



Mapping The Old Kampongs Along The Gajahmada Road

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Abstract. The old kampongs along Gajahmada Road are one of the oldest sections in Semarang City. The existence of the old kampongs can be seen on the map in 1900. However, the old Kampongs changed their environmental conditions considerably due to their commercial activities, especially in 2007. The existence of high-rise commercial buildings dominates corridors along the Gajahmada road, and the presence of old kampongs located behind the buildings is also displaced. Whereas, the presence of these old kampongs keeps a history of the development of Semarang City and traditional houses. This article seeks to identify changes in the appearance of the old kampongs which are displaced due to the development of the commercial activity, based on a field survey, map analysis, building form and street analysis. There are significant changes and minor changes that occurred in the old kampongs along Gajahmada road. Physical changes that occur are changes in land use, ways and building functions.

Keyword: Old Kampong; Gajahmada Road; Commercial Activity

INTRODUCTION

Globally, people living in urban areas are more than 50% of the total population [1]. Along with this high number, the development of urban areas can increase to meet the space needs of their inhabitants [2]. Initially, the development of Semarang City began with the growth of residential areas around the port of Semarang. The existence of the port of Semarang started in the 8th century when Semarang became the main port of the ancient Mataram kingdom whose centre of government was in Medang, Central Java [3]. In 1909, Semarang City was overgrowing because it had become the second-largest industrial and trade city after Batavia [4]. This makes Semarang City's economy develop very rapidly.

Semarang city always experiences development, especially in the corridor area which becomes a link to the centre of the city. The main commercial activity is currently centred on the intersection area, which is the downtown area [5]. The city centre is an area that has the highest accessibility so that it becomes a target for the development of the commercial areas because of its high investment [6]. The development of the commercial areas has an impact on the physical changes of an area. Until now, the intersection area is still the centre of commercial activity services with the highest hierarchy. That caused several new centres to emerge around the area. In recent years, the area around Pandanaran Road, Gajahmada Road, and Pemuda Road (PANDAMA Triangle) continues to experience increasingly rapid regional growth dominated by service and commercial functions on a city and regional scale. Based on Semarang's Plan Regulation City (RTRW) of 2000-2010 and 2011-2031, that the BWK I area including the PANDAMA Triangle area is directed as a service, mix and settlement trading area [7], [8].

The central part of Semarang City is the core of the activity because it is connected to Bodjong Street, which is the main road. The west part of the Semarang City is dominated by native villages that are traversed by a long way to Batavia (Jakarta). East and south of the city of Semarang, some communities are growing. In the central part of the city of Semarang, it is dominated by the settlement of Chinese ethnic, which is marked by the centre of the association, which is buried "Chinese Camp"[9]. However, there are also several villages inhabited by natives.

Gajahmada Road corridor is also developing along with the rapid growth of commercial activities in the intersection area. Based on the physical aspect, the Gajahmada road corridor is located in a flat condition and high accessibility making it easier to develop commercial activities. While from the point of regulation, the Semarang city government has indeed allocated the Gajahmada road corridor as a commercial area as stipulated in the BWK RDTRK 1 Semarang document and the Semarang City RTRW [5].

Indigenous villages that also border the ethnic Chinese Kampong inhabit many of the settlements on Gajahmada Road. Kampong located along Gajahmada Road includes Baterman Kampong, Petempen Kampong, Batan Kampong and Pekunden Kampong on the left [10] and ethnic Chinese villages on the right. Based on previous research, commercial areas have dominated 65% of the land in the Gajahmada road corridor [5]. That shows a rapid development that occurred in the Gajahmada corridor land. The existence of the old Kampongs is still maintaining despite the rapid commercial development in the area. Previous research in 2013 and 2014 did not identify changes of kampong in a certain period (1800-2019 now) [5], [10]. Therefore, it is necessary to determine the condition of old kampongs that are located in the corridor of the Gajahmada road today. Then see the physical changes that occur in the old Kampong of Semarang.

The physical changes in the area can be explored using morphological and typological approaches [11]— a morphological approach is performed by identifying the process of change that occurs from one period to another. Typology approach identifies the patterns of an area that are experiencing physical changes. According to Carmona, Tiesdell, Heath, & OC (2010), the main elements of morphology are interrelated with Land use, Building structure, Plot pattern, and Cadastral (street) pattern [12]. Meanwhile, typology is a specific pattern that forms a regional morphology. Identifying typology uses eight aspects, namely block plane to see the relationship of building mass and open space, nollie plan to see patterns of community activities, building flooring, building conditions, building area, open space and trees, circulation system and building functions [3]. Some previous studies, spatial change can be seen more from indicators of changes in land use [13], [14], Accessibility [15], [16], and building conditions[17], [18].

METHODOLOGY



FIGURE 1. Delimitation of the Research Area in the Gajahmada Corridor

This study employed a quantitative method with data collected based on a field survey, map analysis, building form and street analysis. Quantitative methods are used to measure the impacts of the commercial activities in the region on the spatial, physical changes in the area. The development of the commercial areas is currently growing around the city centre, including one of the Gadjahmada corridors. Changes in the Gadjahmada Corridor are considered based on a lot of development happening in the Gajahmada Corridor at this time. Based on preliminary observation, there is the construction of Tentrem apartments in the Pekunden Kampong area and the construction of the Arthotel Hotel building in Batan Kampong. In addition, the construction of Semarang Town Square in 2016 has changed the physical structure of Petempen Kampong. Physical changes in the research object can be identified by morphological and typological approaches. Therefore, the objects in this study are the condition of the building, land use and changes in the pattern of the road network. Changes to the research area are identified by taking into account the physical changes that occurred on the map of the previous year and compared with the map of the latest year image and the current condition of the research area.

The area of concern in this study is the area around the Gajahmada corridor, which is included in the Golden Triangle area of Semarang City. The area limit around the Gajahmada corridor uses the Kampong boundary, which is directly adjacent to the Gajah Mada corridor. Kampong located along the Gajahmada corridor is Baterman Kampong, Petempen Kampong, Batan Kampong and Pekunden Kampong. On the inside of the golden triangle area of the Semarang city, there is the MH Thamrin road, which has a high development of the commercial area. Therefore, in this study for the Batan Kampong and Pekunden Kampong only identified up to the border with the MH Thamrin road.

RESULTS AND DISCUSSION

Commercial Area in Gajahmada Corridor

The current condition of the Gajahmada road is located from the Pemuda Road (main road of Semarang City) until the central business district (Simpang Lima) of Semarang. However in 1886 (look at figure 2a), the location of Gajahmada road was located from Bodjong Road (Pemuda Road in the present) until Semarang River and was surrounded by Chinese Kampongs, Java Kampongs, Malay Kampongs and was the main route for them [19]. In 1909 (look at picture 2b), the Gajahmada Corridor began to connect with Pandanaran Road and formed a crossroad with the road to Demak and Pahlawan Road. As for the built area, there is an old settlement bordering Semarang River. The old Kampong like Kampong Batan, Baterman, Kampong Petempen, Kampong Prembaen and Kampong Pekunden saw on 1909 map. In 1925 (look at picture 2c), the Dutch government had plans to develop a residential area in the Batan district and Pekunden district based on road plan map. Until the 1940s (look at picture 2d), commercial buildings have begun to develop along the edge of the Gajahmada Corridor.

The rapid development of commercial buildings in the Gajahmada corridor is currently due to its strategic location close to the Central Business District of Semarang. In addition, the accessibility that occurs in the Gajahmada corridor is quite high, because it is a link between the central Gajahmada districts of Semarang with the Pemuda road of Semarang. Previously the commercial area in the Gajahmada Corridor was in the front or directly adjacent to the Gajahmada road. Commercial developments continued until they entered the residential area behind it.

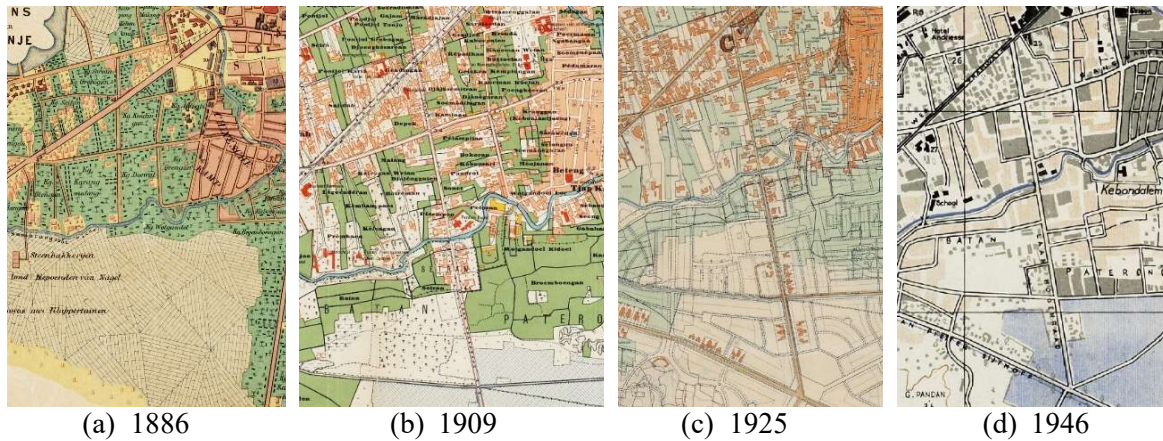


FIGURE 2. Development of Gajahmada Road Corridor [20]



FIGURE 3. Commercial Building in Gajahmada Corridor

Many commercial developments in Gajahmada have resulted in shops, apartments, hotels, cafes and restaurants (figure 3). Commercial buildings located in along the Gajahmada corridor are dominated by service functions. Along the Gajahmada corridor, there is the Gumaya Tower, Mutiara Garden Suites, Semarang Town Square, Sumi Hotel, 5th Avenue and Tentrem Apartments. In addition, there are some of residential buildings, Theresia educational foundation buildings, Restaurants such as Sendok bebek Noodles and Rice, Happy Restaurant, Ayam Bakar Primarasa, Istana Buah, Lumpia Delight, Starbuck, and Restaurant Semarang, Cafes such as Anak Panah, and several office buildings such as notary offices, Bank Mas offices, QNB Indonesia Semarang, and HSBC Buildings.

Changes in the Old Kampong Area of Semarang City

The development of commercial areas in the city centre has shifted the existence of the old Settlement in the centre of Semarang. Some Kampongs are affected by commercial development including Sekayu Kampong, Jayenggaten Kampong, Gabahan Kampong and Petempen Kampong (Republika.co.id). Land owned by residents is the target of development in the city centre to become a business and commercial centre. Strategic location causes an increase in the

number of developments around the Gajahmada Corridor.

1. Baterman Kampong with Gumaya Hotel Development, Gumaya hotel built on green space in the Baterman Kampong area. In 2005, the land acquisition process began, and in 2007, the hotel building was established. The Gumaya hotel building construction does not use the existing settlement area. However, at the end of 2007, the village settlements in the southern part of the Gumaya Hotel building transformed into parking lots for visitors to the Gumaya Hotel (Figure 4).

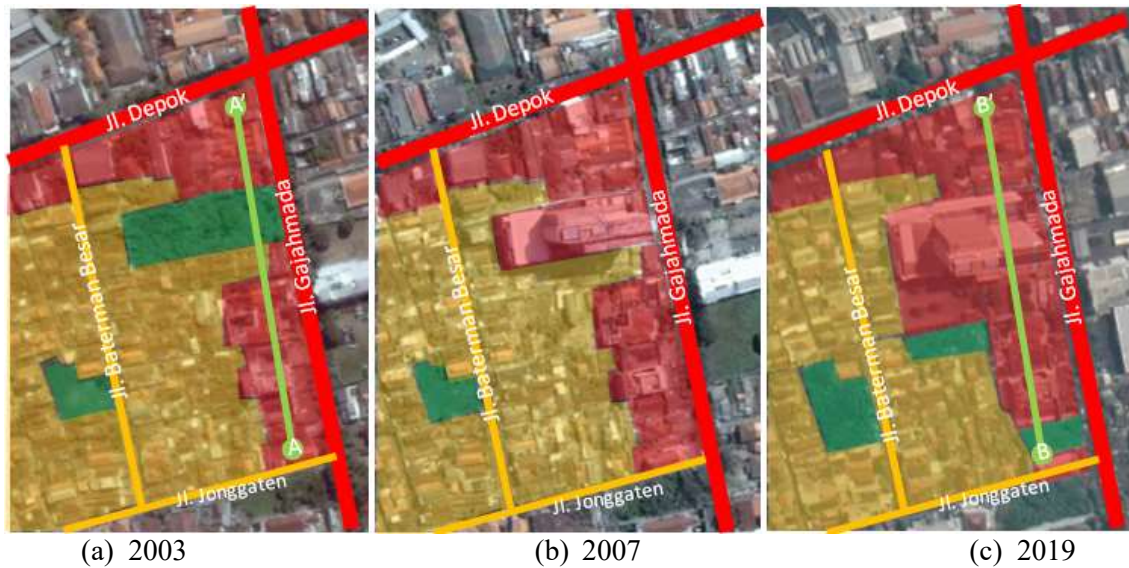


FIGURE 4. Land Use Changes in Bateman Kampong

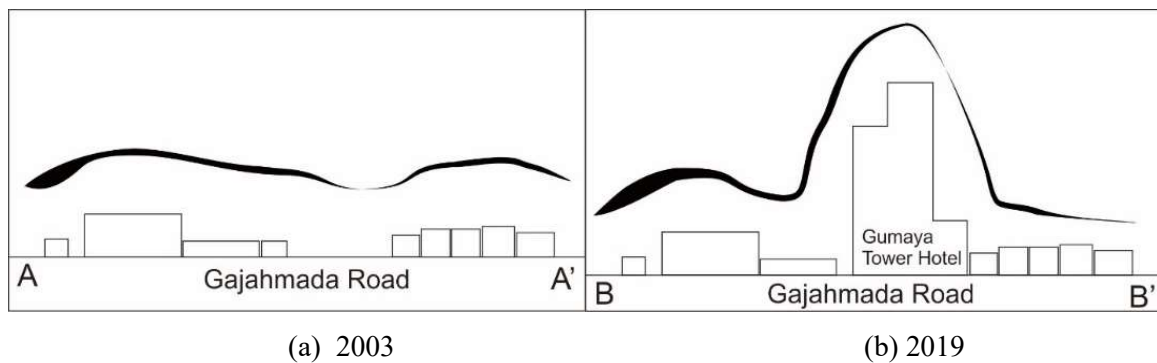


FIGURE 5. Commercial Area Skyline in Bateman Kampong

The most significant land-use change in the Bateman Kampong is caused by the construction of the Gumaya Hotel area, which spends around 20 or more houses into parking lots and green open spaces into hotel buildings. Other land-use changes are on the front near the junction to enter the Jonggaten Street, which was once a commercial building but now is a green space that is fenced off. In addition, the green space in the centre of Bateman Kampong also experienced a slight expansion around the addition of land from two building lots that became green space.

Meanwhile, changes in the building functions occur on the family houses to boarding houses. There are many small stalls along the Bateman Besar Street. Then, the street infrastructure in the Bateman Kampong has not changed. Based on the map in 1935, it was identified that Bateman Besar Street, which is until now the name of the road is still the same and has not undergone physical changes.

2. Petempen Kampong with Mutiara Garden Suite and Semarang Town Square. In 2003, the Petempen Kampong was still an area with low economic value as a housing for the underprivileged family. Changes began to occur around 2011 with the construction of Mutiara Garden Apartments. This construction has changed the Petempen kampong has a high economic value to date. In 2014, the old residential area of the Petempen Kampong turned into a commercial area with the construction of Semarang Town Square.

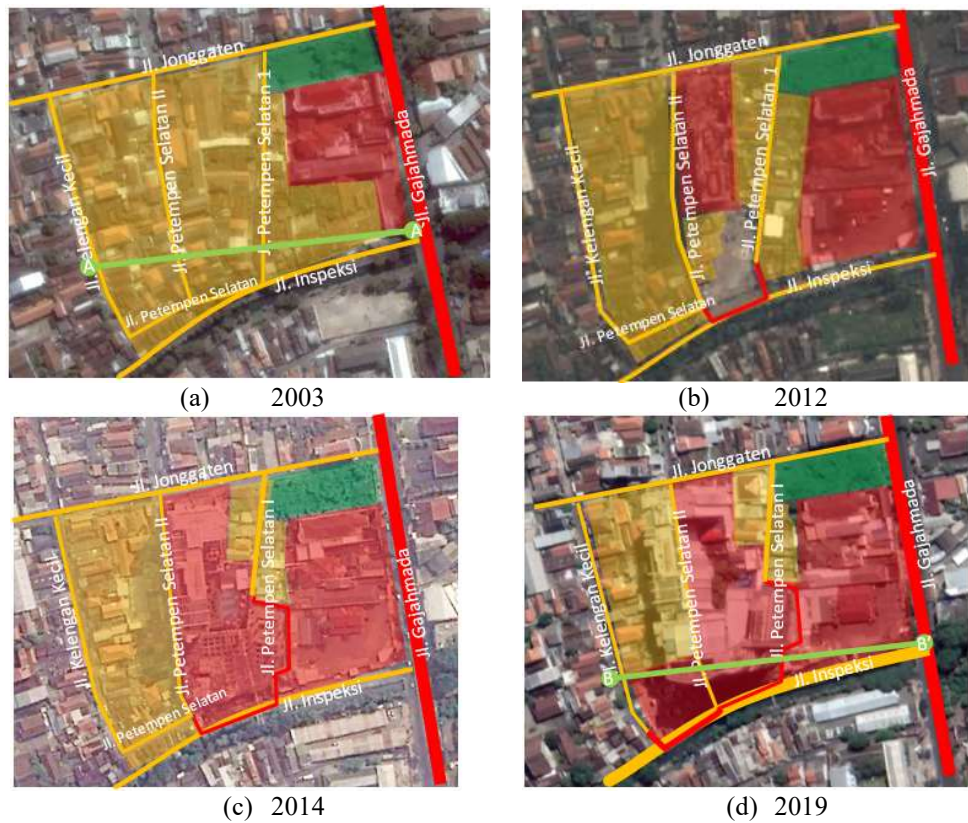


FIGURE 6. Land Use Changes in Petempen Kampong (Author Analysis, 2019)

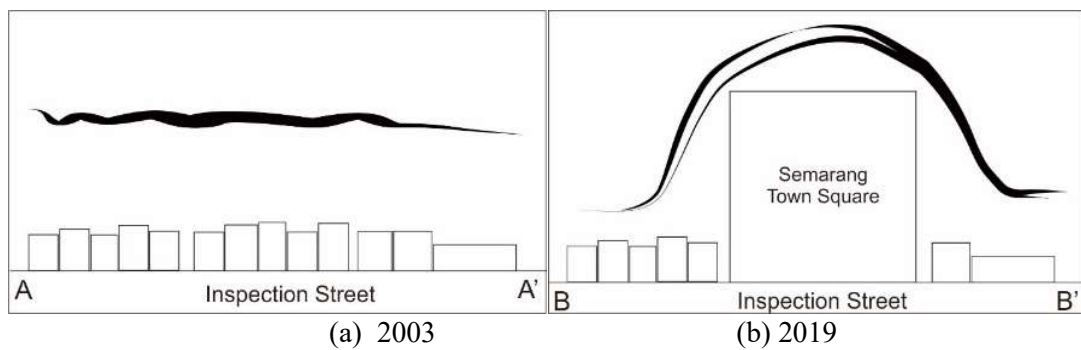


FIGURE 7. Skyline in Petempen Kampong Area

The construction of Mutiara Garden Apartments and Semarang Town Square has changed the land use in Petempen Kampong (figure 6). In 2014, there were approximate of fifty house plots that had turned to an apartment building and town square building. It shows the significant changes that have taken place in Petempen Kampong. In 2019, the change of old residential land into a commercial area will increase, which is about 15 of house plots which have been replaced into the parking lot of Semarang Town Square. Until now, there are around 40 of house plots, which are still in the Petempen Kampong.

Petempen Kampong underwent a change in its building function, namely changes in the role of residency to boarding houses. Many houses have provided additional floors for boarding homes of workers from the commercial building in front of them. For the skyline area, Petempen Kampong has a very significant change due to the existence of Mutiara Garden Apartments and Semarang Town Square. Seen in Figure 7, the skyline of Kampong Petempen in 2003 consisted of buildings with a height of 1 or 2 floors. Meanwhile, in 2019 there was a change due to the Mutiara Garden apartment building and Semarang town square, which had a building height of more than ten floors.

Changes of the street in the Petempen Kampong are classified as significant changes. The change that occurred was the merging of the inspection road with Petempen Selatan Street, which is currently the entrance to Semarang town square and has a width of about 14 meters [21] . Then the change to Petempen Selatan I

Street, which was once a straight street became Winding Street due to the construction of the Semarang town square building and only had a width of about 1-1.5 meters.

3. The name of Batan Kampong can be identified from the 1909 map of Semarang city. However, in that year the condition of the Batan Kampong region was partly still a forest area. The plan to establish a residential area in Kampong Batan can identify from the map of the Semarang City Plan in 1925. Until 1946, the area of Batan Village has begun to develop settlements and the construction of several buildings. The plan for the housing area in 1925 has implemented, and currently, the Batan Kampong area is a residential area based on the road network pattern similar to the plan map.

Changes in land use that occur in the Batan Kampong were classified as small transformation (figure 8) because the changes that occur do not have too much impact on the occupancy of residents in Batan Kampong. Changes that occur in the Batan Kampong are more dominant in buildings that face the side of Gajahmada Road. Changes in the form of construction of trade and service buildings initially included the commercial zone. The settlement area of Batan Kampong was once a residential area that had planned so that no development of the commercial areas affected.

Based on figure 9, the skyline of the Batan Kampong in 2003 and 2019 changed the height of the building area. In 2019, there were hotel buildings that have ten floors and roadside shops only have 2-3 floors. The commercial buildings in Batan Kampong are not very significant changes. Likewise, with the road network pattern because it is a planned residential area.



(a) 2003 (b) 2019

FIGURE 8. Land Use Changes in Batan Kampong

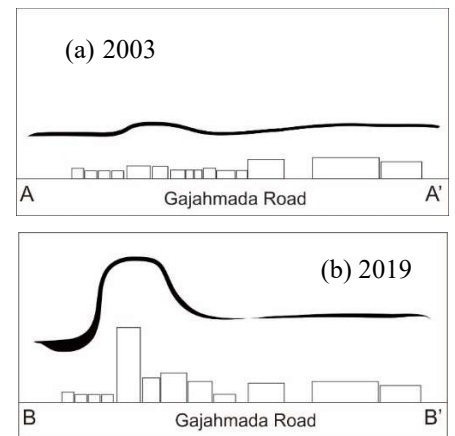


FIGURE 9. Commercial Area Skyline in Batan Kampong

4. Pekunden Kampong with Tentrem Apartment Development. The Development of Tentrem Apartment started from 2016. Tentrem Apartment Development does not change from residential settlements in Pekunden Kampong. The residential area in the Pekunden Kampong is a residential area planned from 1935. It can see from the current pattern of the road network in Pekunden Kampong is the same as the road network pattern on the 1935 plan map. Changes that occur in the Pekunden Kampong are only changes to commercial buildings that initially had one floor and are now tall buildings with a high enough number of floors. It can see that figure 11 has no change in land use in the Pekunden Kampong.

In 2019, Tentrem apartment is still under construction. The area was a Manggala food court and Kesatrian Senior High School building. In addition, the building beside HSBC has become a parking lot since 2013. The commercial building's transformation in the Pekunden Kampong has changed in height so that the skyline of the Gajahmada Corridor has changed see Figure 11.

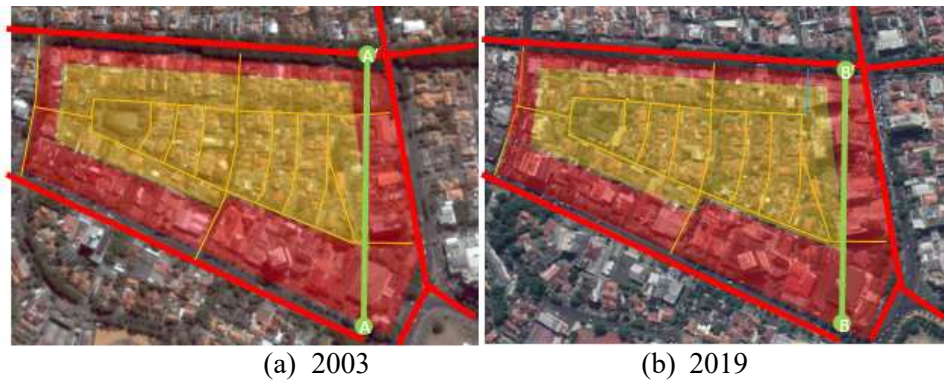


FIGURE 10. Land Use Changes in Pekunden Kampung

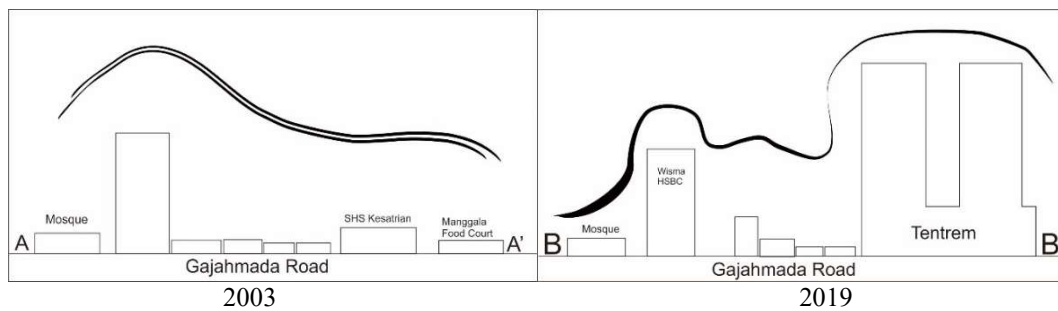


FIGURE 11. Commercial Area Skyline in Pekunden Kampung

The construction of Tentrem Apartment uses two lots of education area and food court area. Until 2015, Pekunden Dalam Street is connecting residential areas with the Gajahmada Road. During the construction process, Pekunden Dalam Street in between the Kesatrian senior high school buildings and Manggala food court was closed. The closed street was diverting to the Taman Pekunden Timur Street, which is connected directly to the Sutoyo Mayjend Road. Although in the process of Tentrem apartment project, Pekunden Dalam Street was closed, when the project was completed, the road would not be permanently closed. In the master plan of the Tentrem Apartment area between two towers, it remains connected with the construction of a bridge between buildings so that the Pekunden Kampung community still can be accessed in Pekunden Dalam Street.

Changes in land use from residential areas to commercial business areas affect the existence of the Kampongs in Semarang city that are located directly opposite the Gajahmada road. The affected kampongs included parts of Batan kampong, Pekunden kampong, Baterman kampong and Petempen kampong. The commercial developments that have taken place in the Gajahmada corridor have made some changes to the surrounding kampongs. The kampong experienced physical changes such as changes in land use, building functions and streets network. The following is a figure of changes that have occurred in Kampung Semarang city from 1800 to 2019 now.

TABLE 1. Change in Kampongs along the Gajahmada road

Kampongs	1886-2000	2001-2010	2011-2019 (Now)
Baterman Kampong	1886, it was named as Karangmatang Kampong dominated by green space. There is already a Gajahmada road. 1909, there was a settlement of the Baterman Kampong on the southern part bordering the Petempen kampong	2003, it was already crowded with settlements and commercial building along the Gajah Mada road 2005, Construction of the Gumaya Hotel was started 2007, Gumaya hotel and parking area were built	The side of the Gajah Mada road becomes a commercial area with high activity and in the back is an old kampong with a dense settlement.

Petempen Kampong	1886, it was named Karangmatang Kampong dominated by green space. There is already a Gajahmada road. 1909, there was a settlement of the Petempen Kampong on the edge of the Gajahmada road	It was already crowded with settlements and commercial building along the Gajah Mada road	2012, Construction of the Mutiara Garden Apartment 2014, Construction of the Semarang Towns Square was started 2015, The side of the Gajah Mada road became a commercial area with high activity
Batan Kampong	1886, it was an agricultural area. Gajahmada Road did not exist 1909, Gajahmada Road was made, and there were settlements of Setran and Batan on the edge of Semarang River and Gajahmada Road, some parts were plantation land. 1925, there have been several buildings and settlement plans	It was already crowded with settlements and commercial building along the Gajah Mada road	A settlement area was under the existing road plan in 1925. The side of the Gajah Mada road becomes a commercial area with high activity.
Pekunden Kampong	1886, it was an agricultural area. Gajahmada Road did not exist 1909, it was still an agrarian sector but there was already a Gajahmada road. 1925, there were already several buildings along the Gajahmada road and settlement plans.	It was already crowded with settlements and commercial along the Gajahmada road	A settlement area was under the existing road plan in 1925. The side of the Gajah Mada road becomes a commercial area with high activity, and there is the construction of the Tentrem apartment that began in 2016.

CONCLUSION

The development of the commercial area on Jalan Gajahmada has induced the most significant physical change that occurred at Petempen kampong. Land use and road network patterns are physical changes that often occur in Petempen Kampong. The changes that occurred in Petempen Kampong were caused by the construction of Semarang Town Square and Mutiara Garden Apartments. The depletion of the Petempen Kampong due to development is one of the reasons for the changes that occur are classified as significant changes. Meanwhile, the biggest change in the pattern of the road network occurred on the Petempen Selatan Street, which now an inspection street and becomes entranceways of Semarang town square. Physical minor changes are taking place in the construction of Tentrem apartments that were formerly an area of *Kesantrian* Senior High School and *Manggala* Food Court located in Pekunden Kampong. The Pekunden Dalam Street was closed during the Tentrem Apartment development process. When the construction project finished, the inner road will be re-opened. In addition, minor changes are also taking place in the development of the Gumaya Hotel area, which is building a parking area that was once residential. Physical changes in the commercial area of the Batan Kampong are relatively small compared to changes in other Kampong because the changes in the commercial area of the Batan Kampong are not in the residential area and do not cause less harm to the surrounding settlements.

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