

# Sustainable Tourism Development'S Effect on Land Use in the Coastal Area of Surabaya City

Kartika Eka Sari<sup>1</sup>, N Sari<sup>2</sup>

Received: 21<sup>st</sup> May 2019      Accepted: 1<sup>st</sup> April 2020

**Abstract:** Surabaya is the capital city of East Java Province that develops coastal tourism activities. Based on Surabaya City RTRW for 2014-2034, the development of coastal tourism in Surabaya is in Bulak District. The district is designated as a development unit III of Tambak Wedi that directed as marine beach tourism. Kenjeran Tourism has a number of tourist destinations including Kenjeran Beach, THP Kenjeran, Kenjeran Park, Bulak Park, Surabaya Park, and Kenjeran Bridge. The development of coastal tourism resulted in many changes in land use and building's function, mainly affecting the type of land use settlement because people tend to use the front of the house for trading activities and services. This study aims to determine the effect of tourism development on land use in the Kenjeran Area. This study uses overlay analysis and PLS (Partial Least Square) analysis. The results of this study found that tourism development variables affect land use change by 92.2%. Changes in land use are dominated by vacant land and supporting facilities for tourism activities such as trade and services, recreation, tourism, and green open space.

*Keywords:* Tourism, land use, coastal area

## INTRODUCTION

The tourism sector is one of the mainstays in improving the Indonesian economy, both as economic activities that can generate employment and increase people's income. The tourism sector is relied on to increase state revenues, regional income, and foreign exchange. Thus, the tourism sector needs to be well planned, systematic and comprehensive both locally, regionally and even nationally while maintaining sustainable development (Abdillah, 2016). Many developments occur due to tourism activities but the most interesting is the high growth of tourist accommodation's business in limited land (Miswanto & Safaat, 2018). Limited land doesn't inhibit the development of tourism business, because according to (Inskeep, 1991), required basic component of tourism is accommodation. Accommodation is all facilities related to services when tourists visit tourist destinations. The development of these tourist accommodations led to the conversion of coastal land functions as explained by (Miswanto & Safaat, 2018) that the development of the tourism industry has a tangible impact on coastal land to become a accommodation facilities that is growing rapidly each year to reach 80% of the coastal area.

According to (Mulyana & Ayuni, 2017) in his research using PLS (Partial Least Square) to evaluate the relationship between service quality, destination image with satisfaction and intention to revisit, service quality has a more dominant influence on satisfaction and intention

---

<sup>1</sup> Departement of Urban and Regional Planning, Brawijaya University, Malang 65145, Indonesia

Korespondensi: [kartika\\_plano@yahoo.co.id](mailto:kartika_plano@yahoo.co.id)

to revisit and it leads the management to focus on the factors that increase the quality of services such as recreational facilities provided, management of recreation areas, provision of informal vendors, reputation of recreation areas, comfort of recreation areas and officers who serve visitors. Same research results are also showed by (HERAYANTHI W. et al., 2016), that tourist's satisfaction has a positive influence on the intention to revisit. So it can not be avoided, that the empty land around the tourism destination will turn into facilities that form the quality of tourism services

According to data recorded at the Kenjeran Beach Service Technical Implementation Unit, the number of tourists in 2012 was 399,588 people and increased to 529,588 people in 2017. The increase of tourists was followed by the development of facilities and tourism in Kenjeran, the increase in facilities and infrastructure affected the activities of settlements in Kenjeran, so that it would have a significant effect on the land use of the Kenjeran, especially in Bulak District. Since the coastal tourism area has been established in Kenjeran, the remaining open space is only in the form of a sidewalk, but local residents use that open space for trading (Poedjioetami, 2017).

The greatest pressure on land use change occurred at the begging of tourism development. The developmet of tourism accommodation such as hotels and resorts can increase up to 30% and make tourism activities as a major driving force for land use change (Atik et al., 2010). Land use change can be identified by overlaying spatial land use data in series and processed with analysis on the GIS system, so that land use change aspects by the development of tourism activities. According to (Rudi Biantoro, 2014), land use change in Tourism Area is caused by the development of tourist activities and facilities dan can be identified using land use series map.

According to (Akbar et al., 2019), Kenjeran tourism area has a land suitability value included in the S3 category with a capacity of 2,580 people per day for 9 hours. This category shows that the rapid development of tourism has many limiting factors that need attention. Since the establishment of the Bulak District as a tourist attraction for Kenjeran Coastal Tourism, tourism support activities also began to develop in the Bulak District. Based on Surabaya City Spatial Planning, Bulak District is located in UP (Development Unit) III Tambak Wedi with main activity function for marine tourism with the development of natural and artificial tourism and fishing settlements (Ananda & Koswara, 2018). Some of the main factors that affect the attractiveness of coastal tourism in the Bulak District include integration between attractions, the availability of tourist service facilities, accessibility and government policy support (Ananda & Koswara, 2018).

Bulak District is one of the districts in the geographical area of Surabaya City and is located in the area of North Surabaya. According to the District of Bulak's Figures In 2017, the District of Bulak has an area of 2% of the total area of Surabaya, which is equal to  $\pm 6.72 \text{ km}^2$ . Bulak District has a population of 42,978 people with a population density of 7,144 people /  $\text{km}^2$ . The area, population and highest population density are in Bulak District. Bulak District is bordered by several other areas including the north of Kenjeran District, east of the Madura Strait, south of Mulyorejo District, and West of Tambak Sari District.

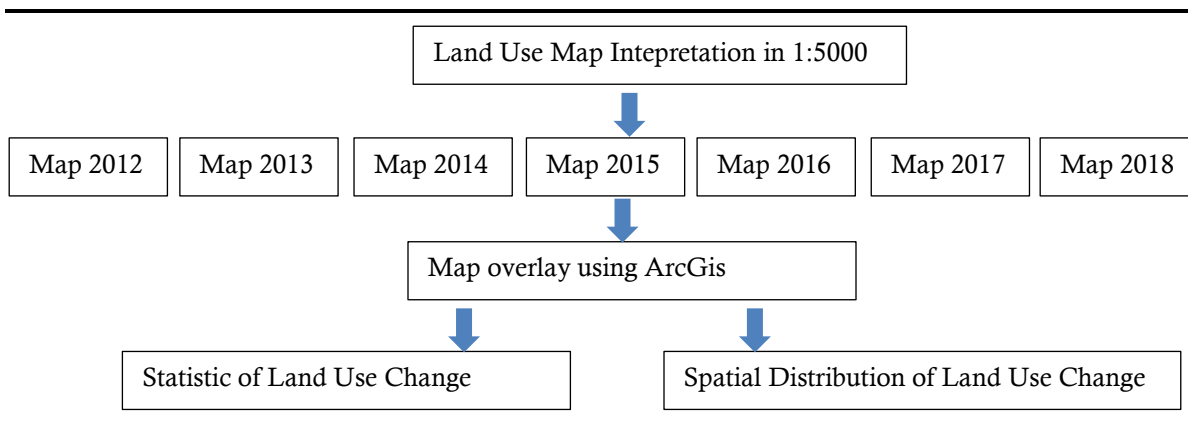
The number of immigrants in the District of Bulak is unstable, there are increases and decreases. The increase occurred in 2013, 2014 and 2017 while the decline occurred in 2015 and 2018. The instability of the number of migrants in Bulak Subdistrict was because in 2012 it was the beginning of tourism in North Surabaya which was carried out by tourism development plans by the central government of Surabaya. So that many residents wished to move to Bulak District to find new jobs. Most of the residents who chose to move were from Madura Regency because Bulak District bordered the Madura Strait and are close to Madura Regency. Coupled with the ease of accessibility of Madura Island to Bulak District which is supported by the Suramadu

Bridge (Surabaya-Madura) and was inaugurated in 2009. Bulak District, which was established as a development unit III of Tambak Wedi and its development was directed as marine tourism / beach, making the district has a number of tourist destinations and tourist facilities including Kenjeran Beach, THP Kenjeran, Kenjeran Park, Bulak Park, Surabaya Park, Kenjeran Bridge, Colorful, and Bulak Fish Center (SIB) (Khomenie & Umilia, 2013).

## METHOD

This study was conducted in Bulak District using 2 analysis techniques, there are comparative analysis with overlay techniques using arcgis software and PLS analysis to determine the effect of tourism on land use in Bulak District.

Changes in land use were analyzed by comparing the Bulak District land use map in 2012 up to 2018 with a scale of 1: 5000. According to (Hizkia Satria Constantine Sajow, 2016), land use components can be divided into Private Uses, Public Uses and Roads. Following are the stages of land use change analysis (Atik et al., 2010).



**Figure 1. Flow Diagram to Ildicates Land Use Change**

Second analysis is PLS (Partial Least Square) to determine the effect of tourism on land use in Bulak District. PLS is an alternative method of SEM (Structural Equation Modeling) that can be used to overcome problems in influence. The small numbers of sample and the use of reflexive indicators make PLS more suitable to be chosen compared to other analytical tools (Hussein, 2015). PLS Method using exogenous variable (independent) and endogenous variable related to tourism development consisting of 6 elements, namely Accessibility, Compatibility with Activities, Characteristics of Tourism Facilities, Social Interaction, Level of Acceptance of Local Communities on the Existence of Travelers and the Degree of Management Control (Pitana, 2009), and the endogenous variable is land use change that consists of 3 aspects, namely private use, public use and roads (Hizkia Satria Constantine Sajow, 2016).

## RESULTS AND DISCUSSION

Based on the intepretation of land use map and extensive calculation using ArcGIS 10.5, it is known that the land use of Bulak District in 2018 is as follows.

The type of land use in Bulak District in 2018 was dominated by residential, which amounted to 27.48% with an area of 1,746,962.48 m<sup>2</sup>. Whereas the second largest land use is ponds at 19.55% with an area of 1,242,352.43 m<sup>2</sup>. Other extensive land use is agriculture at

14.95% with an area of 950,567.42 m<sup>2</sup>. It is known that agricultural land in Bulak District has not changed from year to year. Then in the fourth position is the type of tourism land use of 10.47% with an area of 665,354.32 m<sup>2</sup>. And the use of vacant land every year is reduced to only 9.81% with an area of 623,861.07 m<sup>2</sup>.

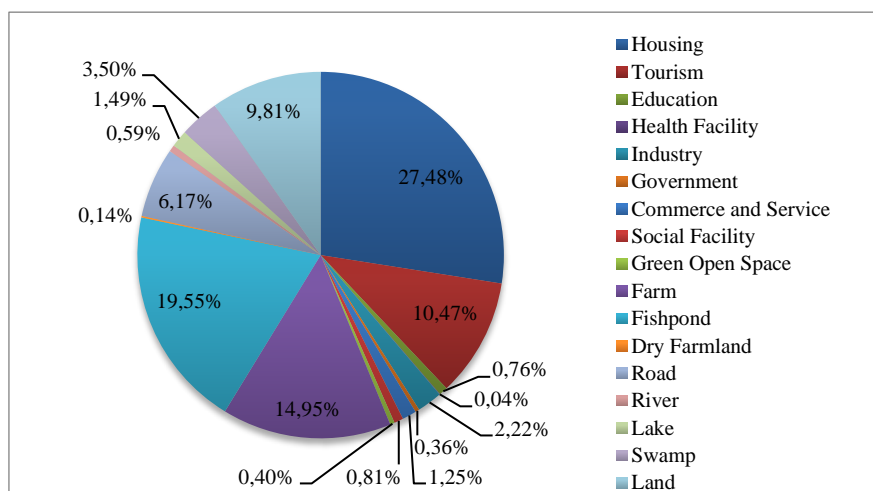


Figure 2. Land Use in Bulak District in 2018

### Changes in Land Use in 2012-2018

Changes in land use in Bulak District are known from the results of overlay analysis of land use maps using ArcGIS 10.5. The results of the overlay analysis can be seen in the following figure.

Table 1. Changes in Land Use in 2012-2018

Type of Land Use	2012-2014	2014-2016	Area (m <sup>2</sup> ) 2016-2018	Total (m <sup>2</sup> )
Residential	-8.508,44	+3.224,15	-4.027,00	-9.311,29
Tourism	0	+7.257,07	0	+7.257,07
Education	0	+6.956,05	0	+6.956,05
Health	0	0	0	0
Industry	+1.798,04	+19.105,99	+2.284,34	+23.188,37
Government	0	0	+4.683,05	+4.683,05
Trade and Services	+2.264,58	+2.321,31	+14.878,63	+19.464,52
Recreation	40.101,67	0	0	+40.101,67
Green Open Space	0	0	+25.447,31	+25.447,31
Agriculture	0	0	0	0
Ponds	0	-25.421,74	-19.186,49	-44.608,23
Plantation	0	0	0	0
Road	0	+4.687,98	+4.055,92	+8.743,9
River	0	0	0	0
Lake	0	0	0	0
Swamp	-2.009,43	0	0	-2.009,43
Empty Land	-33.646,42	-10.873,74	-25.551,01	-70.071,17

Source: Overlay, 2018

The total amount of land use change in 2014-2016 has increased by ± 7,257.07 m<sup>2</sup> and in 2016-2018 it has increased by ± 2,584.75 m<sup>2</sup> due to the development of tourism land use types and roads in coastal waters. Some land uses experience shrinkage and addition.

**Effects of Tourism Development on Land Use Change**

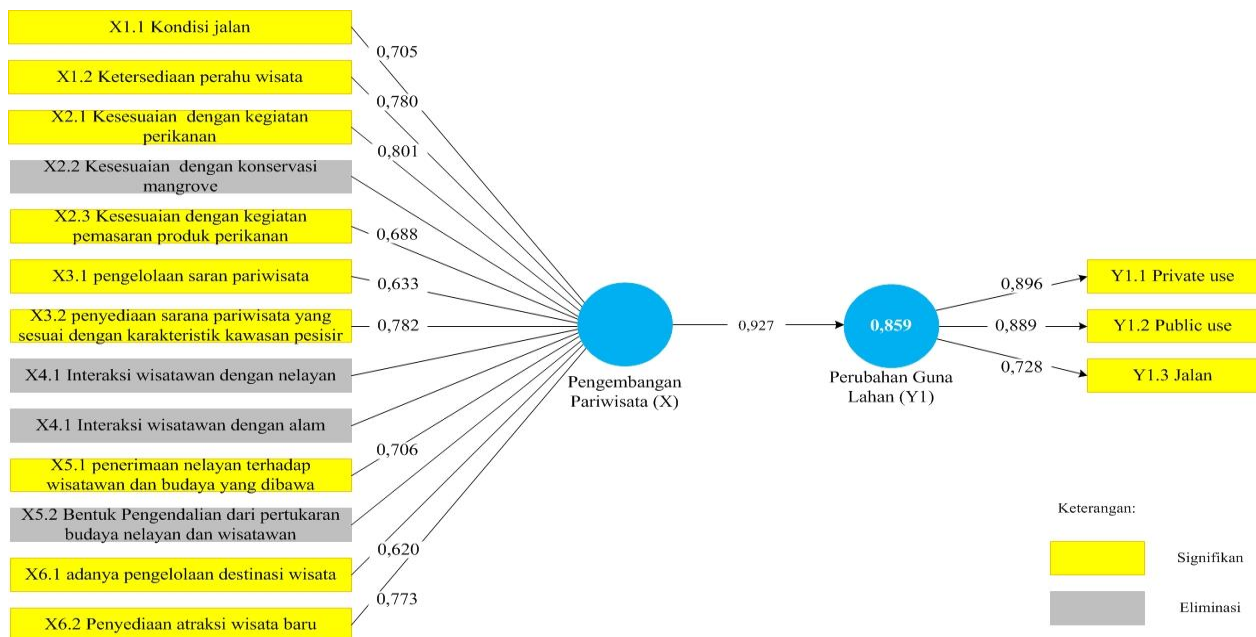
The effect of tourism development on land use change is known from the results of Partial Least Square (PLS) analysis. The data entered in the PLS is the result of a questionnaire from the perception of respondent's assessment of the effect of tourism development on land use change. The questionnaire was filled by 265 respondents who were Bulak District residents.

**Table 2. Perception of Respondent's Assessment**

Variable	Indicator	Code	Total					Average
			DA	LA	E	A	SA	
Land Use Change	Private Use	Y1.1	0 0.00%	10 3.80%	20 7.50%	103 38.90%	132 49.80%	4.35
	Public Use	Y1.2	0 0.00%	9 3.40%	21 7.90%	139 52.50%	96 36.20%	
	Jalan	Y1.3	4 1.50%	10 3.80%	91 34.30%	126 47.50%	34 12.80%	
Average Dimension							4.08	

\*Information:  
DA: Disagree, LA: Less Agree, E: Enough, A: Agree, SA: Strongly Agree

Source: Survey Results, 2018



**Figure 6. Line Chart Model**

It is known that the average land use change variable in Bulak District is in the good category in terms of community perceptions that rate agree if land use change is affected by tourism development, with an average variable or dimension of 4.08. The highest average value indicator in the land use change variable is Y1.2 (public use) and Y1.1 (private use) with values of 4.22 and 4.35 respectively, which means that the variable is strongly influenced by tourism development. Based on the results of the respondents' perceptions of assessment, it will then be analyzed using PLS analysis with SmartPLS 3.0 software. After several iterations, the path diagram model is generated as follows (Figure 6)

### *Outer Model Test*

Next is the outer model output after invalid indicators are eliminated. Output outer model is done by testing construct validity and reliability test and discriminant validity test. Construct validity is done by looking at the value of loading factor and AVE, while reliability is done by looking at the composite reliability value and cronbach alpha.

**Table 3. Construct Validity**

Variable	AVE	Code	Loading Factor	Keterangan
Tourism Development	0,524	X1.1	0,705	valid
		X1.2	0,780	valid
		X2.1	0,801	valid
		X2.3	0,688	valid
		X3.1	0,633	valid
		X3.2	0,782	valid
		X5.1	0,706	valid
		X6.1	0,620	valid
Land Use Change	0,705	Y1.1	0,896	valid
		Y1.2	0,889	valid
		Y1.3	0,723	valid

Source: Results of PLS Analysis, 2018

Based on Table 3, it is known that all values of loading factors > 0.5. This shows that the indicators used to measure dimensions are valid. Construct validity can also be seen using the AVE value. The AVE value of all variables > 0.5 means that one latent variable is able to explain more than half of the variants of the indicator in an average so that subvariables can be said to be good and valid for measuring the variables.

**Table 4. Construct Reliability**

Variable	Cronbach Alpha	Composite Reliability	Explanation
Tourism Development	0,886	0,908	Reliabel
Land Use Change	0,785	0,877	Reliabel

Source: Results of PLS Analysis, 2018

Measurements of construct reliability are done by looking at the composite reliability value and cronbach alpha. Based on table 4, it is known that the cronbach alpha value of each variable > 0.7 so that it can be said that the construct is reliable. This is also reinforced by the results of the composite reliability value > 0.7 on each variable which indicates that the construct has been reliable and can be used to measure or explain the variables that are affected.

**Table 5. Discriminant Validity**

Variable	R2	Average Variance Extracted (AVE)	Square Root Of Average Variance Extracted ( $AVE\sqrt{AVE}$ )	Explanation
Tourism Development	0,000	0,524	0,723	Good
Land Use Change	0,859	0,705	0,839	Good

Source: Results of PLS Analysis, 2018

Discriminant validity can be assessed based on cross loading measurements with constructs or comparing the value of Square Root Of Average Variance Extracted (AVE) of each construct with a correlation between other constructs in the model. If the AVE root value of each construct is greater than the value (R2), then the value of discriminant validity is said to be good. It can be seen that the AVE root which has a greater value than the correlation between constructs (R2) is a tourism development variable. The discriminant validity test can also be considered achieved and good if the AVE value is  $> 0.50$ . Based on this, the variable that has AVE root value is lower than R2 but also has an AVE value of  $> 0.5$  as in the land use change variable can be considered to have good discriminant validity. It can be concluded that all variables are considered good. The next step is to evaluate the results of the PLS with the results of the loading factor as follows.

#### Evaluation of PLS results on tourism development variables

The value of the loading factor of each indicator in the tourism development variable is used to determine the size of the contribution of the influence of the indicator on the variable of tourism development. The indicator is said to have an effect if the value of loading factor  $> 0.5$ .

**Table 6. Value of Loading Factor Indicator in Tourism Development Variables**

Variable	Code	Loading Factor	Explanation
Tourism Development	X1.1	0,705	have an effect
	X1.2	0,780	have an effect
	X2.1	0,801	have an effect
	X2.3	0,688	have an effect
	X3.1	0,633	have an effect
	X3.2	0,782	have an effect
	X5.1	0,706	have an effect
	X6.1	0,620	have an effect
	X6.2	0,773	have an effect

Source: Results of PLS Analysis, 2018

#### Evaluation of PLS Results in Land Use Change Variable

The value of loading factor of each indicator in the land use change variable is used to determine the contribution of the effect of the indicator to the land use change variable. The indicator is said to have an effect if the value of loading factor  $> 0.5$ .

**Table 7. Value of Loading Factor Indicators in Land Use Change Variables**

Variable	Code	Loading Factor	Explanation
Land Use Change	Y1.1	0,896	have an effect
	Y1.2	0,889	have an effect
	Y1.3	0,723	have an effect

Source: Results of PLS Analysis, 2018

### *Inner Model Test*

Inner model testing is use to ensure that the structural model that is built has been robust and accurate. The inner model test was evaluated using R-square (R<sup>2</sup>) for the dependent construct, stone-geisser Q-square test (Q<sup>2</sup>) for predictive relevance and Goodness of Fit (GoF).

**Table 8. Calculation of Model Feasibility**

Variable	R <sup>2</sup>	Q <sup>2</sup>
Land Use Change(R <sup>1</sup> )	0,849	$Q^2 = (1 - R1^2)$ $Q^2 = (1 - 0,859)$ $Q^2 = 0,141$

Source: Results of PLS Analysis, 2018

It is known that the value of R<sup>2</sup> is used to assess the influence of independent latent variables, with the dependent variable having a value of > 0.7. The variable land use change is categorized as a very powerful influential model with a value of R<sup>2</sup> 0.849. Furthermore, based on the calculation of Q<sup>2</sup> using the R<sup>2</sup> value, it is known that Q<sup>2</sup> has a value of 0.141 which means Q<sup>2</sup> > 0, where it shows that the model has good predictive relevance. Then in the evaluation of the inner model the last is to find the value of Goodness Of Fit (GoF). Goodness of Fit (GoF) index, used in evaluating structural models and overall measurements or feasibility test models with the following equation.

$$GoF = \sqrt{AVE \times R^2}$$

$$GoF = \sqrt{0,705 \times 0,849}$$

$$GoF = 0,773$$

GoF = 0.1 is categorized as small, GoF = 0.25 is categorized as moderate, and GoF = 0.38 is categorized as large. It is known that the model formed in the land use change variable has a GoF value of 0.774 or 77.4% which is categorized as large. This shows that the diversity of land use change variables can be explained by tourism development variables.

### *Hypothesis Test*

Hypothesis testing is done by looking at the probability values (p-value) and t-statistics. For the probability value, the p-value with alpha 5% is <0.05, whereas when using the t-table value for alpha 5% is 1.96 so the acceptance criteria for the hypothesis are t-statistics > t-table.

Based on the results of the hypothesis test in Table 9, we can know the value of the original sample (O) or the path coefficient between the variables which each shows a positive effect. In addition to this, the t-statistic value indicates a significant level on each variable > 1.96 and p-values <0.05, which means that the influence is significant and the hypothesis is acceptable.



**Table 9. The Results of Hypothesis Test**

Eksogen Variable -> Endogen Variable	Original Sample (O)	Explanation	T-Statistics (O/STDEV)	P-Values	Explanation
Pengembangan Pariwisata (X) -> Perubahan Guna Lahan (Y1)	0,927	Have a positive effect	100,98	0,000	Have a significant effect

Source: Results of PLS Analysis, 2018

### Hypothesis 1 Effect of Tourism Development on Land Use Change

The effect of tourism development on land use change can be illustrated by the equation:

$$\eta_1 = Y_1\xi_1$$

$$\eta_1 = 0,927\xi_1$$

This shows that tourism development variables contribute to influencing  $\eta_1$  (land use change) with a contribution of 92.7% while the remaining 8.3% is influenced by other variables not discussed in this study.

## DISCUSSION

The land use which experiencing depreciation each year are empty land and ponds. This is because many empty land and dry ponds are converted into built-in land uses. Other land uses such as residential, tourism, education, government, recreation, open green space, roads and swamps have increased, decreased or have a fixed area. Types of residential land use experience shrinking and growth. The occurrence of shrinkage of land use in residential areas is because there are several houses that are used as places of trade and services primarily housing around the tourism area, namely in Kenjeran Village and Sukolilo Baru Village. It has been known that in the last 7 years trade and services have increased by an area of  $\pm 33,104.43$  m<sup>2</sup> with changes in the use of land originally housing to trade and services covering an area of  $\pm 30,204.62$  m<sup>2</sup>. At the beginning of 2014 evictions took place along the road to the coast of Kenjeran, precisely in the area of Bulak Sub-district covering an area of  $\pm 13,521.30$  m<sup>2</sup>, so that the total change in type of land use for trade and services was  $\pm 19,583.13$  m<sup>2</sup>. Land use which increase every year is an industry with a total addition of  $\pm 23,188.37$  m<sup>2</sup>. This was due to the fact that in Bulak District, the Bulak Sub-district was primarily an industrial area and most of the population worked as factory laborers. According to the Bulak Urban Monograph Report, the number of people working as factory workers in 2017 was 9,993. Tourism land use growth in 2014-2016 around  $\pm 7,257.07$  m<sup>2</sup> because there was the construction of the Kenjeran Bridge in Kenjeran Sub-district. The type of educational land use experienced growth in 2014-2016 as a result of the construction of the Surabaya 52nd Junior High School covering an area of  $\pm 6,956.05$  m<sup>2</sup> located in Bulak Sub-district. The land use for the government experienced growth in 2016-2018 due to the construction of the Surabaya-Madura Regional Development Agency (BAPEL BPWS) covering an area of  $\pm 4,683.05$  m<sup>2</sup> located in Kedung Cowek Sub-district. The type of recreational land use experienced growth in 2012-2014 with an area of  $\pm 40,101.67$  m<sup>2</sup>. Because of the construction of fishing ponds located in the Sukolilo Baru Sub-district. The vast increase in open green space occurred in 2016-2018, namely  $\pm 25,447.31$  m<sup>2</sup> due to the construction of Suroboyo and Taman Bulak Parks located in Bulak Sub-district. The type of land use for roads has increased in 2014-2016 and in 2016-2018 with the total number of additions being  $\pm 8,743.90$  m<sup>2</sup> due to road construction in Bulak and Kenjeran Sub-district. Swamp land use experienced a decline in 2012-2014 because it was converted into trade and service land use of  $\pm 2,009.43$  m<sup>2</sup> located in Sukolilo Baru Sub-district. Land use ponds experienced shrinkage in the year 2014-

2018 covering an area of  $\pm 44,610.34$  m<sup>2</sup> because it was converted into built-in land use. Empty land experiences depreciation every year with a total depreciation of  $\pm 70,071.17$  m<sup>2</sup> because it is converted into built-in land use which is spread across all Sub-district in Bulak District. Types of land use that do not experience changes in land use include health, rivers, lakes, agriculture and plantations.

In 2012-2014 the change in land use amounted to 1.28% with the type of land use that experienced the biggest change was the use of recreational land covering  $\pm 40,101.67$  m<sup>2</sup>, then in 2014-2016 it decreased to 0.72% with the type of land use experiencing the biggest change was the use of industrial land covering an area of  $\pm 19,106.09$  m<sup>2</sup>, and in 2016-2018 an increase of 1.00% with the type of land use that experienced the greatest change was the use of  $\pm 25,447.63$  m<sup>2</sup> of green space. This is due to an increase in population over the years experienced by the Bulak District. Bulak District experienced an increase in population from year to year, from 2012 to 2018 there was an increase in the population of Bulak District by 20,765 people. It is known that currently in 2018 the population reaches 43,784 people. The large number of residents in Bulak Subdistrict makes life needs of the community increasingly diverse and the desires of each individual also change, such as the need for shelter, employment, entertainment, and other needs. In addition to these factors the development of tourism in the Bulak District also cause a lot of changes in land use. This can be seen from the results of the overlay analysis which states that most of the changing land use is a type of land use supporting tourism activities such as recreational land use, green space, trade and services, and tourism. Some of the changes in land use are mostly located around the Kenjeran tourist sites so it can be concluded that the development of tourism in the District of Bulak can affect changes in land use around it.

It can be explain that tourism development has a significant contribution in land use change in Coastal Area of Surabaya. This can be confirmed by the most significant changes in land use in Kenjeran District occurred during 2012 – 2014 when the Kenjeran tourist destination was first established by the Surabaya City Government, where land for tourism destinations increased by 7,257.07 m<sup>2</sup> and land for recreation increased by 40,101.67 m<sup>2</sup>. Overall, the change in land use reduced the area of vacant land in Kenjeran by 70,071.17 m<sup>2</sup>. The significant reduction in empty land needs to be considered given that 92.7% is influenced by tourism activities in Kenjeran, so that in the future it is necessary to give attention to the development of tourism facilities in Kenjeran so that the impact of tourism on land use has a positive influence on the socio-economic community in Kenjeran

## CONCLUSION

The most significant change in land use occurred in the period of 2012 - 2014 amount 81,117.11 m<sup>2</sup>. During 2012 – 2014, the most effected land use is empty land that changed into tourism facilities. the most significant land use change since the development of KOta Surabaya coastal tourism in Bulak District was trade and services (30,204.62 m<sup>2</sup>), recreation (7,257.07 m<sup>2</sup>), and green open space (25,447.63 m<sup>2</sup>). Based on PLS analysis, Tourism development variables contribute to land use change in the Kenjeran Coast Coastal Area with a contribution of 0.927 or 92.7%.

## REFERENCE

- Peraturan Daerah Kota Surabaya. 2014. Rencana Tata Ruang Wilayah Kota Surabaya Tahun 2014-2034. Nomor 12 Kecamatan Bulak Dalam Angka Tahun 2012-2018
- Akbar, Z. F., Rudianto, R., & Isdianto, A. (2019). Analysis of carrying capacity and land suitability in Kenjeran Coastal Area, Bulak Sub Regency, Surabaya City, East Java. *Jurnal Pendidikan Geografi*, 24(1), 52–66. <https://doi.org/10.17977/um017v24i12019p052>

- Ananda, F. A., & Koswara, A. Y. (2018). Faktor-Faktor yang Mempengaruhi Integrasi Daya Tarik Wisata (DTW) di Kawasan Wisata Bulak Surabaya. *Jurnal Teknik ITS*, 7(2), 95–99. <https://doi.org/10.12962/j23373539.v7i2.34253>
- Atik, M., Altan, T., & Artar, M. (2010). Land use changes in relation to coastal tourism developments in Turkish Mediterranean. *Polish Journal of Environmental Studies*, 19(1), 21–33. <http://www.pjoes.com/Land-Use-Changes-in-Relation-to-Coastal-Tourism-r-nDevelopments-in-Turkish-Mediterranean,88352,0,2.html>
- Herayanthi W., D., Sukarsa, K. G., Oka, T. B., & Kencana, E. N. (2016). Analisis Kunjungan Ulang Wisatawan Nusantara Dengan Model Konstruksi Berhierarki. *E-Jurnal Matematika*, 5(4), 194. <https://doi.org/10.24843/mtk.2016.v05.i04.p140>
- Hizkia Satria Constantine Sajow, et al. (2016). Perubahan Fungsi Lahan Di Koridor Segitigamapanget-Talawaan Hizkia. Spasial: Perencanaan Wilayah Dan Kota, 3(2), 40–48. <https://ejournal.unsrat.ac.id/Index.php/Spasial/Article/View/12511/12083>
- Hussein, A. (2015). Penelitian Bisnis dan Manajemen Menggunakan PLS (smart-PLS 3.0). Universitas Brawijaya.
- Inskeep, E. (1991). Tourism planning: an integrated and sustainable development approach (VNR Touris). New York: Van Nostrand Reinhold, 1991.
- Khomenie, A., & Umilia, E. (2013). Arahan pengembangan kawasan wisata terpadu Kenjeran Surabaya. *Jurnal Teknik ITS*, 2(2), C87–C91. <https://doi.org/10.12962/j23373539.v2i2.4349>
- Miswanto, & Safaat, M. (2018). Dampak Pembangunan Industri Pariwisata terhadap Alih Fungsi Lahan (Studi Tentang Kehidupan Sosial Budaya Masyarakat Desa Teluk Bakau, Kecamatan Gunung Kijang, Kabupaten Bintan, Kepulauan Riau). *Antropologi*, 20(1), 45–55. [jurnalantropologi.fisip.unand.ac.id > article](http://jurnalantropologi.fisip.unand.ac.id/article)
- Mulyana, A., & Ayuni, D. (2017). Hubungan Antara Kualitas Jasa, Citra Destinasi, Kepuasan Pengunjung Dan Niat Mengunjungi Kembali Taman Wisata Air Terjun Di Bogor. *Jurnal Manajemen Indonesia*, 16(3), 163. <https://doi.org/10.25124/jmi.v16i3.333>
- Pitana, I. G. (2009). *Pengantar Ilmu Pariwisata*. Pdf. Andi Yogyakarta.
- Poedjioetami, E. (2017). Penataan Kawasan Wisata Pantai Kenjeran Surabaya Dengan Memadukan Aktivitas Rekreasi & Perdagangan. *Seminar Nasional Ilmu Terapan (Sniter) 2017*, 1–6. <http://jurnal.itats.ac.id/Wp-Content/Uploads/2018/07/A109-Esty-Poedjioetami.Pdf>
- Rudi Biantoro, S. M. (2014). Pengaruh Pariwisata Terhadap Karakteristik Sosial Ekonomi Masyarakat Pada Kawasan Objek Wisata Candi Borobudur Kabupaten Magelang. *Teknik PWK (Perencanaan Wilayah Kota)*, 3(4), 1038–1047. <https://ejournal3.undip.ac.id/index.php/pwk/article/view/6856>