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IMPLEMENTATION OF SDGS 11 AND LEZ POLICY TOWARD VISITOR SATISFACTION IN KOTA TUA AREA JAKARTA

Ismayanti Istanto^{1*}, Ina Djamhur², Irwanto Sapitriyadi³

 ^{1,2,3}Faculty of Economic and Business Universitas Sahid
 Jl. Prof. Dr. Supomo SH, No.84, Tebet, Jakarta 12870 Indonesia ismayanti_istanto@usahid.ac.id

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Abstract

Sustainable tourism can be achieved by executing the action of SDGS 11 Sustainable Cities and Communities. The Low Emission Zone (LEZ) policy is a translation of SDGS 11 implemented in cities worldwide. In 2021, the Special Capital Region Government of Jakarta chose Kota Tua Area Jakarta (KTA) as LEZ pilot project area to try out a form of restriction of motorized vehicles in an area in many ways. However, as LEZ policy was executed, visitor reviews were still unknown. This research aimed to evaluate SDGS 11 and LEZ implementation in KTA and weigh the contribution toward tourist satisfaction. A descriptive quantitative study from November 2022 until January 2023 was taken using primary data from 100 questionnaires used on a purposive sample of tourist aged over 18 who was repeat visitor of KTA. The data analysis used the explanatory method, multiregression, Pearson Correlation Product Moment, and determinant coefficient analysis. The result showed that the implementation of SDGS 11 in KTA was compatible with the target of SDG Goal 11. LEZ policy has been very well executed. Visitors claimed they were strongly satisfied with tourist spots in KTA. Implementation of SDGS 11 and LEZ policy simultaneously and partially influenced visitor satisfaction. The SDGS 11 and LEZ policy in KTA contributed 23.4 percent to tourist satisfaction, and the remaining 76.6 percent was supported by other factors. It is recommended to pay attention to the safety aspect of KTA, organize parking, and increase the quality of tourist facilities.

Keywords: low emission zone, SGDS 11, sustainable cities and communities, visitor satisfaction

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INTRODUCTION

One of the sectors that contribute to the nation's economic growth is tourism from foreign earnings, creating jobs, improving the nation's welfare, and many others (Voronkova et al., 2021). Indonesia's economic growth from tourism reached 4.7 percent (US\$17.76 billion) in 2019 (Azzahra, 2022), whilst in 2020, due to Covid-19 the percentage decreased to 4.05, and in 2021 the contribution increased to 4.2 percent, and 4.3 percent in the year 2022. In 2023, the government targets the country's foreign exchange revenue from tourism of US \$ 2.07 billion to US \$ 5.95 billion, with a total of 3.5 million to 7.4 million foreign tourist arrivals. Meanwhile, for domestic tourists, it is targeted at 1.2 - 1.4 billion people in 2023. However, tourism can also be considered one of the causes of environmental degradation, adversely affecting the ecosystem (Voronkova et al., 2021) and among one of the most polluting sectors globally (Dolnicar, 2020). Tourism is said to produce global greenhouse emissions of around eight percent (Lenzen et al., 2018) and estimated global warming of around 12.5 percent.

In order to protect the environment, reduce inequality, and end poverty globally, in 2015, the United Nations introduced the Sustainable Development Goals which consist of 17 goals to be implemented in many sectors, including tourism, that need to be achieved by the year 2030. In support of this matter, the Ministry of Tourism of Indonesia has published a regulation regarding sustainable tourism development and Sustainable Tourism Destination guidelines in 2016 and 2021 (Regulation of Ministry of Tourism and Creative Economy No.9 of 2021, 2021).

Jakarta, as a metropolitan city (population of more than 10 million people), is one of Indonesia's top three international tourist arrivals. It offers various tourist attractions from culture (historical heritage objects), nature (island resorts), and man-made (MICE, events, et cetera) tourism. Aware of environmental degradation such as air pollution, emissions, and others, Jakarta emphasizes its vision and mission to become a safe, healthy, smart, civilized, and prosperous city, developing sustainable urban infrastructure and strengthening the environment-carrying capacity for the community as well as visitors (Communication, Information and Statistics Office of DKI Jakarta, 2022). Jakarta's vision and mission are coherent with SDGS 11 Sustainable Cities and Communities, and in line with the Ministry of Tourism and Creative Economy's strategic planning, to enhance tourism sustainability by providing a qualified tourism product as a competitive advantage. One of the prominent tourist areas in Jakarta is the Jakarta Old Town Area, which is in West Jakarta, where many historical buildings and museums can be explored. Not only well known for its heritage area, but it has become the center of economic activities and a crossing border area between West Jakarta and Central Jakarta. In terms of tourism perspective, Jakarta Old Town Area has ranked number four as the most visited tourist area, with five million visitors in 2019 and more than one million in 2020. In conjunction with the massification of tourists in KTA and the substantial numbers of traffic in this area, it would likely endanger the heritage sites by jeopardizing the environment and sustainable city of Jakarta and negatively impacting the community (Pinto da Silva et al., 2019).



Figure 1. LEZ Old Town Area Source: (a) ITDP, 2022 (b) Google Maps, 2023

Before the revitalization program in 2021, Jakarta Old Town Area was surrounded by unorganized street vendors and traffic congestion, which produced emissions from modes of transportation across the border of this area, such as cars, motorcycles, public transportation, and many others, which caused air pollution and damaged the heritage area. The air pollution standard index around this area was at level 58 with a category average. Nonetheless, Jakarta Old Town Area received negative visitor reviews through the media platform TripAdvisor, in terms of the street vendors, safety, hygiene, traffic congestion, parking violation, chaotic visitor management, vandalism, abandoned historical building, et cetera. These have caused unpleasant experiences for tourists. Therefore, on 8 February 2021, the Jakarta Old Town area was designated by the Jakarta Provincial Government as a low emission zone (LEZ) area (see figure 1). They also issued policy through Governor's Regulation Number 90 of 2021 concerning low-carbon development plans for climateresilient areas (2021), making this area a low-emission area to reduce pollution levels and increase the comfort of visitors as well as preserve the heritage buildings. Europe initially implemented LEZ policy as a form of Access Restriction (AR) and it is said as one of the most consistent and proficient tools for Travel Demand Management (TDM) measures (Ku et al., 2020). The LEZ regulation in Jakarta is the implementation of the Presidential Regulation Number 61 of 2011 concerning the National Action Plan for Reducing Greenhouse Gas Emissions (2011). LEZ is also stated in the document of Jakarta Regional Spatial Plan 2030.

It is undeniable that sustainable areas are needed for the development of sustainable destinations through sustainable transportation systems (Raharjo et al., 2022). Additionally, the United Nations has published a document called New Urban Agenda, which stated the shifting paradigm in a more scientific manner, such as standards and principles for managing and improving urban areas through implementation of one of five pillars: policies and regulations (UN-Habitat, 2020).

Amongst 17 SDGS, Goal 11 of Sustainable Cities and Communities is highlighted by the Government of Jakarta Province and clearly stated in Special Capital Region of Jakarta Regulation No. 90 of 2021 about LEZ development plan for Climate Resilient (2021). SDGS agenda has become the topic of many researches with diverse perspectives on sustainable tourism, such as cultural and sustainable tourism, sustainable travel behavior, and big data in smart cities (Agrawal et al., 2022). A motivation that influences tourist behavior toward satisfaction (López-Sanz et al., 2021).

In Indonesia, particularly Jakarta, SDGS 11 is implemented by enacting the Low Emission Zone (LEZ) policy. LEZ is a form of restriction of motorized vehicles in an area with certain conditions. The purpose of LEZ is to reduce the level of emissions to improve air quality and the protection of cultural heritage buildings in the Jakarta Old Town Area. LEZ policy allows pedestrians, cyclists, public transportations and vehicles with special stickers labeled low-emission to pass. LEZ itself has been applied in various cities in the world, such as London–United Kingdom, Brussels–Belgium; and Haifa–Israel. It also has been experimented in the Kota Tua Area (KTA), a historical tourist area, as part of Jakarta Indonesia. Three studies showed that LEZ acceptability is shaped by the personal and social norms that can cause social acceptance and behavioral change as it is associated with environmental concerns of younger and wealthier travelers (Kowalska-Pyzalska, 2022; Ku et al., 2020; Rizki et al., 2022).

Past research regarding SDGS has been taken since it was declared; however, studies on the relationship between SDGS and tourism remain lacking. Policymakers have to keep initiating the voluntary adoption of new practices by tourism stakeholders contributing to the SDGS. Tourism stakeholders cannot fulfill all the 17 SDGS through their actions and need stakeholders collaboration (Boluk & Rasoolimanesh, 2022; Rosato et al., 2021). Among all SDGS, the interest in the smart cities concept came into the spotlight in favor of SDGS 11. It is believed that smart cities may improve quality of life (Leidner & Percivall, 2022), and keep focusing on reducing environmental emission. Since Jakarta has categorized itself as a Smart City, the brand is strongly related to any acts toward SDGS 11 and LEZ policy. Based on a preliminary survey in November 2022, it was found that the implementation of LEZ policy was not as easy as its plans and yet properly executed. Many cases, such as cars and motorcycles with no special stickers, are still allowed to enter the area, and illegal parking still occurs. Most studies regarding LEZ can be found in the area of transportation or environment, unlikely in the case of visitor satisfaction and tourism marketing.

Visitor satisfaction has been seen as an emotional or cognitive response and precipitable value of visitors that refer to a certain focus, such as expectation, product, and experiences. The response occurs at a particular time, pre, during, and after consumption, and there is always a general pattern (Giese & Cote, 2000; Kyriakaki & Kleinaki, 2022). The degree of social demographic characteristics influence tourist satisfaction (Huete-Alcocer et al., 2019). The visitors play an essential part in carbon emissions with their behavioral intention. In regards to SDGS toward tourist satisfaction, a study showed that implementing SDGs in features and factors of a tourist destination directed to tourist satisfaction (Yu et al., 2021) accompanied by empathy with nature and perceived environmental responsibility and the emotional factors that impact low-carbon

tourist behavior, which may lead to satisfaction (Chen & Cheng, 2023; Wu et al., 2023). A low-carbon attitude and policy reward were inherent challenges with SDGS, but both can regulate visitor behavior. Visitor behavior can be traced using big data in marketing from the both tourism and non-tourism sectors (Istanto et al., 2023).

Based on the above issues of SDGS 11, LEZ and visitor behavior, this research identified opinions about the execution of SDGS 11 and LEZ, the level of visitor satisfaction after the policy enactment, and how the implementation can influence tourist satisfaction level. Thus, the purpose of this research is to evaluate the implementation of SDGS 11 and LEZ policy in KTA, to recognize the level of tourist satisfaction when visiting KTA after SDGS 11 and LEZ policy was implemented, and to recognize the contribution of SDGS 11 and LEZ policy in KTA toward tourist satisfaction.

METHODOLOGY

Research Framework and Hypotheses

This research deliberated SDGS 2023, particularly Goal 11 and the implementation of LEZ policy, as a pilot project of SDGS, toward tourist satisfaction. It can be seen in the thinking framework that indicates the link between those variables (see figure 2). Therefore, as the implementation of SDGS 11 and LEZ policy toward tourist satisfaction are the issues, the proposed hypothesis is as follows:

Hypothesis 1 (H₁) : SDGS 11 and LEZ policies significantly affect tourist satisfaction

Hypothesis 2 (H₂) : SDGS 11 partially impacts tourist satisfaction Hypothesis 3 (H₃) : LEZ policy partially influences tourist satisfaction



Figure 2. Framework Thinking

Source: Giese and Cote, 2000; Government of DKI Jakarta, 2021; and UNWTO, 2015

Research Methods

This research is based on a descriptive quantitative using primary data from a questionnaire used on a purposive sample of tourists aged 18 and above who are the repeat visitors of Kota Tua Jakarta (see table 1). Different items of construct on the questionnaire were based on the literature review. The 100 questionnaires in Google Forms were distributed from November 2022 until January 2023, which implies a sampling error of 10%.

Table 1. Technical details of the study

	2
Sample	Visitor over 18 years, a repeater at least once.
Location	Kota Tua Jakarta
Fieldwork	November 2022 to January 2023
Sample size	100 valid questionnaires
Sample design	A structured questionnaire, anonymous survey, Google Form.
Source: Author process	ing result, 2023

As a result of this study, the questionnaire consisted of three constructs with a total of 31 items: eight for SDGS 11 (UNWTO, 2015); fourteen for LEZ (Government of DKI Jakarta, 2021); and nine for satisfaction (Giese & Cote, 2000), as seen in table 2.

Table 2.	Scale of the	model's construct	
			_

Constructs and Items	Source of Adoption				
SDGS 11					
1. I declare KTA as a safety zone.					
2. I experienced a convenient tourist spot in KTA.					
3. I find KTA resilience against disaster.					
4. I consider KTA an inclusive urban area.	UNWTO(2015)				
5. I believe KTA will be a sustainable area.	01000 (2013)				
6. I find that the cultural and natural heritage in KTA is well preserved.					
7. I experienced the affordability of KTA.					
8. I think KTA is accessible to any visitor.					
LEZ Policy					
1. I experienced an integrated public transportation system.					
2. I face a better traffic management transformation.					
3. I understand the reason behind the limitation of vehicles.					
4. I enhance the use of the bicycle in KTA.					
5. I am aware that cycling is good for my health.					
6. I enhance the use of pavement to enjoy KTA.					
7. I encourage others to walk around the area.	Government of DKI				
8. I motivate people to appreciate the cultural and natural heritage.	Jakarta (2021)				
9. I respect cultural and natural heritage.					
10. I promote public transportation usage.					
11. I encourage people to use private cars less.					
12. I urge the visitor to do an emission test in their vehicle.					
13. I ask others to put a Low Emission sticker on their vehicle.					
14. I encourage visitors to park their cars in the parking space provided.					
Visitor Satisfaction					
1. I am excited when visiting KTA.					
2. I experienced similar or a beyond expectation experience when visiting	Giese and Cote (2000)				
KTA	Grese and Cole (2000)				
3. I find a low emission zone is impactful.					

Constructs and Items	Source of Adoption
4. I have had a memorable experience in KTA.	
5. I am happy with the green infrastructure in KTA.	
6. I like the tourist facilities.	
7. I have a good impression of KTA.	
8. I chose KTA to be revisited.	
9. I experienced the uniqueness of KTA.	
Source: Giese and Cote, 2000; Government of DKI Jakarta, 2021; UNWTO, 2015	

The data was collected through personal surveys. All questionnaire items use the same 5-point Likert-type scale, where 5 = strongly agree and 1 = strongly disagree. A pretest of this questionnaire was performed on 10 people who visited KTA at least twice and aged over 18 years, to evaluate where the scale was well-constructed. In the end, all questions were valid as all r counts were higher than the r-table. The construct was reliable since all values of Alpha Cronbach of each variable were higher than the significance of 0.5 of the two-tailed test. The mean of each collected data is calculated, then placed within an interval score of 0.8 and interpreted as follows in table 3.

Table 3. Scoring and interpretation

Statement		Intorvol	Interpretation			
options	Value	score	SGDs Goal 11	LEZ Policy	Tourist Satisfaction	
Strongly disagree	1	1.00-1.80	Highly	Very poorly	Strongly	
			incompatible	executed	unsatisfied	
Disagree	2	1.81-2.60	Incompatible	Poorly executed	Unsatisfied	
Unsure	3	2.61-3.40		Unsure		
Agree	4	3.41-4.20	Compatible	Well Executed	Satisfied	
Strongly agree	5	4.21-5.00	Highly	Very well	Strongly satisfied	
			compatible	executed		

Source: Author's processing result, 2023

The data analysis used the explanatory method, multi-regression, Pearson Correlation Product Moment (PCC), and determinant coefficient analysis. The multiregression analysis used the equation of:

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \dots \beta_n X x_n + \varepsilon \qquad \dots (1)$$

With y = Visitor expectation; x1 = SDGS 11; x2 = LEZ policy; α = constanta; β = regression coefficient. PCC is used to measure the linear relationship between two or more variables that have been measured on an interval scale, and it is interpreted as follows in table 4.

Table 4.	Inter	pretation	of	R-val	ue
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R-value	Interpretation	R-value	Interpretation
R = 1	Perfect positive linear correlation	$0 > R \ge -0.4$	Weak negative linear correlation
$1 > R \ge 0.8$	Strong positive linear correlation	$-0.4 > R \ge -0.8$	Moderate negative linear correlation

R-value	Interpretation	R-value	Interpretation
$0.8 > R \ge 0.4$	Moderate positive linear	-0.8 > R > -1	Strong negative linear
	correlation		correlation
0.4 > R > 0	Weak positive linear	R = -1	Perfect negative linear
	correlation		correlation
$\mathbf{R} = 0$	No correlation		
Courses Coursell a	and Casesaull 2019		

Source: Creswell and Creswell, 2018

The coefficient of determination is used to explain how much the variability of one or more factors are caused by their relationships to another factor. The R-square (R2) is represented as a value between 0.00 and 1.00 or 0% to 100%.

FINDINGS AND DISCUSSION

An interpretation of the mean score was performed to examine each variable studied. The result showed that the implementation of SDGS 11 in KTA (see table 5) has a score of 4.31, which means the enactment was compatible with the target of SDGS 11. SDGS 11 is well translated into action to make the city and community sustainable since inclusive and accessible, green, and public spaces are developed in KTA (UNWTO, 2015).

 Table 5. Perception of SDGS 11 Implementation

No.	Items	Mean Score	Interpretation
1.	I find KTA resilience against disaster.	4.59	Highly compatible
2.	I find that the cultural and natural heritage in KTA are	4.54	Highly compatible
	well-preserved		
3.	I believe KTA will be a sustainable area	4.44	Highly compatible
4.	I experienced the affordability of KTA	4.40	Highly compatible
5.	I think KTA is accessible to any visitor.	4.26	Highly compatible
6.	I experienced a convenient tourist spot in KTA	4.22	Highly compatible
7.	I consider KTA an inclusive urban area	4.08	Compatible
8.	I declare KTA as a safety zone	3.98	Compatible
	Average	4.31	Highly compatible

Source: Author's processing result, 2023

The statement "I find KTA resilience against disaster" was the highest item with a score of 4.59. It means that visitors feel the area is vital in a vulnerable situation and durable against any condition. Resilience is increasingly recognized as important for the long-term sustainable development of tourism destinations (Koens et al., 2018). The challenge of facing uncertainty and unpredictability requires various approaches to ensure that people remain to have a productive as well as prosperous life. Therefore, the ability to adapt, transform, persist are fundamentally important for sustainable life.

On the other hand, the statement "I declare KTA as a safety zone" was the lowest point, with a score of 3.98. It indicated that the safety of the area needs to be improved. Safety in tourism may lead to perceived risk and uncertainty of destination, and end up with perception and intention to visit (Zhou et al., 2021). Destination safety and security are essential factors to be considered by tourists when deciding to travel. Safety is emphasized in stable and thorough conditions, such as protection from injury or danger during tourism

activity (Zou & Yu, 2022). In KTA, tourists likely assume that safety needs to be improved more due to street beggars, pickpockets, or accidents caused by heavy traffic movement.

Regarding LEZ policy (see table 6), the execution has a score of 4.55. It can be understood that according to visitors, the implementation of LEZ policy in KTA was very well executed. This result was strengthened by the previous study about the acceptance of LEZ implementation shaped by personal norms (Rizki et al., 2022).

No.	Items	Score	Interpretation
1.	I enhance the use of the bicycle in KTA.	4.78	Very well executed
2.	I enhance the use of pavement to enjoy KTA.	4.78	Very well executed
3.	I experienced an integrated public transportation system.	4.72	Very well executed
4.	I am aware that cycling is good for my health.	4.69	Very well executed
5.	I encourage others to walk around the area.	4.66	Very well executed
6.	I motivate people to appreciate the cultural and natural	4.60	Very well executed
	heritage.		
7.	I promote public transportation usage.	4.59	Very well executed
8.	I face a better traffic management transformation.	4.57	Very well executed
9.	I respect cultural and natural heritage.	4.54	Very well executed
10.	I urge the visitors to do an emission test for their	4.53	Very well executed
	vehicles.		
11.	I understand the reason behind the limitation of vehicles.	4.44	Very well executed
12.	I ask others to put a Low Emission sticker on their	4.43	Very well executed
	vehicle.		
13.	I encourage people to use private cars less.	4.22	Very well executed
14.	I encourage the visitor to park their car in the parking	4.08	Well executed
	space provided.		
	Average	4.55	Very well executed

Table 6. Perception of LEZ Policy Execution

Source: Author's processing result, 2023

The statement "I encourage the use of the bicycle in KTA" was the highest item with a score of 4.78. It indicated that a bicycle is a suitable means when applying LEZ policy in KTA since it is considered as green transportation with zero-emission (Raharjo et al., 2022). One of the ways to enhance air quality, reduce traffic congestion, and increase health issues for the public and visitors is by using bicycles as an alternative to non-motorized vehicles. Bicycle is a highly recommended means of transportation to explore KTA, and several parking points has been suggested, as shown in Figure 3 (ITDP, 2022).



Figure 3. Bicycle Parking Points Source: ITDP, 2022

Conversely, the statement "I encourage the visitor to park their car in the parking space provided", was the lowest item with a score of 4.08. The parking zone of KTA was located at a 400 m distance from the tourist spot with a 5-10 minute walk (see figure 4). However, a lot of illegal parking areas occurred. Vehicles that inquire for vacant parking space may contribute to congestion and air pollution (Gonzalez et al., 2022). Another issue regarding illegal parking is that there are minimum to no law enforcement on illegal parking areas management and parking fees collection (Triputro et al., 2023).



Figure 4. Parking zone of Old Town Area Source: ITDP, 2022

In terms of satisfaction (see table 7), the average mean score is 4.65, which can be interpreted as a visitor who is strongly satisfied with tourist spots in KTA being a pilot project of SDGS 11 and LEZ policy implementation. This result consolidated the previous study about the positive impact of sustainable development on tourist satisfaction (Yu et al., 2021). The highest mean score of 4.82 belonged to the statement 'I have a good impression of KTA', which means that KTA has a positive image in visitors' minds. The impression about the performance of LEZ policy may bring success and must now move to zero-emission mobility (Müller & Le Petit, 2019). Whereas the lowest mean score of 4.26 was 'I like the tourist facilities in KTA'. It can be interpreted that facilities provided in the area were less strongly satisfying for tourists. Amenities, such as F&B, tour guide services, and bicycle rental, have to be improved to fulfill visitor expectation as those amenities are an important part of the travel experience and tourist satisfaction (Huete-Alcocer et al., 2019).

Table 7. Perception of Visitor Satisfaction in KTA

No.	Items	Mean Score	Interpretation
1.	I have a good impression of KTA.	4.82	Strongly satisfied
2.	I will visit KTA again in the future.	4.82	Strongly satisfied
3.	I am excited when visiting KTA.	4.78	Strongly satisfied
4.	I experienced similar or beyond my expectations when	4.76	Strongly satisfied
	visiting KTA		
5.	I find a low emission zone is impactful.	4.68	Strongly satisfied
6.	I have had a memorable experience in KTA.	4.67	Strongly satisfied
7.	I am happy with the green infrastructure in KTA.	4.55	Strongly satisfied
8.	I experienced the uniqueness of KTA.	4.52	Strongly satisfied
9.	I like the tourist facilities.	4.26	Strongly satisfied
	Average	4.65	Strongly satisfied

Source: Author's processing result, 2023

To analyze the link between variable studies, multiple regression analysis was taken using MS Excel and SPSS 29. The result shows as follows:

Table 8. Multiple regression

	Coefficients						
Model		Unstandardized C	oefficients	Standardized Coefficients	t	Sig.	
	_	В	Std. Error	Beta			
1	(Constant)	2.555	.412		6.205	<.001	
	SDGS 11	.179	.084	.218	2.136	.035	
	LEZ	.310	.093	.338	3.320	.001	

a. Dependent Variable: Satisfaction

Source: Author's processing result, 2023

Table 9. F-test

	ANOVA"											
	Model	Sum of Squares	Df	Mean Square	F	Sig.						
1	Regression	4.950	2	2.475	14.809	<.001 ^b						
	Residual	16.210	97	.167								
	Total	21.160	99									

a. Dependent Variable: Satisfaction, b. Predictors: (Constant), LEZ, SDGS Source: Author's processing result, 2023

Table 10. Determinant Coefficient

Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate						
1	.484 ^a	.234	.218	.409						
a. Predictors:	(Constant), LEZ, SI	DGS								

Source: Author's processing result, 2023

Table 11. Pearson Correlation

Correlations								
		SDGS 11	LEZ	Satisfaction				
Satisfaction	Pearson Correlation	.383**	.445**	1				
	Sig. (2-tailed)	<.001	<.001					
	Ν	100	100	100				

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Author's processing result, 2023

The model of multiple regression can be seen in the equation below:

$$y = 2.555 + 0.179x_1 + 0.310x_2 \qquad \dots (2)$$

The constant value of 2.555 (see table 8) indicated that if SDGS 11 as variable X1 and LEZ policy as variable X2 are zero or null, then satisfaction is variable Y valued at 2.555. If SDGS 11 and LEZ policies were not implemented in KTA, then visitors experienced dissatisfaction. Nowadays tourists are searching for an experience that has a sustainable perspective (Huete-Alcocer et al., 2019; Yu et al., 2021; Zhou et al., 2021) to fulfill their expectations. The regression coefficient of variable SDGS 11 was 0.179, indicating that every increase in one value of SDGS 11, will impact the value of satisfaction of 0.179 (significant level α of 5%). A positive sign means that there is a confident impact of SDGS 11 on visitor satisfaction. Whereas, the regression coefficient of the variable LEZ policy was 0.310, which meant that every increase in one value of 5%). A positive sign indicated that there is an optimistic impact of LEZ policy toward satisfaction.

Then, three hypotheses were tested by using Coefficient and ANOVA. The significant value for both SDGS 11 and LEZ policy simultaneously toward visitor satisfaction is 0.001 (see table 9). The significance of 0.001 is less than 0.05 as it is the criteria to accept the hypothesis. It meant that the hypothesis of H_1 was accepted. Both SDGS 11 and LEZ policy in KTA simultaneously influenced visitor satisfaction.

The significant value for SDGS 11 toward satisfaction was 0.035. It was less than the criteria of 0.05. The significant value of LEZ policy toward satisfaction was 0.001. It

was also less than the criteria of 0.05. The hypothesis of H_2 and H_3 were accepted. Each SDGS 11 and LEZ policy in KTA partially has been proven, affecting visitor satisfaction.

The correlation between both SDGS 11 and LEZ policy in KTA with visitor satisfaction resulted in an r-value of 0.484 (see table 10). It indicated a moderate strength correlation with a positive direction between both variables SDGS 11 and LEZ policy towards satisfaction. Individually, as seen in table 11, SDGS 11 and satisfaction had an r-value of 0.380 while LEZ policy and satisfaction had an r-value of 0.445 (with a 2-tailed significance value of 0.01). There was a weak positive correlation between variables SDGS 11 and satisfaction but there was a moderate positive linear correlation between LEZ policy for satisfaction.

The involvement of SDGS 11 and LEZ policy toward visitor satisfaction is an R-square value of 0.234, which means that 23,4 percent of visitor satisfaction in KTA was contributed by the implementation of SDGS 11 and LEZ policy, the rest of 76,6 percent was predicted by other factors such as land use reform, improvement of public transit, cycling, walking facilities, discounts, subsidies, tax credits that can be studied in future research (see figure 5). Those further factors of LEZ policy implementation could be more successful with equitable design and link to other strategic components (ITDP, 2023).



Source: ITDP, 2023

CONCLUSION

It can be concluded that the realization of SDGS 11 has already been highly compatible with its target. It is also found that the LEZ policies are very well executed so that they can be applied to other tourist areas in Jakarta in detecting the level of visitor satisfaction after implementation. Then, it can be concluded that visitors are strongly satisfied with the implementation and they may revisit KTA in the near future and recommend the destination to others. Based on the finding, there is a proposed recommendation for the future execution of SDGSs and LEZ policy in Jakarta. First, as the safety aspect in KTA is the lowest point, it is recommended to put more effort into planning safety systems into actions such as CCTV placement in an unsafe area, and regular patrol from authorities and law enforcement for the outlaws. Secondly, regarding the parking space, it is suggested that the authority exterminate illegal parking by inviting communities to take part in parking attendance. Third, concerning tourist facilities as a necessity for tourists, it is recommended that authorities enhance the quality of facilities and services toward satisfaction.

The study has some limitations. Data collection was done post-pandemic when the number of visitors just slowly increased. Within a limited period of time, this study captures visitor satisfaction. There is also a lack of previous studies about the implementation of LEZ after Covid-19 that can be used as references. Moreover, the research focuses only on repeat visitors and the impact of SDGS 11 and LEZ. It has not yet considered other factors that may contribute to visitor satisfaction and can be the topic for future studies.

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