Physical Structure and Pattern of Land Use Changes from Residential into Commercial: Analyses of Mampang Prapatan, Jakarta, Indonesia

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"When it is obvious that the goals cannot be reached, don't adjust the goals, adjust the action steps." (Confucius, China's most famous teacher, philosopher, and political theorist, 551-479 BC)

*"After difficult, there is always easiness. In truth, after difficulty there is always easiness" (Qur'an, Al-Insyirah: 5 -6)* 

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## **Summary**

Land use changes are common symptoms in city development process, which can happen within and or outside the city. Most often, residential areas are a susceptible to land use changes due to characteristic of the neighbourhood, accessibility, renting/business factors and government policy. Mampang Prapatan, is a residential area located in South of Jakarta, which has undergone land use changes from residential into commercial function. This is specially evident not only along the main avenue in the area but also along the secondary street particularly, Mampang Prapatan VI. The tendency of this change began at first as a penetration process of commercial activities, which then continued to increase and dominate within the area.

The occurrence of land use changes brings out questions how these changes took place and what are the strong factors causing them to happen. To answer these questions, it is therefore important to analysis the structure and pattern of the land use changes and the causing factors of the changes in Mampang Prapatan VI.

This phenomenon compare to other places have some important similar influence factors, which the area becoming strategic, rental commercial space is expensive, and lack of enforcement. In this study, there is one special characteristic of the changes where most of the actors are the local people of Jakarta (Batavia) who in majority owned the land in the study area. Because of most of the residents are still Batavia people, bring the form of the area into commercial area.

Results from the study and analysis concluded that land use changes in Mampang Prapatan VI not only happened in building function changes, from the residential function into commercial, but also in intensity changes of the buildings. These changes show commercial place in form of residential and multi function buildings mixed building which the combination between those two changes. It can be concluded that the main characteristic activity in the study area is commercial activities with domination of commercial buildings that reach approximately 10% and mixed building about 85%. Most of these changes occurred after year 2000, after a new plan has been set up in Mampang Prapatan Avenue as a commercial area. Accessibility advantage from the road function and high level of profit return is one of the strongest factors that has influenced the land use changes to occur. Other influencing factors include the flexibility and inability of government policy to control these changes.

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## **Chapter 1 Introduction**

#### 1.1. Background

Space necessities development in the city is much related to the population growth, whether natural growth or because of immigration. The population growth also being followed by city activities development which in certain need a space for it. City space necessities development is being done with intensification, extensification and invasion (new city) (Sujarto, 1996). In this context, intensification means that optimize the existing resources due to the current condition of an area or from the owner of a plot within their property and extensification is development that took place in empty area/land/plot which tend to broaden/extend the development outside.

Jakarta is the capital city of Indonesia and at the same time, the centre of national activities has dynamic space need development. One of the forms of space necessities development is the space for commercial area in the city centre. This process will happen by changing the land use from one certain land use to another. Basically, this process attend to increasing the economic value of the land.

Since the beginning, Jakarta has been the centre of economic activities in the country. Those activities used to be only happening in the harbour area in *Sunda Kelapa*. In its development, Jakarta has the tendency to move further to the south by having a new "elite" residential development area in *Menteng* in the early 20<sup>th</sup> century. As follows the city activities development in the early 1950's, Jakarta's government establishes a "satellite city" in the southern part of Jakarta, which is a new city *Kebayoran Baru*. The development surrounding *Kebayoran Baru* stimulated other new elite residential area to be established. This also made other existing/original residential areas to be pushed by the new activities, especially the development in south Jakarta where it was planned as a green area of the city. Many areas in south Jakarta where the local Jakarta people (Batavia) have a problem with the new residential development and the migration of newcomers live; it seems the development was not particularly concern with the original culture, heritage and people of Jakarta itself. Take for instance Mampang Prapatan.

Sub-district (*Kecamatan*) Mampang Prapatan is a residential area in peripheral of Southern part of Jakarta. The area was supposed to be the green area of the city, which became a residential zone. South of Jakarta become a strategic place than other parts of Jakarta because it is located close to other surrounding cities, many people live there not just because of the location but also for the variety of access to services and cheap land. One of the reasons is also the main roads in Mampang Prapatan Avenue were widened. It seems the area turned into a busy place for commuters from the city centre makes those kinds of development implemented in the area. After many years, Mampang Prapatan became a commercial area especially after Jakarta Municipality set the commercial strip along the Mampang Prapatan Avenue. This gives a significant effect to the surrounding area. Therefore, Mampang Prapatan turned into one of the commercial area in the South of Jakarta. Because of housing land use is the largest proportion in a residential area, it is therefore the function more often and susceptible to the changes into more economic function (Zulkaidi, 1999). Land usually gets the biggest return when it use for commercial or industries purposes (Barlow, 1972: 15). A land use will change for biggest return income in changing type of use from residential into offices (Harvey, 1996; 216).

There are some studies about the trends land use changes from residential into commercial that had been done such as in Ir. H.Juanda Street in Bandung, West Java (Safariah, 1999) and Bintaro Utama 3A and 5 street in Bintaro Jaya Real Estate, South of Jakarta (Maryam, 2000). These areas are all located with in South of Jakarta District.

According to these studies, space necessities development for commercial in Mampang Prapatan influenced the tendency for changing the land use from residential into commercial in the surrounding areas. This change has decreased the environment quality in Mampang Prapatan residential area.

## **1.2.** Problem Statement

This study focus on the land use changes from residential into commercial along the Mampang Prapatan VI Street. The chosen study area, a representative of the secondary street in Mampang Prapatan Avenue, that still 90-95% land occupied by local people of Jakarta (Batavia) along the Mampang Prapatan 6 Street. In addition, in 2000 the newcomers in the study area were only 10-15% of the original population. However, in 2005 it increased to 60-70% of the origin population (observation result). The growth of this phenomenon more less was caused by certain policy changes in the residential area, such as:

- In the year 1998, Land Use Planning in *Kecamatan* (sub-district) Mampang Prapatan for certain area like Kemang Avenue is allow to use double function from residential into commercial.
- In the year 1999, Governor of DKI Jakarta Sutiyoso declared Governor Instruction No. 140 year 1999 about Guidance of Giving Legal Permits for *Kampung Modern* (Modern Neighbourhood), Kemang, Pasar Minggu, and Mampang Prapatan, South of Jakarta. This instruction implies the general idea in having commercial place in Mampang Prapatan and gives flexibility also in changing land use.
- In the year 1999, according to the *Peraturan Daerah* (District Rules) No. 6 in City Planning and Design for South of Jakarta that in part of Mampang Prapatan is very fast developed in economy also other part is well under strict control. However, it is also because of 1985-2005 City Planning and Design (RUTR) Jakarta mentioned something about some parts of Mampang Prapatan set into commercial area (strip line site along Mampang Prapatan Avenue) which has influence to the surrounding local residential way of living.
- Based on description above, it can be seen that the changing of residential into commercial is not just from the residents actions only but also from the government policies, which have an indirectly influence to the changes. However, in other cases the policy changes because of the reality that they are facing.

## **1.3. Research Question**

Given these conditions, the thesis therefore raises the following question:

- What is the physical structure and pattern of the land use changes in residential area?
- What are the factors causing these changes?

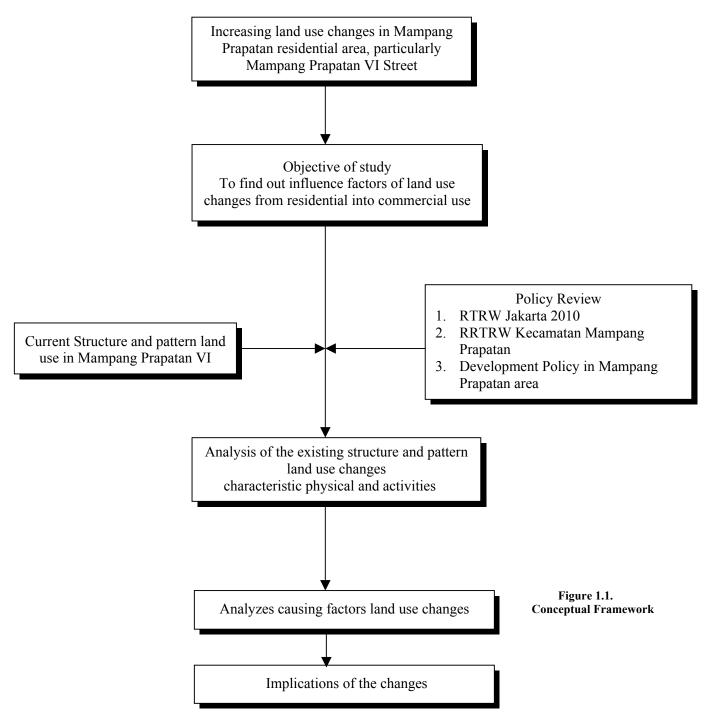
## 1.4. Objectives

The goal of the research is to describe and analyze the existing transformation process of residential area into commercial places in Mampang Prapatan VI Street. The sub objectives of the study:

• To identify physical structure and pattern land use changes development from residential into commercial in Mampang Prapatan VI Street.

- To study the degree/kind of shifting activity from single housing ownership unit into commercial place in the study area.
- To review the government strategy and policy concerning commercial places in residential area in Mampang Prapatan, South Jakarta
- To Identify the factors, influencing land use changes in the residential areas.

Given these objectives, the conceptual framework of the research is shown in figure 1.1.



#### **1.5.** Scope and Limitations

#### Area of study

This research will be limited to the structure, pattern and influencing factors of land use changes from residential into commercial. The aim of land use changes is a new use to land that is not according to the legal Space Area Planning and Design (RTRW) (Ministry of Internal Affairs Regulation No. 4 year 1996, chapter 1, section 1f). The meaning of residential function in this study is residential building and other support buildings, for dwelling purposes. Commercial activities include activities which provide income generations to the reidents such as offices, store or other business place.

In the context of the research, space use pattern is defined as a form of space use that describe dimension, function, and character of human or nature activities (Republic of Indonesia Laws No. 24 year 1992; 40). The structure of space use is defined as composition of substances that creates the nature, social environment which in hierarchy and structure related one to another to form a space designed (RI Laws No. 24 year 24 1992; 40). Therefore structure and pattern of land use in this study is physical characteristic forms and composition of substances that creates the creates the physical characteristic according to the human activities character in a plot of land.

#### Location

Research location will be conduct in Mampang Prapatan VI street residential area as a sample in one Rukun Tetangga (neighborhood authority) which containts 26 houses from the first layers of the street (residential strip). The choice of this area is the fact that many other areas have been a local government concern about the danger in land use, but not particularly for this area.

Summary of the limitation study

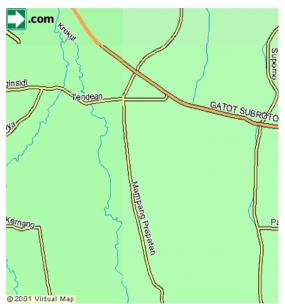
- Condition of the study area, which is Jakarta city, South Jakarta district and subdistrict Mampang Prapatan. The aspect that will be looking at the city reasidential area development history, area region function, government policy and potential also regional problems.
- Internal condition of the study area, which is Mampang Prapatan VI Street.
- Structure and pattern of land use changes development according to physical characteristic and activities.
- Land use changes influence by factors based on land demand side for commercial activities based on environment characteristic factors, accessibility, rent and government policy.

#### **1.7. Relevance of The Study**

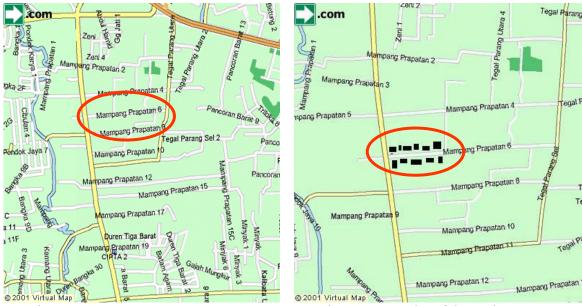
- 1. Analysis of the physical structure and pattern of changes in land use in the study area and determining the cause of these changes can provide a better understanding of this phenomenon which affects the residents, policies and city development.
- 2. The study will not provide solutions to the problems brought about by the changes but can open a new insight on the implications of these land use changes to the residents, to the concerning policies and the city development as a whole.



Location map: South of Jakarta



Location map: Mampang Prapatan



Location map: Mampang Prapatan VI

Location map: samples of the study

Picture 1.2 Map of Study Area Note: *Selatan* (South), *Timur* (East), *Barat* (West), *Pusat* (Centre), and *Utara* (North)

#### 1.8. Research Methdology

Two main methods have been used in data collection:

- 1. Primary data
  - i) Site observation

In Mampang Prapatan VI Street on first layer building along the street until first T junction. There are 26 buildings observed by taking pictures, observing daily activities, mapping the area, observing the interior layout and facade changes of the buildings/houses.

- ii) Interview
  - a. Residents

There are 15 residents inteviewed, 10 residents who changed their houses for commercial use, and the rest still as residential function. All the 10 residents are local people of Jakarta (Batavia) and the 5 remaining are Java people (non Batavia).

b. Local government oficials

The information of interview come from local authority come from Jakarta municipality office, Mampang Prapatan sub-district authority, Tegal Parang local admistrative officer.

- 2. Secondary data
  - i) Literature review of previous studies of similar nature, significant theories in land use, etc.
  - ii) Government documents, reports, maps, etc related to the case study.

## **1.9.** Structure of the thesis

This chapter has introduced background of the study, objectives, research question, scope and limitation, methodology, conceptual framework and relevant of the study. Chapter two will discuss the theory base through literature review on structure, pattern, and factors of land use changes. Chapter three presents the description of the current study area by reviewing both external and internal depth of the area. Chapter four describing the physical structure and pattern of residential land use changes development into commercial and factors influencing these activities. finally chapter five explains the results and the conclusion drawn from the study as well as the recommendations for further research or further action due to these land use changes.

## **Chapter 2** The Changing Land Use: Theoretical Framework

#### 2.1. Structure and Pattern of Changing Land Use

One of the real structures of space use pattern is a land use. Land use is an allocation of the use and land occupancy that has been set up according to the current rules and planning space design. (*Soefaat*, 1997: 83). According to Kushadinoto, as quoted in Gafar (1998; 42), city land use in Indonesia is divided into 4 land use groups, which are residential, business, recreational and commercial. Dirjen Cipta Karya adds Public Works Department added with two more land use groups, like service and mixed/super block (Gafar; 1998; 42)

Land is determined by the main activity on the site. Land use is a form on land occupancy activity as an effort to give certain purpose in result or service and realized space design in keeping the environment function survives. (*Soefaat*, 1997; 76).

Land use is connected with "*land economic*" theory. According to Barlow (1972; 4) land economic is a study about relationship of human economy with land. Land economy focuses on use of human economy with natural resources and physical factors, biology, economy and institution that influenced, formed, and controlled the use of this resource. One of the basic concepts of land economic is basic concept on land use type. This concept separates the land into ten-land use classification: residential land, commercial, industry, agriculture, grass field, animal husbandry, forest, mine land, recreation, transportation, service facility, infertile land and dessert (Barlow; 1972; 11). [According land economic limitation, therefore residential land use and commercial are city land use, which is the concern of this study.]

"City land use will be following the city development", said Doxiadis, as quoted by Zulkaidi (1999), there is two basic types of city development, which is growth and transformation. Moreover, Doxiadis in Zulkaidi quotation (1999) explained that growth is all kind of new settlement includes totally new settlement and existing settlement extension, meanwhile transformation is a very normal process because it shown first by its development form than the extension. Extension only happened once; in the meantime, transformation can happen repeatedly (Zulkaidi, 1999). The process that will be discussed in this study is transformation.

According Bourne, as Kievell's (1993; 88) quotation, there are four main processes of city development, such as:

- 1. Extension in suburb/peripheral (suburb nation);
- 2. Rejuvenation in the city centre;
- 3. Infrastructure development, especially transportation;
- 4. Growth and decline (removal industry from city centre and the growth of public buildings and recreation centre in the suburb)

Harvey (1996; 216) said that all sorts of land use pattern continuously being modified through changes in:

- 1. Size and composition city population;
- 2. Level and distribution of income;
- 3. Technology, like road network development and information technology;
- 4. Social organization and economy of living community, like TV, Sunday shopping, and vehicle ownership;
- 5. Government policy;
- 6. City development

Moreover Harvey (1996; 216) explained that as the answer into those several factors, land use changing:

- 1. Adjusting to the current space condition, like classify a big house into flat;
- 2. Change the type of use, like a big house into office;
- 3. Destruction and rebuild;
- 4. Constructing on vacant land;
- 5. Extension out from the city border;
- 6. Development residential area, like along side the railway.

According to Zulkaidi (1999), steps in changing land use of an area that happened mostly in residential into new function are:

- 1. Penetration, breaking through new function took place in a homogeny function;
- 2. Invasion, that occur the result of invading by new bigger function from penetration but not yet dominated old function;
- 3. Domination, the changes of function proportion domination from old function into new one because of big changing to new function;
- 4. Succession, definitely changes from a new function into the old function.

According to Zulkaidi (1999), type of land use changes includes change of function (use), intensity, and technical rule building period (bulk). He also explained that changing function is a change in type of activity, whereas changing intensity is a change in *Allowable Building Footprint Code (refer to as KDB in the Indonesian context), Allowable Building Floor Code (refer to as KLB in the Indonesian context)*, building density etcetera. Building technical changes inclusive such as Line Building Code (*refer to as GSB in the Indonesian context*), building heights, and other minor changes without transform the function and its intensity. Changing function bring big impact to the neighbourhood because this activity is very different from the previous. Intensity changes for the same activity will make bigger the current effect, whereas building technical changes is a small/light impact violation. In general land use changes is combination between those two or three kinds of changes.

Chapin and Keiser (1979; 28-31) explained that city space structure is much related to three systems, such as:

- 1. Activity system, related by human and their institutional matter to deal their daily business for fulfilled their needs and interaction each other in time and space;
- 2. Land development system; focusing on space change process and adjusting for human needs in accommodate current activity within activity system composition;
- 3. Environment system, related to biotic and a-biotic condition, which bring into use again by natural process, that focusing on plants and animals existence also basic processes that relate with water, air and material.

This study is related with activity and land development system, which refers to Bourne and Harvey who explain about city development and its land use pattern within the development. The study also refers to the activity after the development in land use changes based on Zulkaidi point of view. Thus, only two systems according Chapin and Keiser are explained in city space structure.

## **2.2. Factors Influencing the Changes**

Before looking at the influencing factors of the land use changes, first it is necessary to look at the framework and concept of "*land economic*." According Barlow (1972; 5-6) land economic has three frameworks, such as:

1. Physic and Biology

This framework has connection with natural environment where people try to use nature and knowing characteristic from variety of their resources. This framework has important influence to supply and demand in land economic.

2. Economy

This framework connected with price operation system. Price influences individuals to make serious effort for making profitable use on their basic resources. This framework related to human needs for maximize their profits.

3. Institution

This framework related with human's cultural environment role and social pressure which collective action influenced their habits too, as an individual and as a member of family, groups and society environment. This framework also connected to the impact of culture activity, manners and tradition, a way of thinking and work, law framework, government program, religion trust, and the same factors about human habits with human and human with land.

Barlow (1972; 7-17) also mentioned there are four concepts, which provide the basis for land economic theory which is land economy concept and land resource, type of land use basic concept, land use capacity concept and the best and high of use concept. From those four concepts that have connection with influenced factors of land use changes are:

• Land economy concept and land resource

This concept discusses all control to totally natural resources and artificial that exists on earth. Land concept itself sees the land as space, nature, production factor, goods consumption, situation, property and capital. Land resources concept, represent unification of land economy concept and land law concept. Included are also building and capital increasing which can be given to the land and natural characteristic of land.

• Land use capacity concept

Relative ability a land resource unit for produce surplus from returning and or satisfaction on the use cost. Land use capacity concept has two main components, such as accessibility and resources quality.

• The best and high of use concept

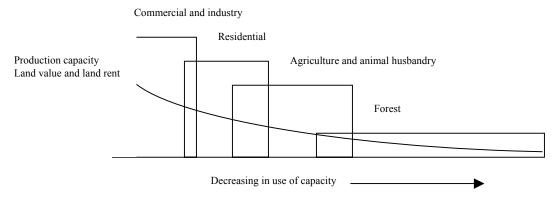
Landowner usually uses their land resource for a promising purpose to have maximal profits. Land resource is in the best and high of use to be used for giving optimum return to the executives or society. Resources usually get bigger return when it is used for industry or commercial (see the picture). As the result, this type of use sometime can change other application almost in every location/site.

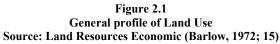
This concept will be interrelated with aspects:

- Legal;
- Physic;
- Financial;
- And optimum value.

Particular in case of Mampang Prapatan VI area the social and environment value will be interrelated. As known in the land economy's theory people start to think how to generate their income with the resources they had, without considering the activity's influence to

their social life as well as the efforts of their income generation activities to the environment.





As seen above, it can be explained that the land use for commercial and industry still has the biggest land value and land rent and most of the space land use more towards for commercial rather than other function which further to decreasing.

According Harvey (1996; 202-206) that there are some factors, which can be influencing on land use, such as:

1. Public accessibility

It is a profit from certain location in cover to be escaped from movement cost (include time) and level of capacity- income (include easiness) is produced. Executives need public accessibility to get production factor (labour) and easiness to the market. Meanwhile households need public accessibility for easiness to work place, store, school and recreation facility. Another thing that needs to take into account is that city centre (CBD) gives a big accessibility. For CBD offices location is location that gives highest income level capacity. Land limited in CBD and competition to get a site or CBD location brings effect on high price/rent. The bottom line is accessibility profit need to be compared with the level of rent.

2. Special accessibility –economy agglomerate

Is a location placement decision that influenced by external economy from two aspects which is concentration and complimentarily.

• Concentration

External economy aspect concentration can be formed from skill labour availability (like secretariat skill), public service (office stationery service), and location reputation (eg. Oxford Street for clothes and Harley Street specialized for medical equipment). Diseconomy from concentration (traffic) can decrease public accessibility location.

• Complementarily

It shows some different aspects that related mainly in personal contact with other specialized, store that sell comparing goods, consumer service, and little store approaching dominant vendors. Both of these aspects are relevant to residential location selection, where population concentration causing providing library, prayer place, school, and recreation facility and culture. The same thing with complementary: not only closer to the park, gymnasium, and open space to increase the interest of the residential area. But the resident also prefer live neighbours with other residents who has same social, culture, religion or race background. Special accessibility is factoring that form house separation with high quality. This special accessibility means that with pattern of city land use that formed by public accessibility; there is clustering or a group of stores and activity.

3. Additional factor

Another factors that influence city land use like history development, topography character, size and imperfect stock market.

4. Dynamic changes

Factor that caused dynamic changes are real income and technology development. New building techniques, which retain the raising building cost, make more development that is intensive in CBD. The movement out of centre increase level of measurement land surface that can be used. When the increasing needs for some lands caused price rising, this thing can be balanced by availability site or location in big amount/number. Land price in sub-centre relative will increase like in the city centre when the people move to suburb (see the picture).

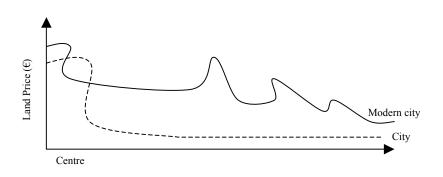


Figure 2.2 Changes in Land Price Gradient Source: Urban Land Economics (Harvey, 1996; 206)

Harvey (1996; 202) concluded that in principle there are three things in influencing location from certain activity, which is accessibility, environment characteristic and rent. Meanwhile other things that also influence are dynamic factor and government policy. Land use changes are done for raising economy land value.

Next part from this theoretical review will be discussing land rent concept. According to Barlow (1972; 156-159), rent is a payment that given to the property owner on behalf their land uses and building. Moreover, it was mentioned that there is three rent concepts in relation with economy return to the land resources, which is contract rent, land rent, and economic rent.

1. Contract rent

A payment that directly to be paid by the renter on behalf the use of other people property with certain agreement. This concept more or less equals with general concept of rent. The payment can be more or even under land rent quantity, which in theory is gaining from the property.

2. Land rent

Land rent is a main concept from land economic theory. This concept gives a theory foundation to explain value to a place that we live in a certain land and mostly from the gaining profit from the land occupancy. This concept also influences allocation from land resources between individual and other users that competed. The concept also has important effect to the agreement contribution, tax policy, land economy development, conservation, and some aspects of other land use resources. Land rent is an economy return that increase or must be increased to the land on behalf the use of it in certain production activity.

3. Economic rent

This concept is used for explaining economic income from the land and has a broad meaning or more less the same with the land rent concept now. Other meaning is surplus income above supply minimum price that is need for carrying a certain factor into production. Economic rent can be looked at as a short-run economic supply, which is a production factor, or an operator that gain because of unexpected supply-demand condition. A land economic like apartment construction can produce economic rent beyond normal value rent contract and land when the needs suddenly for residential make possibilities for owner to raising its rent price.

According Colby (Nelson, in Bourne, 1971; 77-78), there are two opposite style that influence the formation and land use changes, such as:

- 1. Centrifuge style, force the activity to move from certain area (city centre) to suburb, there are five form that work in this matter, like:
  - Space form (increasing the traffic)
  - Site form (losses because city centre too intensive)
  - Situational form (distance between building and unsatisfied functional alignment)
  - Social evolution form (high land value, taxes, and developing limitation)
  - Status and organization residential form (expired functional form, crystallize form, and unsatisfied transportation form)
- 2. Centripetal style, works to hold certain function in certain area (city centre) and bring back other function inside. This style happened because several of city centre (area) attraction quality, like:
  - Site (physic) attraction (nature landscape quality)
  - Functional comfortable (public accessibility)
  - Functional attraction (one function attract other function)
  - Functional prestige (road reputation or location for certain function)

Beside those two styles, Colby (Nelson, in Bourne, 1971: 77-78) realized that there is another factor, which is human rights to choose, like human equation. This factor can work as centripetal style or even centrifuge style. For example, Land and Building Tax (*PBB*) in city centre that expensive can make people to move from the centre (centrifuge style) because their activity not economic, but can also hold or attract other people to stay because of bigger profit gaining from their activity than taxes that need to be paid. Land use changes by itself will increase land value such as land price.

According Susilo (2000; 8-6 - 8-10) the meaning of land price is related to financial terms like market land price. Land price can be looked at into two aspects, like:

- 1. Land price as a market price, which land price is agreed during the buy-sell transaction
- 2. Land price as assessed value, which someone who expert in land estimation (assessor) from private or public estimates the price, in that land price estimation also being added "opportunity cost" that will be taken in the future from the land.

Moreover, it already explained in many studies, therefore can be made list of location factors that influenced the land price, such as:

- Land distance length from the workplace
- Distance to the city centre (CBD)
- Distance to local shopping centre within the area
- Distance to the nearest public transportation
- Relative distance to other support activity
- Environment quality surrounding

Susilo also mentioned city's land price theory; where to be known because of high demand on land in the city will cause competition within the buyers. It was mentioned that in economic policy there is *bid rent*, which means the amount of money that being paid by someone for a plot of land can be used for a certain cost/purpose. Therefore, it also explains that in the city, ability to pay the rent depend on certain factors, like:

- 1. Size of the city
- 2. Level of economic living survival
- 3. City land special use
- 4. Someone pleasure and desire
- 5. Land availability in the city

Beside that also explained about tendency of land price changes that usually happen because:

- The changes of personal pleasure and live style
- The changes or expansion from city area
- Space mobility from city people, especially in developed country
- The changes in economy and willingness people to more compete

## 2.2. Overview of Previous Land Use Changes Studies in the Same Trends (Jakarta & Bandung)

In a study that had been done by Safariah (1999), about land use changes from residential into commercial, aspects that can influence the changes are as follows:

- 1. Aspect of site attraction, the application variable are building form, land's wide, air condition, level of disturbance, green belt and residential condition.
- 2. Aspect of functional easiness, the application variable are public vehicle tracks/lines and road function.
- 3. Aspects of functional attraction, the application variable are distance from city centre, educations activity, trades activity, offices activity and hotels activity.
- 4. Aspect of functional prestige, the application variable is land prestige value in Dago (West Java-Bandung).

Variables that took place are being considered as an influence factor of land use changes. Safariah (1999) concluded that the most influencing factors in land use changes in H. Juanda road, Bandung city is an area with prestige land value, function of the road and trades activity.

In another study, Maryam (2000) concluded that influencing factors of land use changes in Bintaro Utama 3A and 5 road, *Bintaro Jaya* real estate are:

- 1. Strategic location, because business place is along side of the road (accessible), road connection between *Bintaro BSD (Bumi Serpong Damai Real Estate in South Jakarta)* through highway, passing by many vehicle and public transportation and surrounding by many potential market.
- 2. Economic needs encouragement, as an extra alternative income.
- 3. Rental price for commercial space provided by the developer is expensive.
- 4. Easy to get Business Place legal Permit (SITU)
- 5. There is demand.

It is said that based on the land economy theory mentioned and two previous studies from the same trends of land use changes; the study area has the same indictors of influence factors with one of the previous study, which took place in South Jakarta also. Moreover, in theory it is true that all the residents in the study are more concern how to survive in the large city development that already took place among them. Therefore, they are thinking in economic way with their resources/property by changing the use from residential into commercial.

## **Chapter 3 General Description of Study Area**

The high level of housing development and number of population in Mampang Prapatan area brought big impact to the needs for service facilities in the neighbourhood. Even after the local government has set, in the city planning and design, the first layer along Mampang Prapatan Avenue as commercial area, it automatically influenced the surrounding housing areas. As follow, as the housing development towards to the southern part of Jakarta all the facility like service for instance is shown just like a commercial strip development system where started from Mampang Prapatan Avenue to other secondary road along the avenue. Mampang Prapatan VI street is particularly more dense in terms of population and the activity on residential land use development to become commercial where most of the residence who live in that street change their houses into business place especially also on the strip line of the street.

Because of a clear indication, the changing residential function into commercial in Mampang Prapatan VI Street after the government set the new city planning and design in this area. Most of those residents who did it were the original local people of Jakarta. However, due to time constraints, this study will focus on Mampang Prapatan VI street but only from the main entrance until the first T junction. The structure of this discussion will start from general picture of the study area and then move towards the internal description of the study area.

#### 3.2. General External Description of The Study Area

Based on the conceptual framework on this study/research, this part will discuss the overview of the structure and pattern of the land use changes according to the existing planning and design. Overview will be done in hierarchy by starting with the provincial level in DKI Jakarta and then District (*Kotamadya*) level South of Jakarta, and finally the detail planning in Sub-District (*Kecamatan*) Mampang Prapatan where Mampang Prapatan VI Street is situated.

## 3.2.1. City Planning and Design (Rencana Tata Ruang Wilayah (RTRW)) Province of DKI Jakarta year 2010

Content of RTRW Jakarta that needs to be reviewed in relation with this study is the policy of space organization strategy, structure, pattern and control of land space use. According to the policy and strategy, area planning and design of the study are included in the Northern South Development Area (*WP-SU*). One of the main components of land use in the province is residential area. In that case as a part of residential area, the study area is also one of the main components of the land use structure in the city.

To achieve the land use's structure, pattern of area land use is done according to land use for residential area. Guidelines or land use control are based on the city planning and design structure in the province and district level. The changing functions of land use in the existing areas and have a historical, cultural, architecture value. For example, area like Menteng and Kebayoran Baru are controlled specific. Land use for residential area can be adjusted by the condition of the area. Moreover, land use occupancy has to have legal permits according to the law.

## 3.2.2. District Planning and Design of South Jakarta year 2010 (RTRW 2010)

*RTRW* South Jakarta is part of *RTRW* Jakarta. In the matter that need to be discuss is the policy of space organization strategy, structure, pattern and control of land space use in South of Jakarta where the place for the study in administrative.

Related to the study, therefore *RTRW* South of Jakarta need to be looked at specifically on development in residential, commercial and offices area with taking any

consideration that this study only takes place in residential area and going to study the influence factors due to land use changes from residential into commercial. In addition, the meanings of development in this matter are:

- 1. In residential, looking at:
  - Minimizing/limitation the changing function in residential area, especially for those who had settled by having building and environment protection program.
  - Mixed land use in the area where it is close or surrounding the public building area.
- 2. In commercial, looking at:
  - Commercial facilities development in the main centre, for example Blok M and Manggarai
  - Commercial facilities development which connected with service centre system
  - Limited the growth of "store house" (*rumah toko (ruko)*) in strip line as much as neighbourhood needs.
  - Optimize accessibility
  - Pay attention on neighbourhood physical support.

## 3.2.3. Sub-District Detail Planning and Design (RRTRW) of Mampang Prapatan in 2010

As a detail plan, *RRTRW Kecamatan* (Sub-District) Mampang Prapatan is an operational plan transformation based on 5 years evaluation of City Area Planning (*RBWK*). Meanwhile District Planning and Design (RTRW-K) South of Jakarta is a policy plan transformation from RBWK.

In this study, it is necessary to look at the potentials and problems in Mampang Prapatan. As one of the planning and design areas in South of Jakarta, Mampang Prapatan has potentials in commercial activities at the international, national and regional level, for example:

- Main business centre along the Gatot Subroto road (corridor Gatot Subroto) and Kapten Pierre Tendean road or Mampang Prapatan triangle until North
- Secondary service, like Mampang Prapatan's traditional market

The development in Mampang Prapatan, however also have problems according to the municipality record and researcher observation, such as:

- Traffic jam, like in Mampang Prapatan Avenue, Kemang Avenue, Kapten Tendean road, Kemang Dalam I road, Kemang Utara road, Bangka Avenue.
- Land misuse, like in Kemang Avenue, Kemang Timur road and secondary street Mampang Prapatan from 1-18. The area is regulated for residential from the beginning but the function is changing to be a commercial area (café, restaurant, mini store etc). This is all because of the population growth in the southern part of Jakarta. People tend to move towards to peripheral of the city from the center. In addition, the changing function disturbs the surrounding residential area.
- Lack of reserve for public facility (parks, children playground, clinic) which collide with the increasing on the land prices

In the land use planning for residential area from the municipality, it was mentioned that the residential and the facilities development in *Kecamatan* (Sub-District) Mampang Prapatan are based on the land capability and the high land value. Moreover, land use planning for residential garden in Mampang Prapatan was planned in Bangka area.

Planning for public residential building with the facility was meant to allow possibilities in double use in certain areas, in which residential could become a work/business place, or even more flexible function from residential into public building. These types of building were designed for areas with more developed business and commercial areas, along the artery roads such as Bangka Avenue, Kemang Avenue, and Mampang Prapatan Avenue.

The development pattern of public commercial building with the facility in Mampang Prapatan lies on the centre and *commercial strip* in Mampang Prapatan Avenue. This development was intended for maximize high additional value (land and economic) beside job opportunities. The developments of service/commercial centre in Mampang Prapatan year 2005 are main centre (along Mampang Prapatan road) in Mampang Prapatan area, which is in level sub-district and secondary centre (along Kemang road) in Bangka area.

Meanwhile for commercial strip development happen because the commercial activities occur more along the road. In this kind of development, the problem on transportation has to be minimized by providing sufficient parking areas and pedestrians facility. Commercial strip development in Mampang Prapatan year 2005 include:

- Service/commercial, including Mampang Prapatan Avenue and Kapten Tendean road
- Service/business, including Mampang Prapatan, Kapten Tendean road, Bangka I, some of Bangka avenue, Abdurrohim road (Kuningan Barat 1 road) and some of Kemang avenue.

Low-income vendors/entrepreneur including informal vendors can take advantage of the opportunity to do their business, without disturbing the neighbourhood. For example, those low income/informal vendors can be facilitated in the local government public commercial building with low *Allowable Building Footprint Code (refer to as KDB in the Indonesian context)*. In the same case the municipality through the governor decision, allows to become low income/informal vendors along certain roads.

#### 3.2. Internal Description of Study Area

The section will focus on the internal description of the study area, discussing the physical characteristics and the development of the commercial activities.

## **3.2.1.** Earlier conditions

#### **3.2.1.1.** Setting and context

According to the Governor Decision KDKI Jakarta No. 1815 in 1989, the area broaden in South Jakarta is 145,73 km2 in administrative this territory consist of 10 *Kecamatan* (Sub-district) and 65 *Kelurahan* (Local territory) with 576 *RW* (Society authority) and 6.126 *RT* (Neighbourhood authority). Total population in South Jakarta alone until the end of 2002 is about 1.7 million, and most of their income earners are from governmental and service, trades, industry, agriculture and public transportation. Social structure of the community has so many complexities in culture, religion, and variety of profession. Traditional culture still has its pattern like the origin of Batavia culture that can be found in this area.

Mampang Prapatan is one of the areas in South Jakarta where many Batavia people still live and own a big plot of land. Moreover, comparing the study area with others areas the number of Batavia people is still bigger, especially along the street of the study area where the land is mostly still owned by Batavia people. Only five out of twenty-six households living in the area are non-Batavia people who owned the land.

#### **3.2.1.2.** Physical Plan Concept

In the beginning, Mampang Prapatan was just an ordinary residential area where many Batavia people still live and occupy most of the land. Afterwards local government found out that in economic growth of South Jakarta in the year 2002 according Gross Regional Domestic Product (PDRB) in constant price only reach number Rp. 6.348.406,- ( $\pm \in$  5.000), therefore the local government set up a development territory based on their economic analyses and City Planning and Design Jakarta year 1985-2005. Mampang Prapatan includes in Centre Development Territory together with other 10 sub-district (*Kecamatan*) that approximately 5,587 ha is for trade and service development with Allowable Building Footprint area (KDB) 60-77%.

In Regional regulation no. 6 year 1999 about Regional Planning and Design South Jakarta, Mampang Prapatan is an area in Northern South and development territory, which needs strict regulation of the *Allowable Building Footprints Code* (KDB) to help conserve the southern part.

#### **3.2.1.3.** Perception of the Neighbourhood (interview & observation)

According to one of the correspondent of the interview, the situation before is not like now. "We can still talk with each other and knew every neighbour that we had and even greeted them when they are passing by. This is also because one street is like a big family-street where everybody came from the same roots and lives and grew up in the same area." Therefore, it is obvious that in the study area the family bond is very strong here. 40% of the people earn their income from having a home based children clothes production in the last 6 years ago. Therefore, most of the Batavia people in the study area work at home. Only a small number people work as an employee for private company. Only a few Batavia people became a trader/entrepreneur, even though at the end they finished their school/study or not. In worse cases, many Batavia people in the study area are unemployed but they seem to be contented with their situation.

## 3.2.2. The Life and Growth: a current condition

#### **3.2.2.1.** Perception of the neighbourhood (interview & observation)

After the setting up on Mampang Prapatan Avenue as a commercial place from the local government, many newcomers come and to settle in the study area. This has caused the drastic change or increase of temporary residents in the area who only rent a room near their work places. "Even now is quite hard to recognize people passing by our door to tell the difference between the visitors and the residents, this is really not how I imagine it to be", according one of the correspondents. "This is only a small neighbourhood, if we cannot know who lives here, how we can develop our "*silaturahmi*" (getting familiar each other). The situation right

now has changed when people already taking care of their own business. Only among old neighbours, the communications still exist but from the new one, it is hard and rare."

#### **3.2.2.2.** Community and other institutions

There still exist some collective activities under neighbourhood authority (RT) like : rotate credit association (arisan) – the most popular collective activity particularly for housewives; national events mainly on celebration of Independence Day; monthly contribution fund; voluntary neighbourhood work (*gotong royong*); wedding ceremonial; and funeral ritual.

In year 2000, the new representative body at Local Administrative Board (*Dewan Kelurahan*) has been formed based on representation of neighbourhood territory and informal leader. This representative body has a role to facilitate and lead the community initiatives and participation at the local level. They also planned as integral part of urban organization structure, which attempt to implement several new ideas in urban management: bottom up planning, community participation. Nevertheless, the implementation has not been productive and effective yet. There are still many problems, both at political and managerial level.

## **3.2.2.3.** Housing conditions

For residents who have not changed the function of their homes have definitely no changes with their house and even in size. On the other hand, those who started the business at home, both the façade and entire house form are changed. Because the demand for room rental has been increasing, many residents, mostly Batavia people, transform their houses into small rooms so they can rent it and gain some extra money. Alternatively, in other places because of their children could not afford to have a house so the parents divided the house into small house spaces for all of their children if they are getting married and do not have enough money to purchase a house.

Based on the current situation where in the study area have tenants, it made other residents to open a business service in their front house, such as mini shops, mini restaurants etc that automatically changes the condition of their houses.

#### 3.2.2.4. Other structures and space

In the study area, there is no new development of other buildings, except in the nearby which is the side entrance using Mampang Prapatan VI street for the access and it is a three stars hotel. The others are a mosque, which has existed already there for many years. A four storeys office building, which does not have any relation with the community, was built in the area. Lately a big storage some big copy printing shop company lies in the main entrance of Mampang Prapatan VI Street.

## 3.2.1. Physical Characteristic

The spaces in the study area are divided into building space and open space. Building space is a place to accommodate people activity, such as building with a form of a residential and business place. Meanwhile, open space is a support service facility for parks, green areas, city forest etc. idle land is a plot of land that is totally unmade. Empty land is a part of a med plot that is vacant and unmade. Land use classification in study area is shown on the table below.

No.	Space Use		Building Function	
1	Building Residential		Residential	
			Business place	
			Mixed (R and BP)	
		Business place	Business place	
			Mixed (BP and R)	
2	Open space	Green open space	Public facility	
		Empty land	Idle land	
			Mixed (IL and EL)	

Figure 3.1 Classification space use in the study area

Note: R- residential; BP- business place; IL- idle land; EL- empty land Source: 2001 survey

#### **3.2.3.** Characteristics of development activity

This study focuses in the changing function from residential building into commercial place. In this context, it is necessary to investigate at the development of commercial activities that have been going on so far. The study used two methods to document these activities: onsite observation and interviews. The developed activity can be classified into three major activities such as individual activity, rental activity, and communal activity. (See the table below)

					umber
No.		Activity		Year	
		T		2000	2005
1.	Individual activity	Store	Mini store	2	4
	(resident's own		Electronic	-	1
	commercial		Cellular	-	1
	activities with their		Printing shop	-	1
	plots/houses)		Game rental	2	1
			Taylor	1	-
			Sub-total	5	8
		Food service	Mini restaurant	-	1
		Cafeteria	Cafeteria	-	3
			Sub-total	-	4
		Building	Office	1	1
			Sub-total	1	1
			Total	6	13
2.	Rental activity (spaces the residents	Store	Printer and ink	1	1
			Sub-total	1	1
	rent out for	Food service	Cafeteria	1	3
	commercial use)		Sub-total	1	3
		House	Office	2	1
			Sub-total	2	1
		Service	Photocopy	1	1
			Beauty salon	1	1
			Laundry	1	3
			Sub-total	3	5
	1	1	Total	7	10
3.	Communal activity	Social service	Day-care	1	1
			Vocational centre	2	1
			Sub-total	3	2
		Social Facilities	Mosque	1	1
			Telecommunication facility	2	3
			Sub-total	3	4
		1	Total	6	6
Grand total				19	29

 Table 3.2

 Classification type of activity and the total number

Source: Researcher observation in Mampang Prapatan VI Street

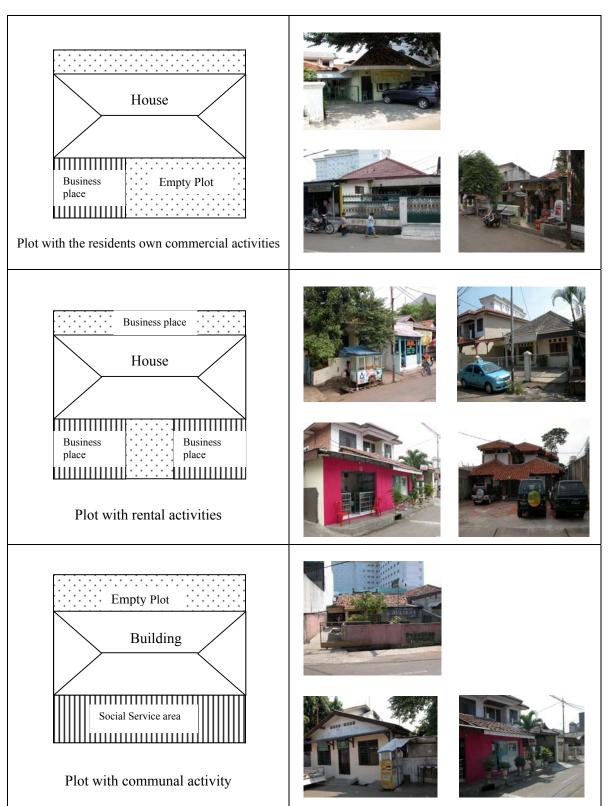


Figure 3.3 Schematic layout of land us changes based on classification type of activity

To sum up the input aspects of the description mentioned:

- The growth of business activity in 2000-2005 in Mampang Prapatan VI are caused by flexible rule or lack of enforcement from local authority, a new planning for Mampang Prapatan Avenue, which become commercial area from municipality and stimulate the movement of the population.
- Most of the people in Mampang Prapatan VI are the original local people of Jakarta, who were stimulated to open a business in their own land.
- The fast growing number of the changing land use in Mampang Prapatan area causes problems to the local government such as infrastructure. In addition, they have a problem in dealing with the local people about these behaviors of commercial activities in the residential area of Mampang Prapatan VI street..
- The increasing number from the year 2000-2005 is about 50% the residents do not have any permits to open a business. Furthermore, they only pay residential property tax and they do not give any contribution, such as commercial taxes. As a penalty, lack of infrastructure is becoming a burden due to the new commercial activities in the area.

# Chapter 4 A Change of Urban Neighbourhood in Mampang Prapatan VI: An Analysis

After reviewing the general description of study area, this chapter will analyze and discuss on land use changes. The first part will focus on the analyses of structure and pattern land use changes with the resulting general picture of land use changes. The second part then analyzes the influencing factors of the land use changes in the study.

#### 4.1. Structure and Pattern of the changing land use

City growth can cause the land use changes. In principal, the change is a process that involves growth in the same time whether in the city centre or even in the suburb (Kustiawan dan Anugrahani, 2000). As follows, this process forms a structure and pattern in land use.

#### 4.1.1. The Surveyed Plots (26 plots)

#### a. Based on the form

According the characteristic of the study area, space is divided into building and open space. However, almost all in the study area is already built, what can be seen only land use for the building comparing to open space. Land use for building in the study area is almost 99%. Functions of building use in the study area include residential, commercial, and a mixed of both.

There are 26 houses surveyed for this study. These houses include 2 business buildings (7%), 5 houses for residential use only (19%), 19 mixed building for residential and commercial use (76%). Based on form business buildings can be separate into residential and commercial place building. Space for creating commercial activities in the form of residential there are being used for self-purposes and some are being rented. In other words, they do not change their houses form but they change the function which in some cases, they added the activity. If it so there is a change maybe only in building intensity or design form. This addition of a new activity in the residential unit demonstrates Zulkaidi's concepts of "Penetration" meaning, a step in land use changes by breaking through new function took place in a homogeny function.

The commercial building with the form of business place has definitely changing the whole form or they started building from the empty land into office buildings. From both building form indicating that there is a change in building function and land use from residential into business place. This illustrates "Domination" as explained by Zulkaidi, meaning a step in land use changes by changes of function proportion domination from old function into new one because of big changing to new function.

b. Based on function

Mixed building is a double function building with residential and commercial use where they use also the land that is supposed to be a residential area. The changing building function started from the existing house space and the un-built part of the land plot (eg. Front-yard, backyard etc). Meanwhile in physical changes in a building with this kind of changes form are the intensity changes and form design of the building, which it used to be a residential.

Residential is a building with main function as housing. In addition, either they own the land or they lease it. However, in this study area mostly owned the land. Only less than five people who lease a space in the house. This illustrates Zulkaidi's concept of "Invasion", meaning a step in land use changes by occurring the result of invading by new bigger function from penetration but not dominated yet the old function.

#### c. Based on classification and the changes of the building

From the survey, the houses are more likely change and or added with commercial space and office building. In conclusion, that main activity in the study area is mixed but for the commercial strip area in Mampang Prapatan VI Street towards to commercial. Given these physical changes, it is therefore important to determine their effect to the area.



Picture 4.1 An office building constructed on a vacant residential plot (4 storeys)



Picture 4.2 Business place completely rebuilt from residential (copy shop storage)



Picture 4.3 Business place in a house without physical change (an office)



Picture 4.4 Mixed house (with residential and commercial)

In principle, land use changing is a common thing in accordance with city growth and development (Zulkaidi, 1999). Based on the pictures above, there are transformation processes in the space area for commercial activities with the growth of houses for commercial use. Dense land use for commercial activities in the business building, decrease the residential/ house use. Because of residential in city land use has the biggest proportion, therefore this function more often and susceptible to changing function for economic gain (Zulkaidi, 1999).

## 4.1.2. All surveyed of changed plots

a. Based on dimension of the land

Based on the survey, the use of commercial place in residential area in a house is between 800-1000 m<sup>2</sup> with total floor area around 400-600 m<sup>2</sup> (the largest). If classified based on type of commercial activity, therefore trade business has average floor area of 10-20 m<sup>2</sup> and for offices around 350 m<sup>2</sup> with floor area 1300 m<sup>2</sup>.

Meanwhile the changing land use into commercial with change of the building has floor area approximately 400 m<sup>2</sup> and main activity is trade. On the other hand, office building has 350 m<sup>2</sup> land plot and the floor around 1300 m<sup>2</sup>. However, for people who only build/use their small vacant land plot, the area is only 10-20 m<sup>2</sup> wide.

No.	Form	Function	Type of Commercial	Plot area	Floor area
				$(m^2)$	$(m^2)$
1.	House	Commercial use	Trade medium-scale	400	50
			Office small-scale	250	200
2.	House	Mixed use	Trade small-scale	20	20
			Office medium-scale	1000	100
3.	Business place	Commercial use	Trade big-scale	400	300
			Office big-scale	350	1300

Source: analysis of the survey result 2005

From this analysis, it is shown that the office building has a larger floor area than the small-scale commercial use. The office building has caused transformation houses to maximize the spaces within the building. It is different from a business that took place in a house. These can be seen by looking at the average of floor area of business place that reach 95% of the land plot. Comparing with average of floor area residential for a business place took place 50-60% of the land plot.

b. Based on previous function

In the year 2000, 80 % of the study area is residential, 13% vacant land, and 7% business. From that period, it can be concluded that there is a change of land use from residential into commercial. This conclusion is taken from the 7% business place, which in the first place was only residential because they only build in their small plot of land and the house is the same physically. Nevertheless, for the office building that has been built from the vacant land, there is a relation between the owner and changing intensity of the neighbourhood. This means that the landowners do not want to sell their land but instead they using it to gain profit from it.

No.	Form	Function	Type of commercial	Previous Function		
				Н	BP	VL
1.	House	Commercial use	Trade			
			Office	2		1
			Other service	1		
			Subtotal	3		1
2.	House	Mixed use	Trade	17	2	1
			Office	1		
			Subtotal	18	2	1
3.	Business place	Commercial use	Trade	1		
			Subtotal	1		
			Office building			1
			Subtotal			1

Note: H = Housing, BP = Business Place, VL = Vacant Land Source: analysis result, 2005

c. Based on ownership

As shown as the table above, the commercial activity within the residential area is the most common in the neighbourhood by building on their empty land (87%) and the place where still having their commercial place but also as residential (9%), the rest is only from vacant land (5%). Meanwhile for business place from a residential function or vacant land are the same averages (50%).

The data indicates that there is a deviation in land use where in the first plan was designed for residential area and the commercial place is in the avenue. Therefore land use change happen not only by changing the house function but also by having business place not according the land use. Moreover, the existing mixed used land use occurs because the residents could not afford to have business place in other places, where they have to pay for extra cost.

These changes also related to ownership of the land/building. 95% of the residences (26 residences surveyed and 15 residences interviewed) in the study area own their land and the building. The remaining 5% are leased the plot/home.

This indicates that ownership of the land have a big part of the changes because the residents feel they can do anything with their own land though they do not have the business permit. Another reason is most of the owners of the land are original people of Jakarta (90%) who have inherited their property from their ancestors. Almost 80% of the correspondents have said that they do not want to sell their land and would rather continue living in the area.

d. Based on intensity of changes on the building

For the changing land use with form of the business place building, from the survey of twenty commercial homes and one office building, there are seven houses with changed façade and front-yard, one house change with increasing number of storey and nine houses with change floor area and two houses without changes at all. Moreover, there is only one office building with changed façade.

	Form	Function	Type of Commercial	Intensity changes of building							
No.				Façade		Front- yard		Heights		Dimension	
				С	U	С	U	С	U	С	U
		Commercial	Trade	1	3	1	3		4		4
1.	House	use		1	3	1	3		4		4
			Office	1	2	2	1		3		3
			Other service	1		1			2		2
2.	House	Mixed use	Trade	10	1	11		1	10	2	9
			Office		1		1		1		1
3.	Business place	Commercial use	Trade		1	1			2		2
			Office		2	1	1		2		2

Table 4.3 Intensity changes of the building

Note: C = change, U = unchanged

Source: analyzes result, 2005

From the data it can be concluded that the previous function of the land/building (see table 4.3) where the changing intensity from previous function depend on original use of the land/building.

#### 4.2. Factors influencing the changes of land use

After analyzing the structure and pattern of the land use change, it is therefore important to study and analyze the factors that influence it. Moreover, in the analyzing these factors only will be looked at the resident point of view as the actors of the changes.

#### 4.2.1. Characteristics of the neighbourhood

According to the survey, Mampang Prapatan VI Street is the only street where most of the landowner still owned by original people of Jakarta (Batavia). Only five residents from the study area are not Batavia people. This indicates that the environment and culture of Batavia people is very dominant. In addition, Batavia people in the study area have more than five children giving economy difficulties in raising their family. One of the correspondents said that the reason that people open their businesses such as, shops, restaurant, is to provide employment to their children.

The study area was originally planned for residential area but since the Mampang Prapatan Avenue was transformed into commercial area, it somehow affected the people, who in the beginning everyone knew each other. Nowadays so many newcomers settle in the area, especially the workers who rent a room

#### 4.2.2. Accessibility

The area is accessible to the city, service and work. That is why so many people/workers in the neighbourhood especially along Mampang Prapatan Avenue search a place to live in the area. Moreover, the width of the street is narrow so the traffic consists, mostly of pedestrians and motorbikes. Therefore, this is very suitable for trade of small businesses that are home based to develop and get the market attraction.

#### 4.2.3. Renting/business factor

In general, the most influencing variable in leased factor is the level of profit return. It proved with its high index value for that variable, but for trading and food business is not influenced directly. However, for other service activities and office services are so influenced by the factors mentioned before. These occur after the local government has allocated part of Mampang Prapatan as commercial area. Therefore, rent price determine the land use changes for commercial activities and other services. Level of profit return is the highest variable index value to trades, offices, and food services. From that data, it can be explained that high rent value does not influence in level of profit return. In addition, based on interview trade commercial and food services are the most profitable activity in the study area.

For most of the landowner, the choice to lease their houses is the last option. Because what they need not only the profit but also the activity as well. However, if they want to lease it, not as a residential but for offices and the price can be higher than as a house. In this context, as discussed in chapter 2, landowner will use their property or the promising cost for their maximum profit (Barlow; 1972). High rent price is not related or influenced the land demand.

Furthermore, since accessibility offices are very important, moreover they are located within the residential area to lessen the cost.

This indicates that the land has the best and high use, which can be concluded for pattern of land ownership for commercial activities in the area is rent.

#### **4.2.4.** Government policy

In general, regulation policy of changing land use has high value index and has the most influence to the government policy. If connected with government policy in Mampang Prapatan, can be conclude that there is flexibility in local government on space planning design, which influenced the residents in changing the land use. It is proved that the development in 2000-2005 on changing land use is quite significant, and has become a dominating process.

As discussed earlier, the changing land use can occur to two different things; previous land use and planning and design (Zulkaidi, 1999). Zulkaidi mentioned that changing in previous land use is a new land use that is different from previous use and changing in planning and design is a new land use but not according to the city planning and design. (*Permendagri No. 4/1996*).

Based on *RBWK Kecamatan* Mampang Prapatan year 1985-2005, the area is for residential use. After revision, the plan changed into mix-residential and the facilities but the commercial on the commercial strip area (along the main road). Land use on an area is according to the main activity in that area. It is indicating in the study area that there is deviation in land use from previous plan and the future plan. This deviation happened because of changing land use residential into commercial.

#### 4.3. Implication of the factors of changes to land use control

According to the Law (*Undang-Undang*) no. 24 year 1992, control of land use is being done by observing and bringing under control on changing land use. This is to maintain the land use in space function, which has been set in planning and design; and be implemented. In the district area (*kabupaten/kotamadya*) the control is by legal permits mechanism. Through permit mechanism, change of land use can be made. It is so because of a law implemented from *Permendagri* (Ministry of Internal Affairs Regulation) no. 4 year 1996. According to this regulation rule, it is possible to change

the land use as long as the changes can be useful for all of the people especially for lowincome group, and can stimulate growth of the city economy.

Land use control in Jakarta, in relation of land use changes from residential into commercial is also controlled by permit mechanism. Based on The Governor Decision no. 203 in 1977, the main use/function in the house is a place to stay/live but there are several allowable activities within the house, such as:

- Individual expert practice, which in not a business company/ a joint business.
- Society service business that related to the society and does not disturb/had bad influence
- Social activity which is not disturbing and have a good influence

In Jakarta Municipality's Regulation no. 7 in 1991, every space changing function in a building must have a permit from the governor and according to the city planning and design.

The description above can provide a general idea of the implication of the changing land use from residential into commercial. The analysis shows that the land use controls in residential area have to look at the physical characteristics of the area and characteristic of the residents. This means that the permits mechanism can be implemented but have to take into consideration the residents needs and still give economic benefits to the local people surrounding area and the local government. City planning at the end must facilitate the changing land use through regulation policy of changing land use. Revision on land use planning along the main road has to be done every year to monitor every change that happen and even for an area that is fragile or easy to change the land use.

High rate of land price is also one of the consequence from the increasing land economic value, which increase land and building taxes where eventually cannot maintain original function of the residential as a home. This maybe because from financial point of view, house as a capital source being looked as an asset which a value product merchandise of all time (Hekkila, 2000:53). This theory illustrated in the interview of the residents who have problems with paying taxes on their land. They said, "The land is not productive and they do not have a job in the same time." That is why they start to make their resources more productive and earn an extra income out of it.

In the end, the local government cannot do anything if those changes are mostly because of personal reason and personal purpose only. One thing that the local authority has to do is to inform the people about the permit mechanism even if the local government cannot give the building permits for under 200 m2 according to Governor Decision no. 147 year 2001. This policy needs to revised and adjusted with the current conditions.

To sum up the discussion in chapter four, it is shown that there is relation between the land use changes theory with the current condition in the study area, which is all happened because of the rapid growth of population and the city development. Where it forced the city planning and design to extent further more from city centre to rural area and in some way influence the people who live in the new setting development. Therefore, the next chapter will be taken a conclusion and necessary recommendation for further research or action based on the condition described in this study and some questions that appeared for next study.

## **Chapter 5: Conclusions and Recommendations**

#### 5.1. The Physical Structure and Pattern Land Use Changes: A Summary

After several decades of occupation, a residential area normally has changed. Especially, when the policy decision took place in the city development. The change could be a positive or negative condition. In case of Mampang Prapatan as one of example in land use changes, the following indicators of neighbourhood deterioration and decline were found:

- 1. The residential conditions started to change, mainly the dwellings where located at the strip line of the street have been intruded by commercial use; and the numbers of commercial places has increase.
- 2. The profile of the residents has changed from the Batavia people (middle-income class) to Batavia people plus workers, students, renters, newcomers.
- 3. The public space and facilities has decreased the caused by increase of land price and individual ownership
- 4. The community organization started to lose the collective forces and the capacity, mainly when face with urban scale problems. Still there were found several collective activities, but the activities still work in marginal position are sure not an integral part of neighbourhood.

The analysis has recognized one of the causes of change and decline, such as:

1. A natural process of the neighbourhood growth

Increasing of household caused of additional space within the area; reducing cost expenditure on the land or house maintenance (change in function or generate income) lead to the obsolescence and neglect of the building structures or pattern.

2. Exploitation of property value

It could be indicated when the residents start to function not only as a place to live but a place to generate their income. The maximizing of the exchange value of property has often leaded to land speculation, intrusion of non-residential use and finally neglect of the building regulation too.

3. Low capability of municipality and local administrative officer in development plan and control

First, the municipality could not anticipate the negative impacts of neighbourhood growth; second, low performance in development control has allowed the increased exploitation of property value and pushed the illegal activities too; lastly, the local administrative officer could not give the building permits because they tied up with the ground base regulation.

4. Enlarging of city development in the residential area

The commercial are that took place in residential area, tend to influence, interrupt and destroy the neighbourhood structure, both physical and social aspect. So whilst, the planner set the commercial place in residential area and prepared for some transition in the original plan, the scale of city development eventually were simply too heavy to be accepted by the neighbourhood.

5. Lose priority of municipality program for inner city revitalization, especially for the residential area

The phenomenon of the large-scale city development showed the government rather gives to the new development of commercial places/areas in the inner city and new residential in the outskirt of the city. In many ways,

residential areas – both the planned and unplanned areas have been a direct sufferer of the new development. The lowest effect, they isolated the neighbourhood; the highest effect, they would decide a gentrification policy to replace the neighbourhood area. One main negative influence of this policy is the problems of neighbourhood growth and change are not addressed by the urban development program and policy.

Therefore, it is shown that the primary causes of the decline are more due to the external forces. The natural growth at the local level tends to give the soft influences within neighbourhood. These leave of the neighbourhood structure still intact. However, the external forces, mainly the simultaneously combination of exploitation land value, low performance of the municipality program are the ones that really have accelerated the neighbourhood decline.

According to the analyses of the physical structure and pattern of land use changes, the following can therefore be concluded:

- 1. There are two of land use changes from the residential into commercial use in study area:
  - The changes of residential function into business place
    - Because of the population growth and the rapid of city development, which towards to rural area, caused the behaviour of the residents to outsource their resources to be more productive as their economy, decreases. That made the people change either their house function into commercial or having commercial place on their empty land in built plot.
    - The changes of intensity and technical regulation on building period

Commercial use added in a house has resulted in changes in their façade, mostly on their front yard. This happened because the local authorities cannot declare for the residents the building permit because it too small according to the planning and design regulation. Therefore, many residents felt that they owned the land so they can increase the value of their resources/property.

- 2. The changes of function took place by transforming the house function into commercial activity. The intensity of change took place with the floor area extension to accommodate the business place. The building period changes take place by changing the building area, heights, front-yard terrace.
- 3. Changing function also intensity and building period formed building classification in the study area, divided into:
  - Business building, the main function is commercial use. This building change the function and also change the intensity and building period
  - Residential building, the main function is residence
  - Mixed building, the main function is residence but intensity and building period changes took place to accommodate commercial activity.
- 4. There is a decrease of residential building and increase of business building and mixed building in the last 5 years (2000-2005). It is estimated in 2000-2002 residential buildings were still dominant in the study area. However, since 2002-2005 business building has increased and become dominant in the study area.
- 5. There has been a transformation process with penetration step in commercial activity as a start, develop into invasion step, then keep developing into

domination step and towards to succession step based on inclination the current land use changes.

From the survey in 2005, it can be concluded that the result of findings from the study according to correspondent judgment to every aspects from influence factors of land use changes as follows:

1. For characteristic factor,

Based on study finding results above can be concluded that:

- There is tendency on land use changes function in residential area for along side secondary road after the effect of the main road is set up for commercial
- Level of location rent/land price for commercial activity in the study will be still high or even increasing, because the owner willing not to sell the land, but using it for economic purposes.
- If it is connected with government policy, where set up in Mampang Prapatan, therefore the conclusions that there is flexibility in giving the permits in land use changes. Also because lack of enforcement and the ability to give permits for a small plots through the space design policy can stimulate the growth of lad use changes and also as a factor that so influence in land use changes activity. These prove that there is a big increasing in land use changes in 2000-2005, where the growth causes a domination process on land use changes.
- 2. Mampang Prapatan VI Street as a residential area is one of the secondary road along Mampang Prapatan Avenue, which turned into commercial strip area influencing towards to the land use changes.
- 3. Land dimension is one of the considerations as influence factor where most of the residents owned big plots and big space in their house.
- 4. For accessibility factors in general, road function has high value index and the most influence in land use for commercial.
- 5. From respondent point of view is shown that because of the main road turned into commercial place then the demand for accommodation surrounding their workplace is increased and also the service facility (store, cafeteria etc).
- 6. High rate profit return for doing a business has a big influence in land use changes for commercial in the study area.

The general conclusion that land use changes in residential uses into commercial is influenced by:

1. Market strength, which supported with maximum value aspect existence, financial, physic and environment

Based on Barlow (1972; 7-17) four concepts for the basis of land economic theory, market strength is one of the best and the high of use concept where usually landowner uses their resources for a promising goal to have maximum profits.

- 2. Political power, which related with legal aspect
- 3. Social aspect, which influenced by social value existence

#### 5.2. A Changing in Land Use: Recommendation

Generally, the commercial places in residential area, the design of infrastructure and services capacities should be prepared and be anticipated to meet the densification of the newcomers - population growth - demands - when dealing with the fast growth of commercial places. This effort is to maintain the quality of the neighbourhood, social, settlement and its environment.

Based on this study, the neighbourhood income generation has three main prerequisites: the high level of government intervention, the city development schemes and the social condition of the people. In case of Jakarta, the government position is still as part of problem, whereas the neighbourhood regeneration program requires a strong supporting by government.

It has given a clear understanding for me, that in the context of Indonesian cities, the position of neighbourhood income generation is entirely different. It is not sensible to apply directly all of the international experiences to local context.

There are possibilities of implication caused by land use changes or neighbourhood income generation such as:

1. Unmonitored land use changes

Negative:

- Chaotic development of the area
- Infrastructure problems
- Lost sense of community
- Unorganized population density
- Illegal development

Positive:

- Optimize value of the resident's property
- Extra income in the residents
- Decrease unemployment
- 2. Lack of public facility/social activity

Negative:

- Stimulate an extra activity within the house
  - This can be in conflict to the residential activities.
- Social problems caused by heterogeneous people
- Security matters for the neighbourhood

Positive:

- Communal collective activities appearances
  - They initiated to have some activities so that can be together among the neighbours.
- Big appreciation on ceremonial celebration

With identified structure and pattern of the land use changes can be a general picture of the phenomenon and know how to deal with it or prevent something like this worsening. Perhaps further research can be deal with the following questions; were are derived from this study:

- 1. What are the effects of the land use changes for surrounding neighbourhood, executive/ entrepreneur, and local authority/ government?
- 2. What tools can be use to prevent the current condition worsening?
- 3. What aspects are needed to take into consideration in city development planning for existing area surrounding?
- 4. What are the compromising solutions of the property ownership by indigenous people and the current city land development?

Among all of that, the land use changes needs to be recognized that transformation process from residential to commercial should be regulated in proper way so it is "doable" for the short term through:

- Institutional scheme is projected by developing the quality of coordination between its involved actor and related mechanism (land use permit/commercial place permit). The process of legalizing the activity of transforming residential into commercial should have clear instrument and being arranged by specific institution to control the occurrence, mainly in its environment support of the neighbourhood.
- Society system is proposed by improving the quality of social control and social awareness to be actively involved in the management activity of commercial places. The role of community association should be enhanced due to the effectiveness of socializing the issue. The good quality of norm and social relationship should be maintained and being kept as well as the enhancement of role of household sector, in order to support community participation in this management issue even among the original residents and non-original or newcomers.
- Regulatory framework is proposed by enhancing the role of local authority in managing the commercial places in residential area. They should conduct regulation that is more effective and its implementation in socializing the subject/ mechanism. The legal instrument and legal control should have been set up in appropriate manner to meet the society requirement and ability. The guideline and rule should be considered sensitive case in dealing with Batavia people.

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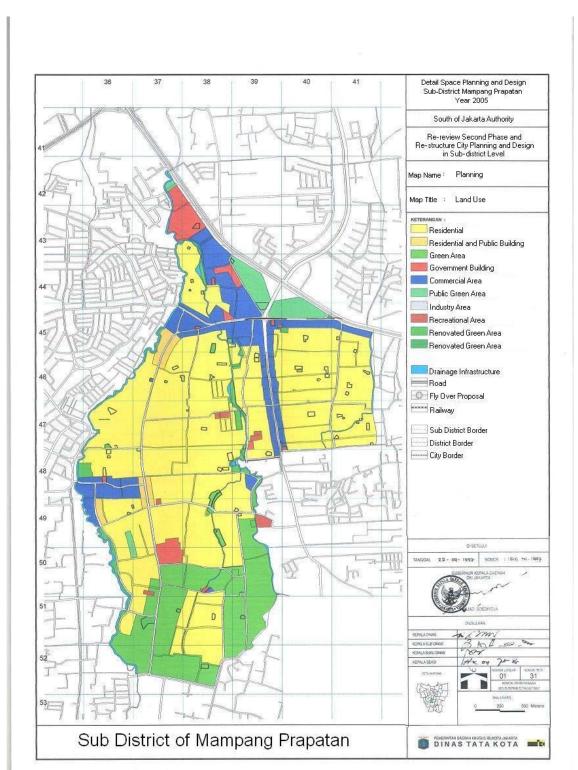
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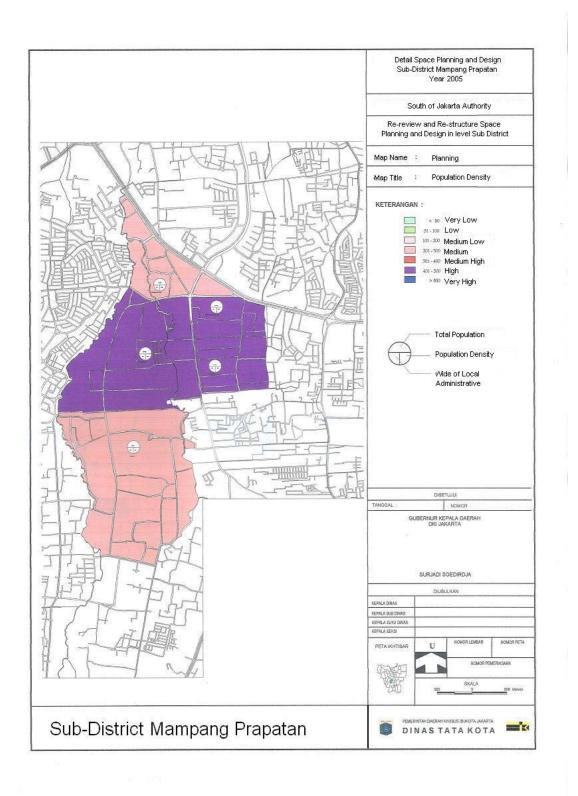
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# Annex 1: Map of Mampang Prapatan Land Use Development and Population Density



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## Annex 2: Questionnaire

1. Residence without change their house function

Unit nr. : Date of interview : Person Interviewed :								
Interviews								
Have you noticed any changes in the neighbourhood in recent years?								
Are you comfortable with these changes?								
Who lives in the house?								
When they did move in?								
Why they choose the place in the first place?								
From where the family get their income?								
What do you think about the changes?								
Do you see any problem because of the changes?(security, disturbance, busy, space)								
Do you have any idea to considered starting a small business?								
Do you have any idea to considered starting renting out the space? Why?								
Do you plan to move to other place because of this changes? Why?								
Do you have any suggestion or a wish about this area?								

# 2. Residence with change their house function

Unit nr. Person Interviewed	:	Date of interview						
Interviews								
Have you noticed any changes in the neighbourhood in recent years?								
Are you comfortable with these changes?								
Who lives in the house?								
When they did move in?								
Why they choose the place in the first place?								
From where the family get their income?								
What do you think about the changes?								
Do you see any problem because of the changes?(security, disturbance, busy, space)								
Do you have any idea to considered starting a small business?								
Do you have any idea to considered starting renting out the space? Why?								
Do you plan to move to other place because of this changes? Why?								
Do you have any suggestion or a wish about this area?								

