

## PHYSICAL IMPACT OF THEME PARKS EXISTENCE ON SETTLEMENT AREA IN LEMBANG SUB-DISTRICT, WEST BANDUNG

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**Abstract.** Theme Park is a type of tourism attraction that able to become the main motivation while tourists visiting a destination. This kind of tourist attraction can bring tourists in large numbers. Farm House and Floating Market are an example of Theme Parks that can gather a large number of tourists which are developed in Lembang Sub-district. Their presence has both positive and negative impacts on the settlement areas where local residents live their livelihoods. This study aims to analyze and assess how the physical impacts occurred by the existence of Theme Parks to settlement areas around. This study uses mixed approach data analysis both qualitative and quantitative. Data analysed based on both primary and secondary data. The physical impact of the presence of Theme Parks for settlement areas is divided into three aspects: land-use change, changes in housing functions, and the impact on public facilities and infrastructure.

Keywords: *Tourism impacts, Residential areas, Theme parks.*

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### 1. INTRODUCTION

Lembang is one of the tourist destinations in West Bandung Regency that has a lot of tourism destinations choice. All types of tourist attractions are there including one of artificial attraction: Theme Park. Theme Park is a recreational park that has special characteristics. It has one or more themes that are promoted and used as a concept (Immamudin, 2016). The theme park is recreational facilities that have special basic ideas that characterize the entire recreation area (Raluca and Gina, 2012). According to Clave (2007) in his book entitled *The Global Theme Park Industry*, the criteria for theme parks include: (1) having a thematic identity that determines recreational alternatives; (2) contains one or more thematic area; (3) set in a closed area and controlled access; (4) centrally managing the productivity and consumer processes.

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Some of the developed Theme Parks in Lembang are Farm House and Floating Market. Theme Park is classified as mass tourism which is able to invite thousands of tourists in one day. Based on data quoted from [www.bandungbisnis.com](http://www.bandungbisnis.com), the number of Farm House tourists in 2016 reached 17,000 per day and based on the data quoted from [www.pikiran-rakyat.com](http://www.pikiran-rakyat.com), the number of visitors to the Floating Market in 2017, especially during long holidays reached 13,000 tourists /day. Mass tourism has some characteristics: large scale tourist volume, fast spending time, and hedonistic motives. In practical conditions, those Theme Parks (Farm House and Floating Market) are surrounded by settlement areas. A settlement is part of the environment outside the protected area, both in the form of urban and rural areas, which has functioned as the place for locals to do their activities that support livelihoods.

According to Waluya (2013), the existence of tourism to the built environment has an impact on the urban environment, scenery, infrastructure, urban forms. If reviewed more specifically for settlement areas, the existence of Theme Parks has a physical and non-physical effect on residential areas. According to Elmia (2019), changes from physical aspects in the settlement area are viewed from changes in land use and building functions (Clave, 2007) and changes to the quality of local infrastructure (Lanquar, 1991 in Clave, 2007). The activity that is held in the area around Theme Park will increase the intensity and density in certain areas.

This study aims to assess how the physical impact felt by communities in residential areas around the Theme Park. An understanding of the physical impact of the existence of Theme Park on settlement areas and its inhabitants can be the basis of a sustainable strategy for developing Lembang tourism.

## 2. LITERATUR REVIEW

The theme park is recreational facilities that have special basic ideas that characterize the entire recreation area (Raluca and Gina, 2012). According to Clave (2007) in his book entitled *The Global Theme Park Industry*, the criteria for theme parks include: (1) having a thematic identity that determines recreational alternatives; (2) contains one or more thematic area; (3) set in a closed area and controlled access; (4) centrally managing the productivity and consumer processes.

According Clave (2007), there are two basic criteria to establish the typology of parks: (i) the size, which can be evaluated by the number of visitors, the surface area that they occupy, the number of employees they have or the necessary investment for their development (all of which are closely related variables); and (ii) the dominant markets according to their origin. Because of their operational and design implications, the use of these two criteria is one of the most common ways to categorize parks, especially because of the fact that they distinguish between urban, regional and destination parks:

1. Destination Park. Destination parks are those that have been specifically designed to attract a large number of visitors coming from places located at middle and long-distance and who spend a night at the said destination with the main aim of visiting the park (often for more than one day).
2. Regional Park. Regional parks have been designed to attract a significant number of visitors for a few hours per day. Most visitors to this type of park come from areas located some 100-200 km away

3. Urban Park. Parks that visited almost exclusively by residents of the immediate urban area.

The existence of theme parks gives physical impacts for the surrounding area including the settlement area as a part of the built environment. According to Waluya (2013), the existence of tourism to the built environment has an impact on the urban environment, scenery, infrastructure, urban forms. If reviewed more specifically for settlement areas, the existence of Theme Parks has a physical and non-physical effect on residential areas. According to Elmia (2019), changes from physical aspects in the settlement area are viewed from changes in land use and building functions (Clave, 2007) and changes to the quality of local infrastructure (Lanquar, 1991).

### 3. METHODOLOGY

This study uses concurrent mixed methods of quantitative and qualitative research strategies or approaches. This approach is carried out by collecting quantitative-qualitative data at one time, then combining it into one information in the one interpretation results (Creswell, 2008). Mixed-Method Research aims to overcome weaknesses in quantitative qualitative approaches.

#### 3.1 Collecting Data Method

The data used in this study are primary data and secondary data. Primary data is obtained through questionnaires, interviews, field observations, and image documentation. Secondary data is obtained through the study of literature, government policy documents, data from government agencies, reports, and other media both form mass media and the internet.

The collection of primary data using the questionnaire method is carried out for residents who live in settlement areas around Theme Parks. The questionnaire method is done to obtain direct data about the impact of the existence of tourist attractions in the residential environment felt by residents in terms of change in land use, building function, and public infrastructure. The process of filling out questionnaires is carried out in 2 months, from 1 October 2018 - 30 November 2018. The expected population is residents around the settlement area affected by the presence of Theme Parks. Because the sample population is unknown, the number of samples taken determined by the formula (Riduwan, 2004):

$$n = (0.25) \times ((Z_{\alpha} / 2) / E)^2$$

Where:

n : number of samples

$Z_{\alpha} / 2$  : the value obtained from the normal table above the level of

confidence E : error tolerance limit (error tolerance)

$$n = (0.25) \times ((1.96 / 0.1))^2$$

$$n = 96$$

Then, the number of samples needed is 96 residents around the Farm House and the Floating Market.

Interviews are conducted to key stakeholders using interview guidelines. The determination of respondents is using nonprobability sampling with the purposive sampling method.

Purposive sampling is a technique of taking data sources with certain considerations (Sugiyono, 2012). Interviewees who were intended were informants who knew information about tourism and its impact in the Lembang sub-district, especially related to the Theme Parks in each location. The researcher conducted an interview to the Head of Tourism Destination Division, Tourism and Culture Office of West Bandung Regency, Head of the Spatial Division in the Public Works Office and Spatial Planning of West Bandung Regency, Gudangkahuripan Village Head, Lembang Village Secretary, Manager of both Theme Park (Floating Market and Farm House).

This study also uses a non-participant observation method where researchers are not involved and only act as independent observers. Observation is used to obtain data on the impact of tourism which can be seen around Theme Park especially the impact on settlement facilities and infrastructure.

### 3.2 Data Analysis Method

Mixed-Method Research aims to overcome weaknesses in quantitative approaches and qualitative approaches. Quantitative data analysis in this study consisted of statistical analysis. Statistical descriptive analysis is an analytical technique that describes data that has been collected descriptively so that a general conclusion is obtained (Sugiyono, 2012). Qualitative analysis is carried out as a method that aims to describe the state of the field systematically with the right facts and interpretations and interconnected data not only to seek absolute truth but the essence of achieving an understanding of observation (Sugiyono, 2012). In this study qualitative descriptive analysis method is used to supplement information from an event in the field.

### 3.3 Study Area

Theme Parks can be defined as part of visitor attractions. Visitor attractions are described as permanent resources designed, controlled and managed for fun, entertainment and education for visiting tourists. Another definition of Theme Park attraction is considered by academics as single units, individual sites or small-scale geographical areas that are accessible and motivate large numbers of people to travel far from their homes, usually in their free time, to visit in a short period of time and limited (Raluca and Gina, 2012). The two interesting parks in Lembang Sub-district include Farm House and Floating Market.



**Figure 1. Theme Parks Location**

a. Farm House Lembang

The farmhouse is a tourist destination area that has theme nuances of Europe that developed in Lembang. The concepts of this attraction are ticket sales is that each entrance ticket (Rp. 20,000.00) can be exchanged with one cup of Cow's Milk or one grilled sausage. Farm House presents the nuances of rural nature with classic natural views of medieval Europe. Farm House has tourist attractions in the form of Petting Zoo, Hobbit House, Backyard Kitchen, Souvenir Shop, Brew Coffee, Croissants, French Crepes, and Traditional European Clothing and Cowboy Rentals. In addition, there are also public facilities such as milk and sausage exchange areas, educational tours, relaxing parks, culinary tours, and shopping tours.

This Theme Park has 3 hectares spacious area. Farm House is located on Jalan Raya Lembang No 108, Gudangkahuripan Village, Lembang District. This attraction is traversed by the collector road that belongs to West Java Provincial Government. This means that policies and authorities regarding the addition of road access are under the West Java Provincial Government.



**Figure 2. Farm House and Settlement Area Around**

Tourists who come to the Farm House are dominated by local travelers from Jakarta and surrounding areas, the highest number of tourists visiting Farm House in 2016 reaching 17,000 visitors/day during peak season ([www.bandungbisnis.com](http://www.bandungbisnis.com)). But based on various other internet media sources, this number continues to decline to 10,000 visitors/day in 2017, and 2000 visitors /day in 2018.

b. Floating Market

Floating Market is a tourist attraction with the theme of international flavors in the world with nuances of Japan, miniature replicas, fantasy, tradition and so on which presents various rides in one area. The price of the entrance ticket for the Floating Market is IDR 20,000/person and visitors can exchange it for welcome drinks such as Choco Latte, Coffee Late, Milo or Lemon Tea. For vehicles such as cars, the entry fee is IDR 5,000/car. Visitors also have to pay a fee around Rp. 20,000 - Rp. 70,000 if they want to enjoy other attractions besides the floating market. Floating Market presents nuances of rural nature with various kinds of rides in it such as floating markets, Kota Mini, Rainbow Garden, Floating & Hijab Swimming Pool, Train Miniature, Kyotoku, Kampung Leuit, Fauna Park, and so on. This Theme Park has 11 hectares spacious area.



**Figure 3. Floating Market and Settlement Area Around**

Floating Market is located at Jl. Grand Hotel No. 33 E Lembang. This attraction is traversed by a collector road that has the status of Provincial Road. This means that policies and authorities regarding the addition of road access are under the West Java Provincial Government. Tourists who come to the Floating Market are dominated by local travelers from Jakarta and surrounding areas, the highest number of Floating Market tourists occurred in 2015, reaching 15,000-18,000 visitors/day during peak season ([www.fokusjabar.com](http://www.fokusjabar.com)). Based on various other sources, this number continues to decline to 10,000 visitors / day in 2016 (Luthfiana, 2016), and 7000-8000 / day in 2018 ([republika.co.id](http://republika.co.id)).

#### 4. DISCUSSION

According to Elmia (2019), the physical impact of theme park existence in the settlement area can be seen in three aspects such as land-use change, building function change, and changes in public infrastructure.

##### 4.1 Land Use Change

The development of Theme Park in Lembang Sub-district grew from year to year, starting when the Floating Market was established in 2012 (Secretary of the Village of Lembang, 2018). After that period, other tourist destinations began to emerge including Farm House in 2015. Expansion of Theme Parks makes an impact on the land. It can be seen in Figures 3 below. From Figure 3, Theme Park developments happen from time to time, in line with the company strategy to maintain the number of tourists by expanding the area and adding new attractions. Changes in land use that happen in the Theme Park, in Farm House case study, there was a change in land use from agricultural and settlements into tourist destinations, while in the Floating Market case study there is a change from Umar Lake become a recreational area. This lake used by people who want to play or take fish. The lake also has a function as a community water resources.

**Table 1. Development of Theme Parks Year by Year**

Year	FARM HOUSE	FLOATING MARKET
	 <p data-bbox="577 653 913 710">Gudangkahuripan village does not have any tourism resources</p>	 <p data-bbox="978 653 1254 865">Floating Market area was the Situ Umar Lake, this lake used by people who want to play or take fish. The lake also has a function as a community water resources.</p>
	 <p data-bbox="591 1277 906 1396">Theme Park has not yet been built and company do land acquisition process to occupy land for Theme Park.</p>	 <p data-bbox="968 1277 1281 1485">Theme Park has not been built and company do land acquisition process to occupy land for Theme Park. The. Company bought land from the private sector that previously owned the land.</p>



2016



Theme Park has been opened for public. The impacts of the existence of this Theme Park began to be felt by residents around



Thematic Park has been opened for the public. The impacts of the existence of this Theme Park began to be felt by the surrounding population



The land in front of Farm House will be developed as a new attraction, the concept was Asia- nuisance



Tourist attractions, Kota Mini and swimming pools are built. Regarding future development, the manager claims there is no expansion plan because the land is fully occupied.

Note: ■ = Theme Park ■ = Built Area ■ = Next Development Plan

Theme Park is one of element in urban planning, and areas that offer the possibility of the presence of new commercial and residential area centers. The presence of Theme Park opens opportunities for workers to come and live around these attractions (Clave, 2007). However, Clave's statement was not proven in this study. Based on the results of the primary survey of residents who live around Theme Parks, known that residents who live in their house after the existence of Theme Parks are 13% in Farm House case studies and 26% in the Floating Market case study. But none of the respondents moved to residential areas around the Theme Park because they work at the Theme Parks. 55% of the residents around Farm House claim to live in residential areas because they have been living there since birth. Whereas for the Floating

Market case study 50% of the respondents chose occupancy because they joined the family (husband/wife). The respondents who work in Thematic Parks were native people who had been living in dwellings around Thematic Parks since birth. Based on the results of interviews with Theme Parks managers, he said that if the employee needs for the Farm House Thematic Amusement Park are 50 employees while the Floating Market is around 100 employees. This figure is not comparable to what happened at Disneyworld Florida (Clave, 2007), where there was a big demand for housing for 20,000 employees of the company and thematic amusement park industry. Then the scale of Theme Park determines how the need for new settlements around the area. Theme Park with the Destination Park scale needs more workforce than Regional Park and Urban Park Scale. It can be concluded that the existence of Theme Parks in the Lembang Sub-district does not significantly affect population migration or grow new settlement areas.

#### 4.2 Impact of Changes in Housing Functions

Another aspect to see the physical impact of Theme Park's existence for the resident is how it makes people change their houses into tourism facilities (Elmia, 2019). As many as 45% of respondents around Farm House and 65% of respondents around the Floating Market, turned their occupancy into another function. Among the respondents who changed their house, 75% of the population around Farm House turned their homes into stalls while the other 25% turned them into restaurants. Meanwhile, for the Floating Market case study, 80% turned it into stalls, 13% turning it into a restaurant, 5% being rented, and 1% being lodging. Among the respondents who turned their house into another function, only around 8.3% of the population around the Farm House and Floating Market made tourism a factor in changing housing functions. This figure is far different than 91.7% of residents around Theme Parks are not affected by the presence of the tourism sector when they change their house into another function. It can be concluded that the presence of Theme Parks in the Lembang Sub-district has a little impact on the change in building functions from house to tourism facilities. Mostly houses that affected to become tourism facilities are located on collector roads so people can easily reach their house/tourism facilities.



**Figure 4. Houses around Theme Park which Changed into Tourism Facilities**

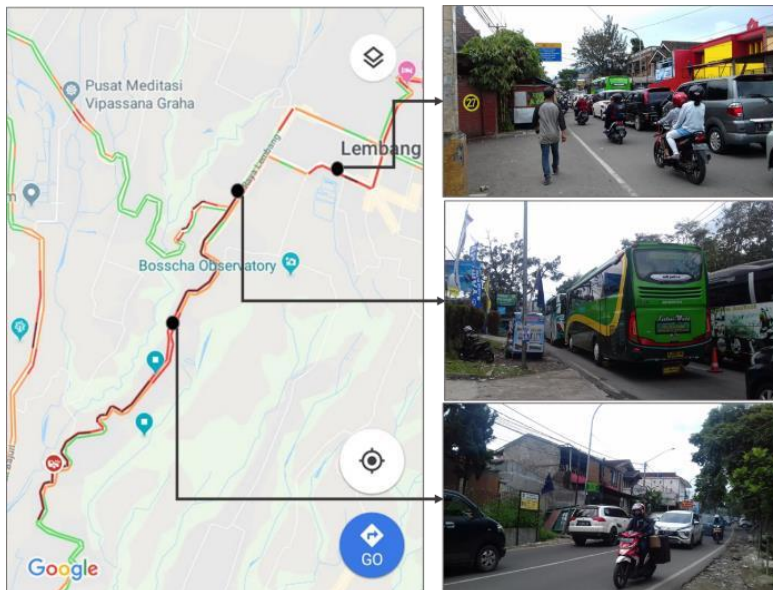
#### 4.3 Impact in Settlement Facilities and Infrastructure

Lanquar (1991) mentions three criteria for evaluating the impact of Theme Park on urban facilities and infrastructure:

- a. Construction of Theme Parks can damage the environment and, depending on the size and nature, also sources of noise pollution, air quality, and water.
- b. Physical and ecological load capacity at theme park locations can be reduced, due to the frequency of intensity of tourists arriving at certain times.
- c. Pressure caused by tourist activities in theme parks can burden local infrastructure. The environmental impact of Theme Park must consider outside development such as in terms of buildings and unsightly parking.

Impact analysis on the facilities and infrastructure of the surrounding settlements seen from how the presence of thematic amusement parks makes use of facilities and infrastructures used jointly by residents and tourists. There are several facilities and infrastructure that are used simultaneously between residents and tourists, which is roads, clean water, houses of worship, parking lots.

In public road facilities and infrastructure, there is the pressure caused by tourists so that it burdens local infrastructure. As evidenced by the results of a questionnaire survey where 87% of respondents around Farm House and 86% of respondents around the Floating Market admitted that congestion in their residential areas had increased since the presence of Theme Parks. This congestion has disrupted the daily activities of residents, especially during holidays.



**Figure 5. Congestion around Theme Parks**

The impact in clean water was felt by a small proportion of the population where 2 residents around the Farm House claimed their access to clean water was increasingly difficult, 94 other respondents did not feel difficulties in accessing clean water. In addition to these

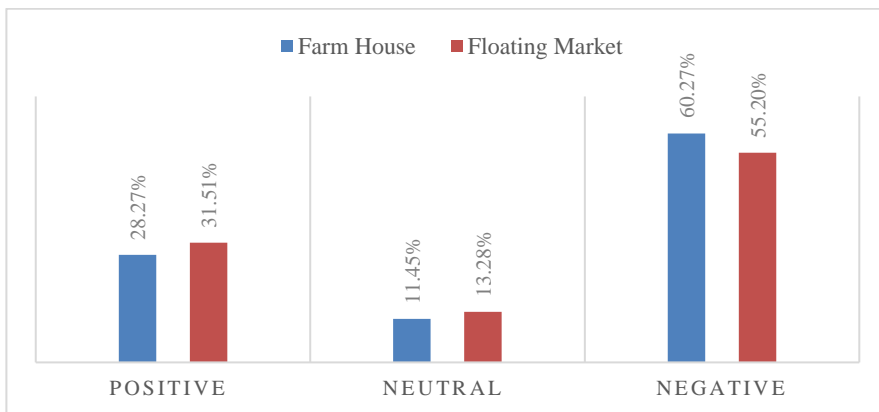
negative impacts, there was also a positive impact on the existence of thematic amusement parks on facilities and infrastructure for worship houses and parking lots. There is funding for the development of mosque assistance by the company of Theme Park also provided assistance with access to clean water from the company to local mosques and the empowerment of vacant land for the provision of parking lots to tourists outside of the provision of parking lots by company. This is the other side, which can be found in the Farm House case study where if the needs of tourist facilities and infrastructure cannot be accommodated by the company, then the local population gets the opportunity to get economic benefits from the presence of tourists by providing these facilities and infrastructure.

The overall impact is seen from the total percentage of the population based on the classification of perceived impacts whether positive, negative, or neutral (normal) The results of the overall impact analysis on physical aspects can be seen from the following table:

**Table 2. Physical Impact Caused by Theme Park**

No.	Variable	Farm House (%)			Floating Market (%)		
		+	=	-	+	=	-
1	The quality of housing environment	27,08	45,83	27,08	26,04	53,13	20,83
2	Interference with jams	48	-	52	44	-	56
3	Interference with convenience in residential area	25	-	75	42	-	58
4	Increased congestion	13	-	87	14	-	86
<b>Sum Total</b>		113,08	45,83	241,08	126,04	53,13	220,83
<b>Average</b>		28,27	11,45	60,27	31,51	13,28	55,2

In the physical aspect, more residents felt the negative impact of the existence of Thematic Amusement Parks than positive impact around their residential areas. This impact is due to a large number of residents who feel disturbed by the congestion caused by the existence of Theme Park.



**Figure 6. Classification of the Physical Impact of the existence of Theme Parks**

However, from another point of view, there is a positive impact on the existence of Theme Parks that gives benefit to the local community. For the Farm House case study, the small size of the area causes managers to need the support of the local community in providing facilities and infrastructure for tourists such as the mosque and parking lots in residential areas. Residents around the Farm House can participate in tourism activities such as providing tourist parking facilities outside the parking lot that the developer has provided so that they get economic benefits from the existence of the parking lot. In addition, tourists' need for mosques especially during prayer times also lead to cooperation in the provision of tourist facilities and infrastructure between residents and managers. The company of theme park participates in providing assistance for the cost of building a mosque to the population. The parking location of the Farm House which is located in the opposite road with the attraction area also causes a high movement of tourists passing across the streets, this opens the opportunity for residents to participate in tourism activities by peddling souvenirs, as well as light snacks on the side of the road. Thus, the economic benefits of the existence of Thematic Amusement Parks for residents around the settlements can be felt. But it is undeniable, the externality of this condition is the increasing congestion.

For the Floating Market case study, the large size of the Theme Park causes all tourist activities, both attractions and the provision of amenities such as mosques and parking lots, internalized in an enclave area. This condition causes not many benefits felt by the people around, because tourists only pass by their vehicles, enter the tourist area, then leave, without any interaction between local residents and tourists.

Based on the explanation above, it can be formulated if the positive and negative physical impacts of the existence of Theme Parks in a residential area are influenced by: (1) the number of tourists; (2) Theme Park size and (3) disruption of population access to public facilities and infrastructure due to the externalities of the existence of Theme Parks.

## 5. CONCLUSION

In general, it can be concluded that physically, the impact of the existence of Thematic Amusement Parks on residential areas has two characteristics, both positive and negative impacts. The positive impacts include (1) funding support for mosque public facilities and infrastructure from Theme Park managers to local residents; (2) empowering community vacant land for tourist parking. On the other hand, there are also physical negative impacts caused by the existence of Thematic Amusement Parks in residential areas: (1) congestion that is generated from massive/large numbers of tourists who come while access roads do not get larger; (2) disruption to people's daily activities due to congestion that occurs especially during holidays; (3) disruption to the comfort of the population due to air pollution, noise pollution, and waste generated by tourists (4) disruption of access to clean water for a *small portion of the population*.

In the Lembang Sub-district case study, physically, the presence of Theme Parks led to changes in land use in tourist areas, from the agricultural land and settlements to tourist areas. But changes in land use do not have a significant impact on the surrounding area. Meanwhile, the change in the function of thematic residential buildings due to thematic existence happened in 8.3% of respondents. The impact on public facilities and infrastructure is negative and

positive. Negative, because the presence of the Thematic Amusement Park raises increasing congestion. But on the other hand, there is a positive impact in the form of funding support for mosque public facilities and infrastructure from the managers of Theme Parks to the local population as well as the empowerment of community vacant land for tourist parking spaces.

To increase the positive impact and minimize the negative physical impact of the presence of Theme Parks, for managers it is recommended to analyze parking capacity by the projected number of visits in the future. Recommendations for local governments are appropriate zoning regulations for regional planning tourism which has the potential to invite large numbers of tourists in order to reduce congestion externalities, increase road access and traffic engineering in Lembang to eliminate congestion, and reduce or even stop the construction of new tourist attractions in Lembang because of its reduced capacity at this time.

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