	<b>100.00</b>

TABLE 2: Age of Businessmen/women.

No.	Age	Frequency	Percentage
1.	20-25	83	54.97
2.	26 – 35	52	34.44
3.	36 – 55	14	9.27
4.	> 55	2	1.32
<b>Total</b>		<b>151</b>	<b>100.00</b>

on income received by MSMEs in Batu shows that 39.74% receive Rp.1-3 million per month, and 33.77% have income less than Rp.1 million per month (Table 4).

TABLE 3: Education Levels of MSMEs in Batu.

No.	Education	Frequency	Percentage
1.	Elementary School (SD)	1	0.66
2.	Junior High School (SMP)	6	3.97
3.	Senior High School (SMA)	79	52.32
4.	Diploma (D-3)	8	5.30
5.	Undergraduate (S-1)	53	35.10
6.	Masters (S-2)	4	2.65
7.	Doctorate (S-3)	0	0.00
	Total	151	100

TABLE 4: Income Levels of MSMEs in Batu.

No.	Income (Rp. million)	Frequency	Percentage
1.	< 1	51	33.77
2.	1-3	60	39.74
3.	3-5	28	18.54
4.	5-10	0	0.00
5.	>10	12	7.95
	Total	151	100.00

Most MSMEs in Batu are less than three years old (66.23%), followed by 3-6 years old (23.84%) (Table 5).

TABLE 5: Age of Business.

No.	Age of Business (Years)	Frequency	Percentage
1.	< 3	100	66.23
2.	3-6	36	23.84
3.	7-10	6	3.97
4.	>10	9	5.96
	Total	151	100

Next, we look at the perceived ease of usefulness towards information technology and find that businessmen/women have a high tendency to perceive ease of use (93.38%) (Table 6). Observation on the attitudes toward the use of information technology in the aspect of perceived ease of use show MSMEs has a high and middle perception of ease of use (Table 7).

TABLE 6: Perceive Ease of Usefulness among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	20-25	High	141	93.38
2.	13-19	Medium	8	5.3
3.	6-12	Low	2	1.32
Total			151	100

TABLE 7: Perceive Ease of Use among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	20-25	High	72	47.68
2.	13-19	Medium	73	48.34
3.	6-12	Low	6	3.97
Total			151	100

Most businessmen/women in Batu intensively use the technology of e-commerce and websites to increase their business activities, such as in marketing, sales, and payments (64.90%). Others use social media at a rarer frequency (31.13% and 3.97%) (Table 8).

TABLE 8: Technology Adoption among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	16-20	High	98	64.90
2.	11-15	Medium	47	31.13
3.	6-10	Low	6	3.97
Total			151	100.00

Social media is an important marketing tool to help their business grow and increase customer satisfaction through customer communication and retrieving feedback. Observation on using social media as a marketing medium shows that most MSMEs in Batu frequently use it as a marketing tool (87.42%) (Table 9).

TABLE 9: Social Media Marketing among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	12-15	High	132	87.42
2.	9-11	Medium	16	10.60
3.	5-8	Low	3	1.99
Total			151	100.00

Most MSMEs in Batu see business sustainability as an essential aspect of their businesses (76.82%). They enjoy the benefits of using technology and social media



in their business activities through increased business performance, increased sales, getting closer to customers, higher business efficiency, and fostering the creativity of businessmen/women actors (Palmer and Chuamuangphan 2018) (Table 10).

TABLE 10: Sustainability among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	19-25	High	116	76.82
2.	13-18	Medium	33	21.85
3.	8-12	Low	2	1.32
Total			151	100.00

Lastly, we look at ecotourism literacy and found more than half of respondents have a high level of ecotourism literacy (59.60%) through various types of information channels such as formal information education, training, or the internet (Table 11).

TABLE 11: Ecotourism Literacy among MSMEs in Batu.

No.	Interval	Category	Frequency	Percentage
1.	19-25	High	90	59.60
2.	13-18	Medium	54	35.76
3.	8-12	Low	7	4.64
Total			151	100

## 5. Regression Results

Using the ordered logit model, we found education and business age are significant contributors to business people’s income (Table 12 Column 1). This condition might be caused by the benefits of education that enable individuals to find new opportunities and ways of production compared to others with lower educational levels. Besides, the longer someone is in business, the more they gain experience and can increase income through broader knowledge.

Age is also a crucial contributor to perceived ease of usefulness and perceived ease of use (Wardle et al. 2021) (Table 12 Columns 2-3). The negative and significant effect of business age on perceived ease of usefulness, social media marketing, and business sustainability indicate the longer the business exists, the lower tendency for the owner to be familiar with those aspects (Singgalen, Sasongko, and Wiloso 2019) (Table 12 Columns 2, 5, 6). In contrast, education positively and significantly contributes to business sustainability, reflecting the higher tendency for businessmen/women to

have business sustainability as they get older (Nú nez-Ríos et al. 2020). Information technology, shown by technology adoption and social media marketing variables, positively and significantly contributes to business sustainability and ecotourism literacy (Situmorang and Mirzanti 2012) (Table 12 Columns 8-9).

TABLE 12: Ordered Logit Results.

	Income	Perceived Ease of Usefulness	Perceived Ease of Use	Technology Adoption	Social Media Marketing	Business Sustainability	Ecotourism Literacy	Business Sustainability	Ecotourism Literacy
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Income		0.650 (0.41)	-0.070 (0.16)	0.310 (0.23)	0.650 (0.44)	0.440 (0.27)	0.080 (0.17)	0.352 (0.33)	-0.007 (0.171)
Sex	0.352 (0.318)	-0.130 (0.66)	0.530 (0.34)	0.460 (0.38)	-0.430 (0.57)	0.670 (0.48)	0.120 (0.37)	0.582 (0.509)	0.066 (0.381)
Age	0.162 (0.216)	1.370** (0.67)	0.480* (0.25)	0.320 (0.3)	0.490 (0.42)	0.080 (0.29)	-0.270 (0.24)	-0.308 (0.314)	-0.466** (0.244)
Education	0.601*** (0.17)	-0.050 (0.42)	0.050 (0.16)	0.090 (0.17)	0.070 (0.26)	0.420* (0.24)	0.020 (0.16)	0.488 (0.322)	0.011 (0.172)
Business' age	0.651*** (0.208)	-0.760** (0.33)	-0.090 (0.2)	-0.520 (0.31)	-0.660** (0.33)	-0.440* (0.27)	-0.160 (0.24)	0.123 (0.406)	0.119 (0.274)
Technology Adoption								1.990*** (0.445)	0.806** (0.34)
Social Media Marketing								2.158*** (0.521)	1.336*** (0.495)

Note: \*p<0.1, \*\*p<0.05, \*\*\*p<0.01. Parentheses are robust standard errors

### 5.1. Qualitative Results

Our qualitative approach yielded several significant findings regarding the perspectives and attitudes of businessmen and women in Batu towards collaboration, IT, ecotourism, and the use of IT to support ecotourism activities. First, the participants did not initially perceive the importance of cooperation between business owners in Batu due to their ability to work independently in various areas, such as production, procurement, and marketing. However, after participating in a focused group discussion (FGD), they recognized the potential benefits of collaboration, including increased efficiency, better resource allocation, and more significant market opportunities.

Second, the participants did not initially appreciate the benefits of using IT, preferring face-to-face business meetings in production and marketing processes (Odumu 2019). However, after receiving training and participating in the FGD, they realized the importance of IT for business development, both in the production and marketing stages.

Third, the participants' understanding of ecotourism was initially limited to enjoying nature without considering the environment's quality. However, after the training and FGD, they developed a more profound and comprehensive understanding of ecotourism, including its sociocultural, economic, and environmental aspects. As a result, they recognized ecotourism activities as an essential aspect of increasing economic activity toward community welfare (Zaenuri 2018).

Fourth, the participants did not initially understand the importance of IT in supporting ecotourism activities, leading them to carry out ecotourism development activities conventionally or face-to-face. However, after obtaining training and participating in the FGD, they realized the importance of IT in developing ecotourism, both in the production and marketing processes.

Fifth, the training and FGD resulted in creating the Hellobumiaji.com website, aimed at empowering ecotourism MSMEs in digital or modern ways and facilitating collaborations between MSMEs to advance ecotourism business activities. The website received high enthusiasm from our respondents, as it provided benefits such as strengthening cooperation between MSMEs in smart ecotourism (OECD 2016).

Overall, the findings suggest that FGDs and training programs can effectively improve attitudes and perceptions towards collaboration, IT, and ecotourism among businessmen and women in Batu.

## 6. CONCLUSION

This paper highlights the education and business age's vivacious and significant contributions to the income of Batu micro, small, and medium enterprises (MSMEs). The study reveals that our training and forum group discussions (FGDs) have effectively enhanced ecotourism literacy among businesses. At the same time, the development of [hellobumiaji.com](http://hellobumiaji.com) has provided an alternative medium for collaboration among businessmen/women and increased ecotourism literacy. However, it is essential to note that the impact of [hellobumiaji.com](http://hellobumiaji.com) on business sustainability requires continuous evaluation, which was not explored in this study. Therefore, future research is recommended to delve deeper into the relationship between IT and business sustainability.

## References

- [1] Arida, I Nyoman Sukma, And Lp Kerti Pujani. 2018. *Kajian Penyusunan Kriteria-Kriteria Desa Wisata Sebagai Instrumen Dasar Pengembangan Desawisata*. Ashok, Smriti, M. D. Behera, And H. R. Tewari. 2019. "Evaluating The Applicability Of Esm (Ecotourism Sustainability Maximization) Model To Assess, Monitor, And Manage The Ecotourism Sustainability In Mountain Ecosystem (Mt. Kangchendzonga Base Camp Trek, India)." *Environmental Monitoring And Assessment* 191.
- [2] Berzina, Kristine, And Marina Tsoy. 2021. "Tourism Sme Sustainability Social And Economic Challenges During Pandemic: Cases Of Russian Federation, Georgia And Latvia." *E3s Web Of Conferences* 296: 05016. <https://doi.org/10.1051/e3sconf/202129605016>.
- [3] Buckley RC. Ecotourism- Comparative Book Review. *Hum Ecol Interdiscip J.* 2015;43(3):503–4.
- [4] Butarbutar, Regina R. 2012. "Community Empowerment Efforts In Sustainable Ecotourism Management In North Sulawesi, Indonesia." *J-Pal* 3(1).
- [5] Dangi TB, And William JG. Sustainable Ecotourism Management And Visitor Experiences: Managing Conflicting Perspectives In Rocky Mountain National Park, USA. *J Ecotour.* 2018;17(3):338–58.
- [6] Eddyono F, Darusman D, Sumarwan U, Sunarminto AF. 2021. "Optimization Model: The Innovation And Future Of E-Ecotourism For Sustainability." *Journal Of Tourism Futures*. Falah, Nailul. 2014. 11 *Jurnal Hisbah Efektivitas Out Bound Sebagaimetode Pembelajaran(Studi Pada Out Bound mahasiswa Jurusan Bkifakultas Dakwah Dankomunikasi Uin Sunan Kalijagayogyakarta)*. <Http://Www.Biouvacoutbondprovider.Co.Cc/> <https://doi.org/10.1108/JTF-03-2021-0067>.
- [7] Herdiana DE. 6 Jumpa. Peran Masyarakat Dalam Pengembangan Desa Wisata Berbasis Masyarakat; 2019.
- [8] Huang G, Wang AZ. The Application Of Virtual Reality Technology In The Coordination And Interaction Of Regional Economy And Culture In The Sustainable Development Of Ecotourism. *Math Probl Eng.* 2022;2022:2022.
- [9] Katsoni V, Dologlou AN. 2017. "ICT Applications In Smart Ecotourism Environments." In, 225–44. [https://doi.org/10.1007/978-3-319-54558-5\\_11](https://doi.org/10.1007/978-3-319-54558-5_11).
- [10] Kristiana Y, And Stephanie MT. "Strategi Upaya Pengembangan Pariwisata Berkelanjutan Agrowisata Berbasis Masyarakat Kampung Domba Terpadu Juhut,

- Provinsi Banten." *Jurnal Ilmiah Widya 3* [Jurnal Administrasi Publik ,Jap]. Kurniawan, Fandy, And Soesilo Zauhar. 2016;2017:1.
- [11] Kemitraan Pengelolaan Sektor Pariwisata (Studi Pada Tirta Wisata Kabupaten Jombang).
- [12] Kusumo Wardani, Galih, And Setyo Tri Wahyudi. 2010. *The Impact Of Banyuwangi Festival Towards Tourist Enhancement To Banyuwangi City*.
- [13] Latif RA, Aris R, And MN. An Exploratory Study On The Ecotourism Small Business In Mukim Pantai, Seremban, Negeri Sembilan. *Int J Manag (Kolkata)*. 2020;11(12). <https://doi.org/10.34218/IJM.11.12.2020.036>.
- [14] Lebr ao CE, Rosa LM, Paim FP, Nassar PM, El Bizri HR, Silva FE. Community-Based Ecotourism And Primate Watching As A Conservation Tool In The Amazon Rainforest. *Int J Primatol*. 2021;42(4):523–7.
- [15] Litheko A, Potgieter AM. Development And Management Of Ecotourism Small Business Enterprises: North West Province, South Africa. *International Journal Of Conceptions On Management And Social Sciences*. 2020;6(1):1–8.
- [16] Mukhtar R. Toward Socially Sustainable Tourism: The Impact Of Tourism On SMEs And Livelihood Development At Tourism Destinations In Bahawalpur Pakistan. *Sustainable Business And Society In Emerging Economies*. 2019;1(1):43–54.
- [17] Nú nez-Ríos JE, Sánchez-García JY, Rojas OG, Olivares-Benitez AE. Factors To Foster Organizational Sustainability In Tourism Smes. *Sustainability* (Basel). 2020;12(20):1–21.
- [18] Nyoko, Antonio E L, And Apriana H.J Fanggidae. 2015. "The Design Of Local Wisdom-Based Ecotourism Destination In Kupang City." *Journal Of Management (Sme's)* 1(1): 103–18.
- [19] Odumu WO. Minnie. 2019. "Adoption Of Information Communication Technology In Ecotourism In Nigeria As A Panacea For Economic Growth And Sustainable Development." <Http://Www.Inosr.Net/Inosr-Scientific-Research/>
- [20] OECD. 2016. *Promoting Better Environmental Performance Of Smes Georgia*.
- [21] Palmer NJ, Chuamuangphan AN. Governance And Local Participation In Ecotourism: Community-Level Ecotourism Stakeholders In Chiang Rai Province, Thailand. *J Ecotour*. 2018;17(3):320–37.
- [22] Rivière JP, Tricaud AM. 2021. *Technological Pitfalls And Opportunities For Ecotourism*. <Http://Ceur-Ws.Org>. Roberto, ´, Lopez-Espinosa De, And Los Monteros'University. 2002. 11 Biodiversity And Conservation *Evaluating Ecotourism In Natural Protected Areas Of'La Of'La Paz Bay, Baja California Sur, Mexico: Ecotourism Or Nature-Based Tourism?* Kluwer Academic Publishers.

- [23] Handayani R, Sudira P, Soenarto R, Suprapti AR. Green Entrepreneurship Development Strategy Based On Local Characteristic To Support Ecotourism Continuous. *Jurnal Manajemen*. 2019;23(2):257.
- [24] Singgalen YA, Sasongko G, And PG. Ritual Capital For Rural Livelihood And Sustainable Tourism Development In Indonesia. *Jurnal Manajemen Hutan Tropika*. 2019;25(2):115–25.
- [25] Situmorang, Dohar Bob M., And Isti Raafaldini Mirzanti. 2012. “Social Entrepreneurship To Develop Ecotourism.” *Procedia Economics And Finance* 4: 398–405.
- [26] Snyman S. The Role Of Private Sector Ecotourism In Local Socio-Economic Development In Southern Africa. *J Ecotour*. 2017;16(3):247–68.
- [27] Soekadji. 2010. *Anatomi Pariwisata: Memahami Pariwisata Sebagai System Linkage*. 1st Ed. Jakarta: Gramedia Pustaka Utama.
- [28] Soseco T. 2022. Household Size and Household Wealth in Indonesia with the Influence of Spatial Aspect. *Economics and Finance in Indonesia*. 68(2). 75-86. Available at: <https://scholarhub.ui.ac.id/efi/vol68/iss2/1>
- [29] Soseco, T, Hidayah, I, Rini, A.D. 2022. Gender Determinant on Multidimensional Poverty Index: Evidence from Indonesia. *JSP: Jurnal Ilmu Sosial dan Politik*. 26(2). 137-151. <https://doi.org/10.22146/jsp.69320>.
- [30] Mega, Tresna Asih Elly Malihah. 2013. Iii Journal (The Journal) *Pengaruh Service Delivery Terhadap Kepuasan Wisatawan Dalam Menggunakan Paket Outbound Di Objek Wisata Linggarjati Indah Kabupaten Kuningan (Survey Pada Wisatawan Yang Menggunakan Paket Outbound Di Objek Wisata Linggarjati Indah Kabupaten Kuningan)*.
- [31] Wardle C, Buckley R, Shakeela A, Guy Castley AJ. Ecotourism’s Contributions To Conservation: Analysing Patterns In Published Studies. *J Ecotour*. 2021;20(2):99–129.
- [32] Zaenuri M. 1 *Tata Kelola Pariwisata Bencana Berbasis Collaborative*. 1st ed. Yogyakarta: Explore; 2018.