



Urban Sprawl and Unequal Development of the Periphery in Indonesia: A Comparative Study of Karet Village and Pondok Kelor Village in Tangerang, Banten Province

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Abstract

Growth with equity is an ideal aim of national development in developing countries. Yet, in Indonesia, while rapid urbanisation has increased the need for more land in the city, the amount of city land available is limited so that the city eventually expands its territory to the suburbs and lead to the urbanisation of the urban periphery itself. This expansion of the city has affected unequally the transformation of the the villages in the periphery. This study examined the phenomenon of unequal development of Tangerang City by comparing the experience of Karet Village and Pondok Kelor Village. The dual specific objectives were to identify the conditions of regional development in the two villages, and to analyse the factors which caused the differences in the development of both villages. The analytical methods used were overlay spatial analysis, quantitative descriptive analysis and comparative descriptive analysis. By examining traits of development such as land use, building characteristics, settlement characteristics, road characteristics, population and livelihoods, the results showed that during 2006 to 2016, Karet Village experienced a faster development until it transformed from the City Village Zone to the Village City Zone signifying the occurrence of an urban sprawl, while Pondok Kelor developed slower and had not undergone any radical transformation. The reason for the discrepancy was the differences in regional development spatial planning policies in the two villages, such as establishing a catalyst, an industrial area, in Karet while Pondok Kelor was left to function as a mere residential and agricultural area.

Keywords: regional development; regional transformation; rural areas; urban areas

Introduction

World development shows that thotal population living in urban areas tends to be higher than the population living in rural areas. The World Bank stated that in 2014 an estimated 54 per cent of the world's population lived in cities and it was predicted that the number would increase to 66 per cent in 2050. The development of these urban areas could not be separated from the tendency of urbanization. In Indonesia, the trend of urbanization growth rate is in the highest category in Asia. According to the World Bank, the average

rate of urbanization growth in Indonesia from 1960 to 2013 was in the first place (4.4 per cent), followed by China (3.6 percent), the Philippines (3.4 percent) and India (3 percent).

Meanwhile, according to the United Nations World Urbanization Prospects report in 2014, it was stated that the proportion of urban population in Indonesia in 2014 would reach to 53 per cent and it was predicted that in 2030 the number would continue to increase to 70 per cent. Thus, in the future the demand for land would increase even though the land area was fixed and limited. So that this would have an impact on the expansion of the city to its suburbs.

According to Webster (2002, in Puji Hardati 2011), urbanization in the city has contributed to the peri-urbanization which has led to the transformation of rural areas located on the periphery of the city to be more urban in nature. Meanwhile according to Giyarsih (2012), regional transformation was defined as a representation of regional development which was described as a change and shift in the characteristics of regional components within a certain period of time as a result of the reciprocal relation between the components of the region. This occurred regional transformation could have an impact on local, social, economic and cultural resources.

Tangerang Regency, which is one of the buffer areas for the capital city of Jakarta and also adjacent to the metropolitan city of Tangerang, is considered to have undergone a regional transformation. This could be proven from the statistical data in 2012 which total population in Tangerang Regency has increased by 14 per cent from 3,050,929 to 3,477,495 in 2016. Along with the increasing population growth, the land use is affected, especially agricultural land, which is decreasing to remain 38,644 ha (BPS, 2013) due to the change in land function from agriculture to residential and industrial areas.

On one hand, impact of this development has a positive impact on meeting the housing needs and equitable distribution of the population's economy. However on the other hand, it has a negative impact on the decline of agricultural production in the village, even though this area is famous as a rice supplier area due to it has perpetual agricultural land. Besides that, another impact is the reduction in water catchment areas and could cause problems of uncontrolled regional development (urban sprawl).

Therefore a study on regional development in Tangerang Regency is necessary by identifying its characteristics and contributing factors. The purpose of this research is to study the condition of regional development in rural areas surrounding urban areas as seen from the physical, spatial, demographic and socioeconomic aspects from 2006-2016. So that it is expected that this could provide input for local governments in formulating spatial planning policies for rural areas located surrounding the urban areas.

The scope of the study area was in two villages, namely Karet Village and Pondok Kelor Village. The two villages were selected based on the consideration that the two villages were both located closely to Tangerang City, but the two villages were suspected to have differences in the regional development. With 265 ha, Karet Village has a larger population, which is around 33,693 and is growing faster than Pondok Kelor Village with 61 ha and a population of only 7,377.

Literature Review

Regional transformation is a representation of regional development which is described as a change and shift in the characteristics of regional components within a certain period of time as a result of the reciprocal relation between the components of the region. This occurred regional transformation could have an impact on local, social, economic and

cultural resources (Giyarsih, 2012). Regional transformation would affect developments in the region due to the fact that the elements in the transformation of the region could change the spatial structure and the environmental order of the community in the region undergoing transformation.

Generally regional transformations occur in areas close to the city center or commonly referred to peri urban areas. The peri urban area or Rural Urban Fringe is a term to describe a transitional area between rural areas which have urban characteristics. Below is the type of area development which would be discussed in this study.

1. Characteristics of land use could be seen through the pattern of utilization activities and the area of the land (Yunus 2008 in Meidiani and Wakhidah, 2013)
2. Characteristics of settlement pattern
Settlement patterns could be seen through building mass, settlement layout, settlement hierarchy, space use function and building density (Meidiani and Wakhidah 20130)
3. Building characteristics
Building characteristics may depart from various reviews, including building area, building height, building material condition, architectural appearance of the building, the building process, building ownership, building layout, building status, building function, building density, orientation to building utilization, and other characteristics (Yunus 2008 in Andi Tenri Tappu 2014)
4. Accessibility characteristics
Characteristics of changes in accessibility according to Yunus (2008 in Farisul and Santy, 2014) could be seen through road patterns and road functions.
5. Population characteristics
Population could be seen through changes in population size, population density and population migration rates (Dias and Wiwindari, 2014).
6. Characteristics of people's livelihoods
The development of people's livelihoods is related to the change in employment from the agricultural sector to the non-agricultural sector (Yunus, 2008 in Puji Hardati 2011).

Development of the peri urban area could not be separated from the influencing factors which are interrelated and have a strong influence to causes the development of space centrifugally outward (urban sprawling) and at the same time would reflect variations in the intensity of spatial development in suburban areas. Below are the influencing factors of the area development.

1. Spatial policies
According to Lee (1979), spatial policies were assumed to be one of the factors to have a strong influence on the intensity of spatial development in suburban areas if the existing regulations were implemented consistently and consequently.
2. Center for Economic Activity
According to Lee (1979), the public service factor was a pull factor for the population and urban functions to go there. The more types of public services to be concentrated in an area, the greater their attractiveness to the population and urban functions.

3. **Population**
Yusril and Wisnu (2016) revealed that population growth could trigger regional transformations which intensity was directly proportional to population growth.
4. **Accessibility**
According to Giyarsih, Muta'ali and Pramono (2003), the rate of regional transformation was influenced by the degree of accessibility in the area in which areas with a high degree of accessibility would undergo a faster transformation than areas with a low degree of accessibility due to high accessibility could be used as a benchmark in assessing the ease of accessibility in the area.
5. **Role of developer**
The role of the developer also had a strong influence in directing the spatial development of an area due to the fact that the area with development supported by the developer had spatial development acceleration which was much faster than the area not handled by the developer (Lee, 1979).
6. **The Influence of activities in the surrounding areas**
According to Iwan, et.al. (2014), one of the factors which caused an area to experience faster development was due to the existence of the surrounding area because areas which in relation to other areas with higher urban levels would have the higher level of transformation and vice versa.

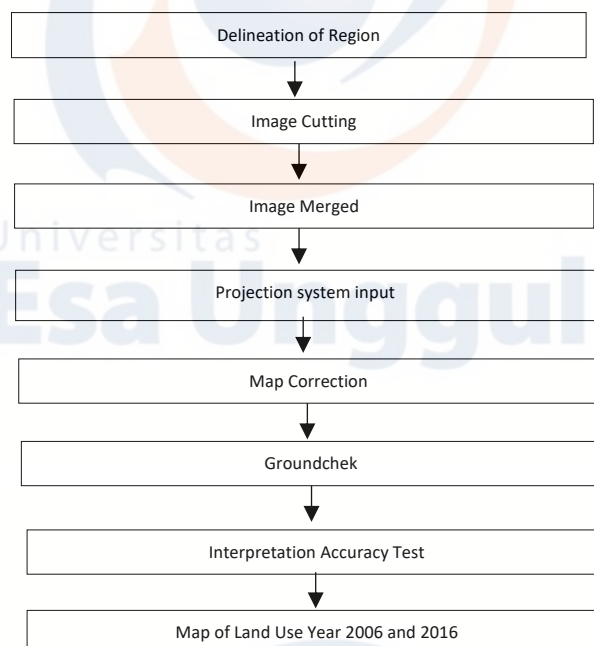
Research Methods

This approach used in this study was a rationalistic quantitative paradigm which determined to understand the process of regional development rationally based on the understanding of the previous theory for further research according to the real conditions in the field. The data required was primary data obtained through field observations and interviews and secondary data obtained through literature studies and international surveys in the form of time series map data for 2006-2016 and Sepatan District statistical data in figures for 2012-2016, urban village monographs, documents of Detail of Spatial Planning for 2011-2031 as well as supporting theories related to regional development.

This study used several analytical methods to assess regional development as seen from the spatial physical (land use, buildings, settlements and roads), population and socio-economic analysis. Below are the detailed discussion.

1. Land use analysis

It is to study the development of land use for 10 years by looking at the magnitude of changes in area and the function of its use. The analytical tool used was a spatial analysis overlay on the map year 2006-2016 and a comparative descriptive. As for obtaining a land use map prior to overlay analysis, it was obtained through the landsat satellite image processing process for 2006-2016, as detailed below.



In the interpretation accuracy test used the interpretation truth test formula from Nita Inopianti (2018), as below.

$$UKI = \frac{\text{+ total of right points}}{\text{total of points to be surved}} \times 100\%$$

The results of this land use change analysis would be classified into regional zones so that the regional development patterns which have occurred in the study location for 10 years could be identified. Theory from Yunus (2008) is used as the area zone parameters which divided the region into four zones, as follow.

- 1) Urban Frame Zone with the built-up land percentage >75 per cent (or *zobikot/zona bidang kota*)
- 2) Rural Urban Frame Zone with the built-up land percentage of >50-75 per cent (or *zobikodes/zona bidang kota desa*)
- 3) Urban Rural Frame Zone with the built-up land percentage of >25-50 per cent (or *zobidekot/zona bidang desa kota*)
- 4) Rural Frame Zone with the built-up land percentage of <25 per cent (or *zobides/zona bidang desa*).

2. Building characteristics analysis

It is to determine changes in the width offuction area and the building shapes from 2006-2016. The analytical tool used is spatial analysis overlay map of land built in 2006-2016 and comparative descriptive.

3. Settlement characteristics analysis

It is to determine the density of settlements from 2006-2016. The analytical tool used is settlement density analysis and comparative descriptive. The settlement density formula used is a theory by Sony Tilaar (2014), as follow.

$$\text{Population density} = \frac{(\text{total population in the number of household})}{(\text{wide of settlement land})}$$

4. Road characteristics analysis

It is to determine the pattern of the road system and its utilization from 2006-2016. The analytical tool used is a spatial analysis of the road system map to determine the length of the road and a comparative descriptive analysis to compare the development of road lengths for 10 years in the two villages.

5. Population characteristics analysis

It is indicated by the number and density of population. The analysis technique used is population density analysis and population growth percentage analysis as well as comparative descriptive analysis to compare population development in the two villages.

6. Livelihood characteristics analysis

It is indicated by the percentage of the population of farmers and non-farmers. The analysis technique used is descriptive comparative to compare the livelihood development which occurred during 2006-2016 in the two villages.

7. Regional development factors analysis

It is conducted by identifying aspects which have changed in the research variables so that the causes could be identified. In this analysis, the approach method is field study and literature study. The analysis technique used is descriptive comparative in order to compare the factors which led to the development of Karet and Pondok Kelor Villages.

Results and Discussion

General Description of the Study Area

The rural areas as the study location are located in Sepatan and East Sepatan Districts, namely in Karet Village and Pondok Kelor Village. Karet Village is located at 106°34'30" East Longitude to 106°35'30" East Longitude and 6°8'30" South Latitude to 6°9'30" South Latitude. Meanwhile Pondok Kelor Village is located at 106°37'0" East Longitude to 106°38'0" East Longitude and 6°6'0" South Latitude to 6°7'0" South Latitude. The two villages were selected based on the geographic location on the periphery of Tangerang City, that is in the north of Tangerang Regency. Physically, the areas are still rural in nature due to the characteristics which are still in form of green land or agricultural land which is quite extensive and are the potential areas, but have differences in the development of the area. Figure 1 is the administrative map of the study location.

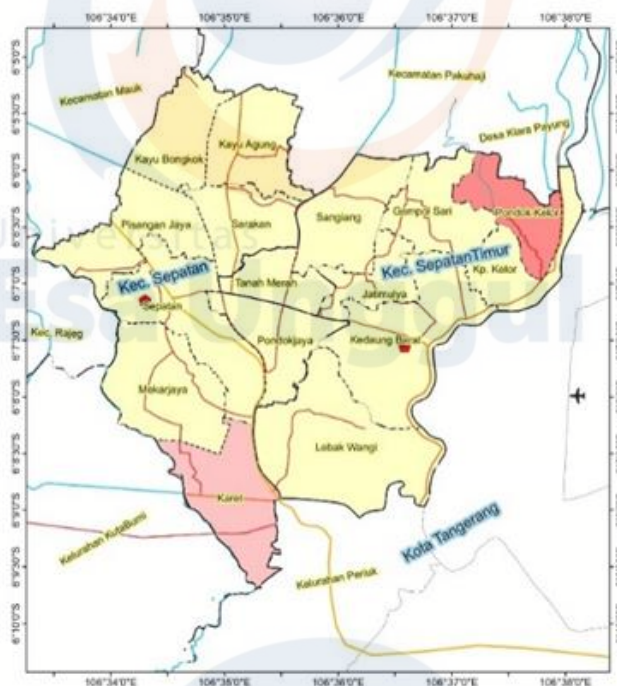


Figure 1. Administrative Map of the Study Location

The area zones in Karet Village and Pondok Kelor Village in 2006 were the initial years of research in identifying the development of the areas, including the urban village frame zone with the percentage of built-up land in the range of 25-50 per cent. For Karet Village, the percentage of developed and undeveloped land was 45 per cent (120.29 ha) to 55 per cent (144.71 ha). As for Karet Village, the percentage was 33 per cent (53.32 ha) to 67 per cent (107.44 ha).

Identification of Regional Development Conditions in the Study Area

Identification of the regional development condition could be seen from the changing process in regional aspects which occurred in the study area by looking at changes in the physical, spatial and non-spatial aspects from 2006-2016. The changes included aspects below.

1. Land Use Characteristics

The development of land use is carried out in three stages of analysis. The first stage is to test the correctness of image interpretation, the second stage is to analyze land use changes in 2006 and 2016, and the third stage is to classify the area zone.

a. The results of the interpretation accuracy test

From the results of the map interpretation of the changed and unchanged land sourced from the Landsat imagery in 2006 and 2016 and processed data from BPS for 2016, the level of accuracy to the field conditions was 100 per cent. Thus the test results could be accepted due to it has exceeded the minimum threshold of 85 per cent. Following is the results of the interpretation test table.

Table 1. Interpretation Accuracy Test

Interpretation results	Number of samples	Field Condition		Accuracy level
		Correct	False	
Changed	25	25	0	100%
Unchanged	25	25	0	100%

Source: Analysis Results, 2018

b. Land use changing analysis

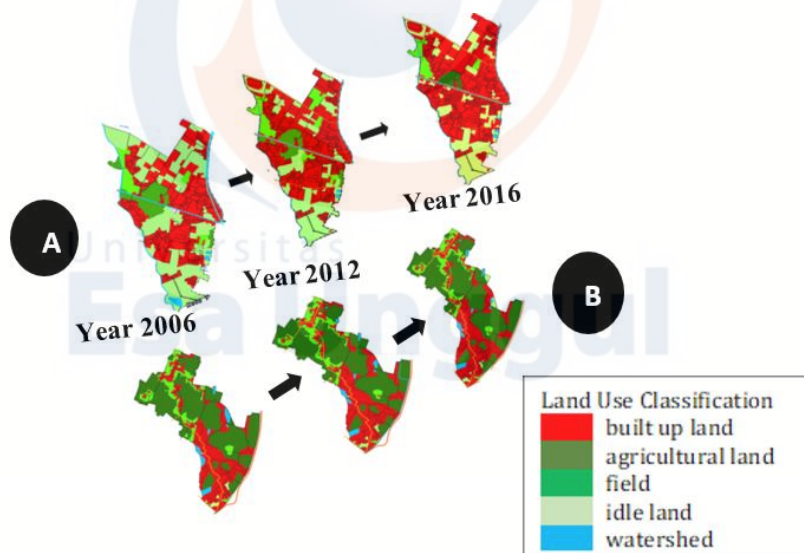
Based on the analysis of land use changing, the increase in built-up land in Karet Village reached to 56.18 ha (47 per cent) from originally 120.3 ha in 2006 then in 2012 the area increased to 154.25 ha and in 2016 the area increased again to 176.47 ha. The largest increase in the constructed land found in the use of open land and agricultural land, which converted respectively of 39.97 ha (39 per cent) and agricultural land of 14.34 ha (66 per cent).

Meanwhile in Pondok Kelor Village, the increase in area of land under construction was only 4.36 ha (9 per cent) from originally 53.32 ha (33 per cent) in 2006, then in 2012 the area increased to 56.82 ha and in 2016 the area increased again to 57.95 ha. The largest increase in developed land found in the reduced agricultural land by 4.25 ha (5 per cent). The results of this land use change analysis could be seen in the following table and figure.

Table 2. Area of Land Use Changing in Karet and Pondok Kelor Villages

Type of Land Use	Karet Village						Pondok Kelor Village						Changes					Ratio / Year PK (Ha)
	Year 2006		Year 2012		Year 2016		Year 2006		Year 2012		Year 2016		K (Ha)	K (%)	PK (Ha)	PK (%)	K (Ha)	
	Wide (Ha)	%	Wide (Ha)	%	Wide (Ha)	%	Wide (Ha)	%	Wide (Ha)	%	Wide (Ha)	%						
Built-up Land	120.3	45	154.25	58	176.47	67	53.32	33	56.82	35	57.95	36	56.18	47	4.63	9%	5.62	0.46
Agricultural Land	21.72	8	14.62	6	7.38	3	85.89	53	83.19	52	81.64	51	-14.34	-66	-4.25	-5%	-1.43	-0.43
Field	12.24	5	21.36	8	11.64	4	16.11	10	16.21	10	15.51	10	-0.60	-5	-0.60	-4%	-0.06	-0.06
Open Land	102.8	39	68.47	26	62.91	24	1.36	1	1.36	0.8	2.3	1	-39.87	-39	0.94	69%	-3.99	0.09
Watershed	7.97	3	6.64	3	6.93	3	4.08	3	3.44	2	3.28	2	-1.04	-13	-0.80	-20%	-0.10	-0.08
Total	265	100	265	100	265	100	161	100	161	100	161	100						

Source: Analysis Results, 2018



Source: Google Earth, Land Use Map of Bappeda Tangerang District, Field observations

Figure 2. Land Use Development (A) Karet Village and (B) Pondok Kelor Village

c. Classification of Area Zones

Based on the development of built-up land during 2006-2016, in 2006 Karet and Pondok Kelor Villages were classified as Urban Rural Frame Zone (Zobides) with a land percentage of 45 per cent for Karet Village and 33 per cent for Pondok Kelor Village. Then in 2012, Karet Village undergone development towards the Rural Urban Frame Zone (Zobidekot) with a percentage of built-up land of 58 per cent. Meanwhile Pondok Kelor Village was still in the Urban Rural Frame Zone with a land percentage of 35 per cent and in the last year (2016), Karet Village was still in the Rural Urban Frame Zone with a percentage of built-up land of 67 per cent and will continue to undergo development towards the Urban Rural Frame Zone. It was due to the prediction that the vacant land which was widely spread in Karet Village in the future would be converted into built-up land for industrial and settlements. Thus, during the period 2006 to 2016 Karet Village has developed faster than Pondok Kelor Village. This rapid development has made Karet Village undergo a regional transformation from Urban Rural to Rural Urban, while Pondok Kelor Village has not undergone a regional transformation due to its slower development.

2. Building Characteristics

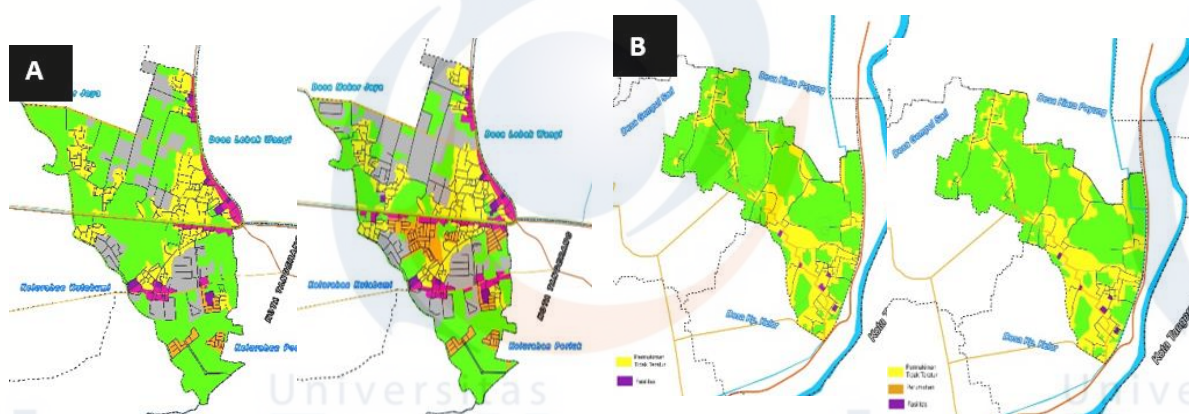
Based on the analysis results, the development of building functions in Karet Village was more developed towards the urban area compared to Pondok Kelor Village. Judging from its residential function, Karet Village has experienced a regular settlement growth with the growth of existing settlements since 2006-2012, included GMP 2, GMP 3, Taman Kota Permai 1, Taman Kota Permai 4, Telaga Bumi Asri Teriti and Prima Tangerang. Then in 2016 new settlements were built, namely Global Living and Permata Icon Settlements which further increased the residential area from 59.44 ha to 77.36 ha. Meanwhile Pondok Kelor did not undergo much development: from 52.54 ha to 57.15 ha or only 4.61 ha increased. This is due to the fact that this village has not been handled by developers and buildings characterized by rural areas were more visible in Pondok Kelor.

Judging from the commercial buildings, Karet Village has grown faster from the initial 57.81 ha to 95.61 ha with the characteristics of commercial buildings have led to urban areas, such as the growth of industrial buildings, shop houses, mini markets, clothing distributions, shops/kiosks, food, etc. which have started to cluster in one block area following the main road network pattern. Meanwhile, Pondok Kelor Village did not have a commercial function which was urban in nature. The development of building functions could be seen in the following table and figure.

Table 3. Development of Building Functions

Building Functions	Karet Village			Pondok Kelor Village		
	2006	2012	2016	2006	2012	2016
Housing	59.44	69.50	77.36	52.54	56.02	57.15
Commercial	57.81	81.70	95.61	0	0	0
Facilities	3.05	3.05	3.05	0.8	0.8	0.8
Total	120.3	154.25	176.02	5334	56.82	57.95

Source: Analysis Results, 2018



Source: Google Earth, Land Use Map of Bappeda Tangerang District, Field observations

Figure 3. Development of Building Functions (A) Karet Village and (B) Pondok Kelor Village

3. Settlements Characteristics

Based on the analysis results, the increase in settlement density in Karet Village reached to 143 people per ha, from the initial 119 people per ha to 161 people per ha. Meanwhile Pondok Kelor Village only undergone an increase in settlement density by 3 people per ha from the initial 29 people increased to 32 people per ha or an increase of 3 people per ha. Thus the building density in Karet Village was higher than Pondok Kelor. This is due to the high number of settlement developments in Karet Village in order to meet the housing needs of residents in Karet Village, which was larger in number compared to Pondok Kelor Village. The following table is the characteristics of settlement development in Karet and Pondok Kelor Villages.

Table 4. Development of Settlement Density

Village	Settlements Density (head/ha)			Notes
	2006	2012	2016	
Karet	119	143	161	High
Pondok Kelor	29	30	32	Low

Source: Analysis Results, 2018

4. Road Characteristics

The road system pattern in the two villages was divided into two types. First, the irregular/non-grid road network pattern (irregular system), which was a pattern usually built by the settlements and by the residents themselves. Second, the grid pattern (regular system), which as the pattern usually built by the settlements and the developers.

Based on the analysis results of the image interpretation of Karet Village in 2006-2016, there was an addition of a grid road system pattern of 5,897 meters. The addition of a grid type road system would function as supporting infrastructure for the development of new residential areas: Global Living and Permata Icon Settlements. Meanwhile for the addition of the non-grid road network pattern, it increased by 1,838 meters.

Meanwhile, in Pondok Kelor Village, the addition of the road system could be seen in the presence of a new 84-meter grid-type road which functioned as infrastructure for housing development which started in 2016. As for the development of non-grid roads, it has increased by 376 meters. Thus the conclusion is that the existence of housing and industrial development in an area could affect the development of its roads. The rapid development of roads occurs in areas which are affected by housing and industrial development due to the role of developers who assisted in improving the infrastructure in their regions. Meanwhile areas which have not experienced housing and industrial development tend to develop slowly. The following is a table and a figure of the development of the road system pattern in Karet and Pondok Kelor Villages.

Table 5. Development of Road System

Villages	Karet Village			Pondok Kelor Village		
	2006	2012	2016	2006	2012	2016
Grid	4,590	7,913	10,487	0	0	84
Non Grid	27,735	2,451	29,573	12,219	12,595	12,595
Total	32,325	37,364	40,060	12,219	12,595	12,679

Source: Analysis Results, 2018

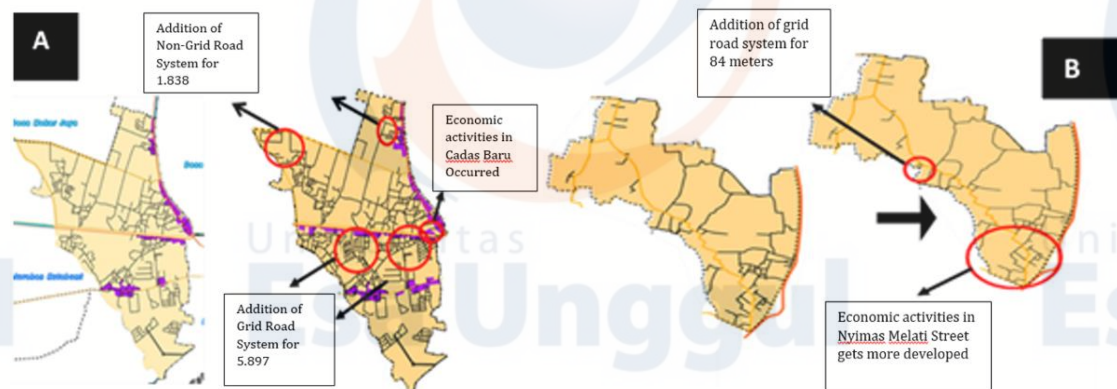


Figure 4. Development of Road System (A) Karet Village and (B) Pondok Kelor Village

5. Population Characteristics

Based on the condition of the initial population in 2006, the population in Karet Village was larger than Pondok Kelor Village. Population of Karet Village was 19,163, while Pondok Kelor was only 6,052. The following Table 6 is presenting the population growth.

Table 6. Development of Population in Karet and Pondok Kelor Villages

No	Year	Karet Village		Pondok Kelor Village	
		Total (head)	Density (head/ha)	Total (head)	Density (head/ha)
1	2006	19,163	72	6,052	38
2	2012	26,885	102	6,785	42
3	2016	33,693	127	7,377	46

Source: Projection Results and Sub-District Statistic Data Year 2013-2017

Based on the data, every year the population in Karet and Pondok Kelor Villages has increased on average during 2006 to 2016. Population growth in Karet Village increased by 6 per cent or an average of 1,453 individuals every year, while Pondok Kelor Village undergone a lower growth of only 2 per cent or an average of 135 individuals per year. This population growth also affected the population density due to the fact Karet Village became more densely populated than Pondok Kelor Village. The cause of population development in Karet, according to the Secretary of Karet Village, was due to the presence of immigrants because this village had quite large industrial activities and was close to the City Center so this was an attraction factor for residents outside the region to choose living in Karet Village. Meanwhile, the cause of population development in Pondok Kelor Village, according to the General Affairs Section of Pondok Kelor Village and the Head of Development, was mostly due to the natural population growth.

6. Livelihoods Characteristics

The initial conditions of the residents' livelihoods in Karet and Pondok Kelor Villages based on the results of the Village Secretary's interview in 2018 was that the average population worked in the agricultural and home industry sectors, such as blacksmiths.

However, the entry of industry and developers in Karet Village had an influence on the transformation of people's livelihoods from farmers to non-farmers, such as factory workers and traders. This is also took place in Karet Village. This change could be seen in 2015 data as the last year's data shows the number of farmers and non-farmers respectively. Based on the livelihood data in Karet Village in 2015, the total population who worked as farmers was 25 per cent or 2,120, while 32 per cent or 3,125 worked in the non-farmer sectors. In addition, the unemployment rate in Karet Village was quite high, reaching to 43 per cent of the total working population or 4,200 people. Meanwhile, in Pondok Kelor Village, the total population working as farmers was 13 per cent or 900, while those working in the non-farmer sectors were 63 per cent or 4,399. In addition, the unemployment rate in Pondok Kelor Village was quite high, reaching to 24 per cent or 1.680. Livelihood development could be seen in the following table:

Table 7. Livelihood Structure in 2015

No	Type of Labor	Karet Village	%	Pondok Kelor Village	%
1	Farmers	2,406	25%	900	13%
2	Non-Farmers	3,125	32%	4,399	63%
3	Unemployment	4,200	43%	1,680	24%
Total		9,731	100%	6,979	100%

Source: Analysis Results, 2018

The shift in livelihoods from farmers to non-farmers, which was not matched by good quality human resources, also affected the high unemployment rate in the two villages and led to competition in business and labor between local residents and immigrants. This is in accordance to the theory by Widjarnako (2006) which stated that the negative impact of changes in land use would cause a shift in employment from farmers to non-farmers, if the local workforce was not fully absorbed, it would increase the unemployment rate. This social impact would develop with increasing social jealousy of the local community towards migrants, which in turn had the potential to increase the social conflict.

Factors Affecting Regional Development in Karet and Pondok Kelor Villages

Centrifugal regional development in Karet and Pondok Kelor Villages is due to theinfluencing factors and at the same time reflected variations in the intensity of regional development even though both villages were located on the periphery of Tangerang City. These factors were government policies, growth of economic activity centers, population, accessibility, the role of the developers, the influence of activities in the surrounding area.

1. Government Policies

Based on the results of the Area Spatial Planning Review of Tangerang Regency 2011-2013, there were differences in the Spatial Use Pattern and Spatial Structure for Karet Village and Pondok Kelor Village. Karet Village was designated as a limited warehousing and industrial area as well as a medium density urban settlement area which functioned as an urban PKLP (*Pusat Kegiatan Lokal Promosi*) for Sepatan District. Meanwhile,

Pondok Kelor Village was designated as agriculture and a medium-density urban settlement area which functioned as PPK (*Pusat Kegiatan Pelayanan Kawasan*) for the East Sepatan District.

The difference in Spatial Planning Policy was causing the more rapid development of Karet Village compared to Pondok Kelor Village. It was due to the area designated for industrial areas had a bigger start-ups due to the influx of investment which has contributed to the growth of many industrial and housing activities which ultimately had an impact on the greater land conversion. However on the other hand, it also assisted to improve the infrastructure in the area so that the area developed faster than areas which were only designated for housing and agriculture, such as Pondok Kelor Village.

2. Centers of Economic Activities

Based on the results of the field findings, the cause of Karet Village to develop faster than Pondok Kelor Village was due to the existence of a greater growth of economic activity centers in Karet Village than in Pondok Kelor Village. The existence of large warehousing and industries in Karet had contributed to major land use changes in the area. In addition, it also affected the transformation of the function of residential buildings around it which were generally built in a row or vertical because it had a dual function. In addition to being used as a residence, this building also functioned as a commercial building (boarding houses) to be rented out to industrial workers in Karet Village.

The existence of industry also contributed to urban functions to grow. The urban functions referred to housing and trading facilities, such as shop houses, mini markets and shops. Another effect was that it could increase population growth and causing a shift in the economic activities of the people from initially being farmers to becoming industrial workers and traders.

Meanwhile, Pondok Kelor Village had slower development because it did not have centers of economic activity. The only economic activities existed were agriculture and serving trade, such as small-scale grocery stores, rented houses and food stalls, which did not have a major influence on the development of the village.

3. Population

Based on the results of population analysis in the study area, the population density in Karet Village tended to be higher due to the increase in immigrant population which affected the population growth in the village. Meanwhile population growth in Pondok Kelor Village was only influenced by natural growth so that growth was slower. Population growth caused by the influx of immigrants in an area would cause the faster development of the area faster compared to the population growth which was only influenced by the natural growth of the local population.

4. Accessibilities

Based on the results of field observations, the comparison of the degree of accessibility on the two main roads had a difference. Jalan Cadas-Sepatan had a higher degree of accessibility compared to Jalan MH. Thamrin due to this road was a Regency Strategic Road which opened a direct access between Tangerang City and Tangerang Regency to its function, namely Row Collector 30 so that the volume of vehicles entering this road was denser. Meanwhile, Jalan MH. Thamrin as the district's central highway with the

function of Collector Row 26 which was not directly connected to the Tangerang City Center so that its accessibility was lower. In addition, because it was not directly connected to the Tangerang City Center, the distance between Pondok Kelor Village and the City Center of Tangerang was farther than Karet Village.

5. Role of Developers

Based on the results of the field findings, the growth of new settlements which was often found in Karet Village was an indication that the development of Karet Village was also influenced by the role of the developers. It was due to the fact that the developers saw a more strategic location supported by industrial activities which could open up economic opportunities. Meanwhile, in Pondok Kelor Village, the role of the developers was not too clear because investors from new developers had just entered in 2016 so that the development was slower.

6. The Influence of Activities in the Surrounding Areas

Based on the results of the field conditions, Karet Village had a direct relation to the center of Tangerang City, namely Periuk Sub-District which had many industrial and residential activities. Therefore its urban function also developed in Karet Village due to the expansion of urban activities centrifugally in its suburbs. In addition, Karet Village which was also adjacent to Kota Bumi which had high density characteristics also affected the development of Karet Village which also undergone housing growth. As for Pondok Kelor Village, although it was closer to Soekarno Hatta Airport, this village was not directly related to the City Center due to it was located a little bit inside the Kampung Kelor Village and did not have direct access to the City Center. Generally areas which were directly related to Pondok Kelor had the same characteristics as Pondok Kelor, namely the dominance of having widespread agricultural and plantation land and the lack of activities which could generate economic activity in the region.

Conclusion

Based on the results of field observations, identification and analysis of the development of rural areas around urban areas, the following conclusion are presented.

1. Some villages around the urban areas, especially big city areas, develop quickly and some develop slowly. An example of a fast growing village is Karet village, which over a period of ten years, it has undergone a rapid transformation from a rural urban zone in 2006- 2012 to the city zone in 2016. Meanwhile, an example of a village which is developing slowly is Pondok Kelor Village due to the fact that for a period of ten years, it remained in the urban rural zone.
2. The factors which cause Karet Village to develop faster than Pondok Kelor Village are due to the existence of government policies in terms of space utilization which have made this village as an industrial area so that its development is faster. Meanwhile, Pondok Kelor Village developed slowly because it only functions as a residential and agricultural area. The government policy also influences other factors, such as accessibility, population, the role of developers and activities in the surrounding area.
3. This study also shows that government policies in developing villages surrounding large cities also have an effect on the direction of urban development. This could be

seen from the development of Tangerang City which is more visible in Karet Village than in Pondok Kelor Village.

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