



รายงานวิจัยฉบับสมบูรณ์

พฤติกรรมการบริโภคพื้นที่เพื่อการอยู่อาศัยแบบ gated community
ของชนชั้นกลาง-สูงในกรุงเทพมหานคร:
กรณีความเท่าเทียมในการใช้พื้นที่และผลกระทบต่อรูปแบบของเมือง

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ของชนชั้นกลาง-สูงในกรุงเทพมหานคร: กรณีความเท่าเทียมในการใช้พื้นที่และ
ผลกระทบต่อรูปแบบของเมือง

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Abstract:

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Project Title : Housing Consumption of Upper-middle Class in Bangkok: Gated Communities and Implications on Housing Equity and Urban Form

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Gated community mostly in a type of detached-single house, presently takes place in the peripheral areas. Bangkok is an area which has encountered this situation and the numbers of detached single houses have changed from 25% in 1996 to 65% in 2005. This material and social symbolic housing consumption attached to the tastes of the middle and upper-middle class, which in turn profoundly affect urban growth and spatial change. The form of gated community has an influence on horizontally urban expansion since this housing type consumes a lot of space. The housing behavior is also conditioned by and, in effect, further 'inward commuting', from lower to higher density zones, especially in the city's core area. This research aims to find out the empirical evidence on a certain trend in housing consumption in the type of gated community and associated urban form in Bangkok developing alongside the expansion of the upper-middle class.

The research used a mixed method approach, employing both quantitative and qualitative methods of data gathering and analysis. In data gathering, it used the following techniques: survey method (using both probability and non-probability sampling method; Delphi technique; focus group interview; individual unstructured interview; and records review.

The results show the land use changes in Bangkok that agricultural land use had been decreased from 416,231 rai in 1984 to 231,148 rai in 2002, while on the other hand urban land use (especially for residential use) had being increased rapidly from 113,119 rai

in 1984 to 228,990 rai in 2002. The agriculture land use was decreased 8.44 percent whereas a change in residential land use was increases 5.04 percent. The expansion of housing to the periphery of upper-middle class has significant impacts on land use change. From 1994 and 1996, 15,095 units of detached single houses were built for upper-middle class which covered 2.188 sq.km land areas, then rapidly decreased to 3,475 units or consumed 0.580 sq.km. from 1997 to 2001 due to the economic crisis in 1997, and again climbed up to 23,573 units or 4.250 sq.km land consumption between 2002 and 2006. This changing has influenced urban development from nuclei to sprawl. Moreover, imperatives of greater gated community have been enhanced by the growing social separation of the residential areas. Living in the gated community does not much have social interaction i.e. activity participation.

The major mechanism of middle to upper-middle class's preferences for choosing a place to live in gated community is the present-day land-use policy and strategy of the government of Thailand have perfectly fitted in with and strongly supported middle-class and upper-class housing consumption. Their predisposition and stakes in housing have been promoted directly or indirectly by the following: a lenient financial lending policy promoting, among others, long-term fixed interest rate loans; reduction of special business tax; lessening of housing transfer fees; and a lack of comprehensive and effective land-use measures and planning; and accompanying with transportation policy i.e. a 'supply-fix' approach of increasing city road construction; low toll-way pricing; that, in turn, de-links the goal of efficient land development and transport in the city, and fails to regulate urban sprawl. Speculative land buying and real estate development and customers' preferences in the face of rapid urban growth are factors boosting up gated community.

For the expanding middle-class and upper-class population, however, Bangkok will more and more be a middle-class and upper class-oriented city – living in gated community and spending more on middle class transport/road support (toll highways; BTS) etc.; because consumer groups of gated communities have become more entrenched and powerful, including the gated communities developers. The motivations for purchasing properties in Bangkok Metropolitan Region (BMR) gated communities appear diverse and complex, which block the way forward in creating compact and smart cities or low-carbon

cities. Compact and smart cities can be implications to cost-effective and efficient use of urban resources (land, water, energy and time as a resource). Therefore, Bangkok may move further away from serving sustainable development goal. It needs a pleading for a more socially responsible real estate development and business take into account the fundamental concerns of equity, and sustainability.

Keywords : housing consumption, upper-middle class, gated community

บทคัดย่อ

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ชื่อโครงการ : พฤติกรรมการบริโภคพื้นที่เพื่อการอยู่อาศัยแบบ gated community ของชนชั้นกลาง-สูงในกรุงเทพมหานคร: กรณีความเท่าเทียมในการใช้พื้นที่และผลกระทบต่อรูปแบบของเมือง

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ชุมชนแบบลุ่มรั้วส่วนใหญ่มีรูปแบบบ้านเป็นบ้านเดี่ยวและพบเห็นได้ในพื้นที่ชานเมืองหรือพื้นที่ที่มีความหนาแน่นต่ำ กรุงเทพมหานครเป็นพื้นที่หนึ่งที่ได้เผชิญกับสถานการณ์การเพิ่มขึ้นของบ้านเดี่ยวที่มีร้อยละ 25 ในปี พ.ศ.2539 และเพิ่มเป็นร้อยละ 65 ในปีพ.ศ. 2548 ลักษณะการบริโภคเชิงพื้นที่เช่นนี้มีความเกี่ยวข้องกับปริมาณหรือความชอบของชนชั้นกลาง-สูงในสังคม และยังส่งผลต่อการเจริญเติบโตของเมืองและการเปลี่ยนแปลงเชิงพื้นที่เนื่องจากชุมชนลุ่มรั้วจะมีการขยายตัวไปตามแนวราบบริเวณเมืองรอบนอก นอกจากนี้พฤติกรรมการเดินทางแบบเข้าเมืองในตอนเช้าและออกเมืองในตอนเย็นยังเป็นปัจจัยหนึ่งที่สังเกตเห็นได้ไปพร้อมกับพฤติกรรมการบริโภคพื้นที่แบบชุมชนลุ่มรั้ว ดังนั้นงานวิจัยนี้จึงมุ่งที่จะค้นหาแนวโน้ม สาเหตุ และผลกระทบเชิงพื้นที่และทางสังคม ของชุมชนลุ่มรั้วระดับปานกลาง-สูงในกรุงเทพมหานคร

การดำเนินการวิจัยได้มีการเก็บรวบรวมและวิเคราะห์ข้อมูลทั้งเชิงปริมาณและเชิงคุณภาพ อาทิเช่น การออกสำรวจพื้นที่ การเก็บแบบสอบถามผู้อาศัยในชุมชนลุ่มรั้วระดับกลาง-สูง การสัมภาษณ์โดยใช้เทคนิคเดลฟายกับผู้ที่เกี่ยวข้อง เช่น ผู้บริหารโครงการ เจ้าหน้าที่ของรัฐและท้องถิ่น นักอสังหาริมทรัพย์ เป็นต้น โดยได้เลือกชุมชนลุ่มรั้ว 5 ชุมชนเป็นกรณีศึกษา

การเปลี่ยนแปลงการใช้ประโยชน์ที่ดินเพื่อเกษตรกรรมในกรุงเทพมหานครลดลง จาก 416,231 ไร่ในปี พ.ศ.2527 เหลือเพียง 231,148 ไร่ในปีพ.ศ. 2545 ในขณะที่มีแนวโน้มการเปลี่ยนแปลงการใช้ประโยชน์ที่ดินเพื่ออยู่อาศัยเพิ่มขึ้นจาก 113,119 ไร่ ในปีพ.ศ. 2527 เพิ่มขึ้นเป็น 228,990 ไร่ ในปีพ.ศ. 2545 การใช้ที่ดินเพื่อเกษตรกรรมลดลงร้อยละ 8.44 ในขณะที่การใช้ที่ดินเพื่ออยู่อาศัยเพิ่มขึ้นร้อยละ 5.04 ซึ่งเป็นผลจากการเพิ่มขึ้นของชนชั้นกลาง-สูงที่มีการบริโภคเชิงพื้นที่แบบชุมชนลุ่มรั้ว ผลการวิจัยยังพบว่าชุมชนลุ่มรั้วในระดับปานกลาง-สูงมีจำนวนมากขึ้น ระหว่างปีพ.ศ. 2537 ถึงปีพ.ศ. 2539 จำนวนบ้านเดี่ยวที่พบในชุมชนลุ่มรั้วระดับปานกลาง-สูงมีเพียง 15,095 หน่วย คิดเป็นพื้นที่ที่เพิ่มขึ้น 2.188 ตร.กม. และได้เพิ่มขึ้นอีก 23,573 หน่วย คิดเป็นพื้นที่ 4.520 ตร.กม. ในช่วงระหว่างปีพ.ศ.2545-ปีพ.ศ.2549 จากหลักฐานยังพบว่าการเพิ่มขึ้นของจำนวนบ้านเดี่ยวและชุมชนลุ่มรั้วจะขยายตัวไปตามเส้นทางการคมนาคมขนส่ง เช่น ถนนวงแหวนรอบนอก ทางด่วน ซึ่งเป็นการบริโภคเชิงพื้นที่ที่ไม่ยั่งยืนและยังส่งผลต่อรูปแบบการขยายตัวของเมือง นอกจากนี้สังคมของชุมชนลุ่มรั้วยังเป็นสังคมแบบเอกเทศและ

ขาดความแน่นแฟ้นเนื่องจากมีกิจกรรมร่วมกันน้อยและสิ่งอำนวยความสะดวกต่างๆ ในชุมชนเป็นแบบจัดจ้างบริษัท ที่น่าเชื่อถือมาดำเนินการแทนที่จะเกิดจากความร่วมมือของคนในชุมชน

กลไกสำคัญที่เอื้อต่อการบริโภคเชิงพื้นที่แบบชุมชนล้อมรั้วของชนชั้นกลาง-สูงส่วนหนึ่งเกิดจากนโยบาย และมาตรการต่างๆ เช่น การลดอัตราดอกเบี้ยเงินกู้ การขยายระยะเวลาการผ่อนชำระ การลดภาษีการโอน การขาด การบังคับใช้มาตรการทางด้านผังเมือง การสร้างการเชื่อมต่อโครงข่ายถนนบริเวณรอบนอกเมือง การลดราคาค่า ผ่านทางพิเศษ การขาดการบูรณาการระหว่างนโยบายที่เกี่ยวข้อง เป็นต้น นอกจากนี้การบริโภคเชิงพื้นที่แบบ ชุมชนล้อมรั้วยังได้รับการกระตุ้นจากกลุ่มต่างๆ ที่เกี่ยวข้อง เช่น นักพัฒนาอสังหาริมทรัพย์ กลุ่มสื่อโฆษณาต่างๆ รวมถึงความชอบ ซึ่งการอยู่อาศัยแบบชุมชนล้อมรั้วเป็นสัญลักษณ์ของสถานะทางสังคมของกลุ่มชนชั้น

กรุงเทพมหานครมีแนวโน้มที่จะเป็นสังคมของชนชั้นกลาง-สูง คือ อาศัยอยู่ในชุมชนล้อมรั้ว และมีการ เดินทางโดยใช้ระบบถนนและทางพิเศษมากขึ้น ดังนั้นการเพิ่มขึ้นของการบริโภคเชิงพื้นที่แบบชุมชนล้อมรั้วอาจจะ เป็นอุปสรรคต่อการพัฒนากรุงเทพมหานครให้ไปสู่เมืองที่ยั่งยืนได้ จึงจำเป็นต้องสร้างความรับผิดชอบและความ ตระหนักในด้านความยั่งยืนและความเท่าเทียมกันให้เกิดแก่ผู้บริโภค นักพัฒนาอสังหาริมทรัพย์ และองค์กรธุรกิจ ต่างๆ ที่มีส่วนเกี่ยวข้อง

คำหลัก : การบริโภคเชิงพื้นที่ ชนชั้นกลาง-สูง ชุมชนล้อมรั้ว

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Executive Summary

In Thailand, scholars have attributed the dramatic expansion of the middle class with the further elaborate development on capitalist production, requiring an increasingly complex and diverse range of human resource skills. A major segment of the country's economic base moved from agricultural to manufacture exports in the mid-1980s, which in turn was overtaken by technology-based product exports such as automotives, electrical goods, and computer parts in the 1990s. The latter two developments were accompanied by dramatic increase in foreign capital flows and expansion of producer services, which fuelled great demand for well-educated professionals, managers, clerks, and sales personnel to service the private business sector. This sector's employment grew from half a million in 1960 to almost 7 million in 1999 (Pasuk and Baker, 2002: 387; see also Hewison, 1996: 143-4). During this period, tertiary education in Thailand also rapidly expanded. Consequently, Thailand's workforces who are graduates of tertiary education multiplied eighteen times between 1970 and 1999 (Pasuk and Baker, 2002:386). Largely based on recognition of these recent changes in Thailand's political economy, a number of social scholars today have underscored three criteria--occupation, income, and education--in defining the category of the middle class in Thailand (Hewison, 1996; Askew, 2002; Ockey, 1999; Pasuk and Baker, 2002).

Rise of urban middle class along with their associated consumption is the most dramatic phenomenon fueling burgeoning housing estates of sprawling urban areas (Chua and Tan, 1999). This has become a critical dimension of urban growth and change since the middle class' consumerism has been strongly attached to material and emotional investments in the home and the housing estate (Young, 1999: 67-69). This massive enhancement in material and emotional consumption in housing has mostly been influenced by the media advertising i.e., comfort, affluence comfort, and exclusivity (Ockey, 1999; Hamilton, 1992). Therefore, types of housing – for example detached-house or high-rise building and their locations in the periphery or downtowns – presented levels of taste of the middle class and upper class, which in turn profoundly affect urban growth and spatial change. Particularly, the detached housing, consuming much more land in total than compact development, (CUPR, 1992) has been located where land is yet inexpensive in Bangkok's outskirts. This expansion of housing in the periphery, known as urban sprawl or low-density settlement, has impacts on space/land.

One form of housing where the new consumption capacity and preference of the upper-middle class of Thailand have become manifest is in the rise of gated communities. These are walled and segregated high-end residential spaces built with high-rise apartments and/or detached houses. In the latter case, housing estates would normally require relatively large tract of land at the city core or peri-urban. Walled or gated communities, which are a growing feature of urban settlement patterns throughout the world, have increasingly also become popular in Bangkok since the earlier mentioned shift in the Thai economy in the mid-1980s.

As in many other cities of the world, the rise of gated communities in Thailand, particularly in Bangkok, might have had important implications on patterns of social (in)equality in the city. Its rise as a distinct form of housing might have caused major shifts in land allocation for different types of housing and jacked up land prices in the city. The latter might have become unaffordable and tended to exclude a growing proportion of the population. This could create a situation that low income people have now become more dependent on social housing program of the government. Moreover, rise of gated communities in Bangkok might also have been increasingly eroding social cohesion and integration, and generating or worsening socio-spatial segregation, fragmentation and disconnectivities in urban life. These probable trends, of course, would have tremendous policy implications in urban development and mass housing provisioning, and in creating sustainable, socially inclusive city in the future. Unfortunately, there is current dearth of research focusing on these important developments and social issues in Bangkok at present; therefore, this research focused on such issue to study.

Objectives

1. To describe the significance of the rise of gated communities in Bangkok and its influence on changes in land use, spatial patterns and urban form in the last two decades.
2. To describe the key actors involved and understand the dynamics and mechanisms in the transformation upper-middle class expansion, changes in their housing consumption preference and behavior into gated community projects.

3. To assess the impact of the rise of gated communities on housing equity¹ in particular and on creating socially cohesive and inclusive urban life in general, and to identify relevant urban development policies and measures that can mitigate the negative or unintended effects of gated communities in Bangkok.

Research Methodology

This research is descriptive and explanatory in nature. It describes and analyses the current scope, patterns, and characteristics of gated communities in Bangkok in the immediate past and at present. It has identified the types of income-groups, professions, age groups, and other relevant socio-economic attributes that have formed the main clientele group of gated communities. It has also identified the distinguishing features, amenities and other salient characteristics of gated communities (including spatial and locational characteristics) and examines the fit of these factors to the preferences and certain attributes of the members of the urban upper-middle class.

The research used a mixed method approach, employing both quantitative and qualitative methods of data gathering and analysis. In data gathering, it used the following techniques: survey method (using both probability and non-probability sampling method; Delphi technique; focus group interview; individual unstructured interview; and records review.

¹ As the United Nations Centre for Human Settlements (UNCHS) describes housing inequality that an increased land and housing prices can force lower-income groups out of certain areas, while fear of violence frequently leads to a voluntary form of segregation. The latter is the case with so-called "Gated Communities" - fortified upper-income residential enclaves where private companies provide security for those who can afford it and from which "unwanted elements" can be barred. Urban spatial segregation is increasingly not only simply expressing socio-economic differences but it is also becoming the spatial embodiment of urban fragmentation and societal breakdown. To understand regarding the social-spatial problems in and among segregated urban areas, the third objective of this research defines "housing equity" as affordability of housing particularly the big segment of low-income household in the housing market which is strongly influenced by land allocation for housing through operation of the land market.

The research has the following schema as its initial working conceptual framework (see Figure 1). The conceptual framework is further elaborated in the course of initial data gathering into a set of clear study propositions around the research questions.

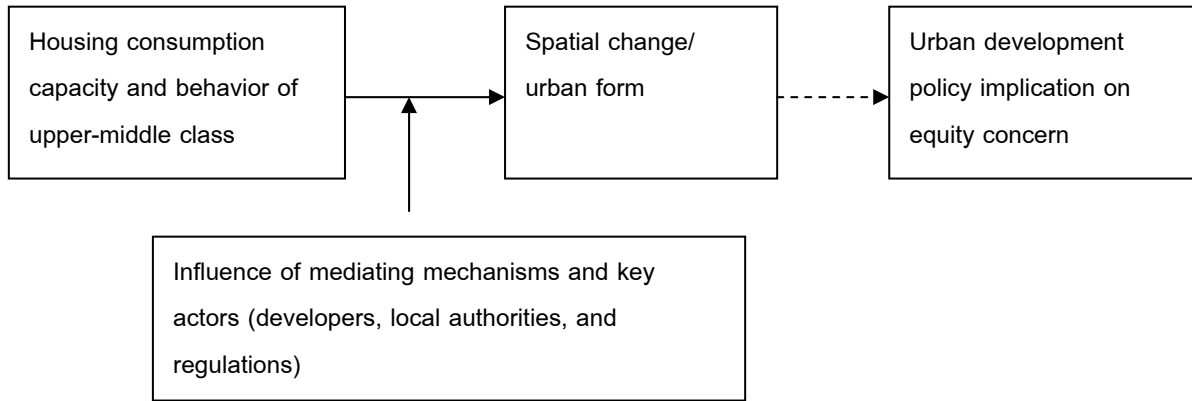


Figure 1: Conceptual Framework

Results

Bangkok Metropolitan Region is a conglomeration of Bangkok, the capital of Thailand, and the five adjacent provinces (Samut Sakorn, Samut Prakarn, Pathumtanee, Nontaburee, and Nakorn Patom) located in the central of Thailand. BMR is now considered the most important industrial and commercial centre in Thailand. In the last three decades, the area has been transformed from agricultural processing centre into manufacturing and residential locations. The developments were accompanied by dramatic increase in foreign capital flows and expansion of producer services requiring an increasingly complex and diverse range of human resource skills. This sector's employment grew from half a million in 1960 to almost 7 million in 1999 (Pasuk and Baker, 2002: 387; see also Hewison, 1996: 143-4). Consequently, Thailand's workforces who are graduates of tertiary education multiplied eighteen times between 1970 and 1999 (Pasuk and Baker, 2002:386). A number of social scholars today have underscored in defining the category of the middle class in Thailand, namely: occupation, income, and education level (Hewison, 1996; Askew, 2002; Ockey, 1999; Pasuk and Baker, 2002).

Rise of urban middle class along with their associated consumption is the most dramatic phenomenon fueling burgeoning housing estates of sprawling urban areas

because of material and social symbolic meaning attached to consumption of quality housing. Therefore, types of housing – for example detached-house or high-rise building and their locations in the periphery or downtowns—represented hierarchy of tastes of the upper-middle class, which in turn profoundly affect urban growth and spatial change. One form of housing where the new consumption capacity and preference of the upper-middle class of Thailand have become manifest is in the gated communities. These are walled and segregated high-end residential spaces built with high-rise apartments and/or detached houses. In the latter case, housing estates would normally require relatively large tract of land at the city core or peri-urban. Walled or gated communities, which are a growing feature of urban settlement patterns throughout the world, have increasingly also become popular in Bangkok. The rise of gated communities in Bangkok have important implications on patterns of social (in)equality in the city. Its rise as a distinct form of housing have caused major shifts in land allocation for different types of housing and jacked up land prices in the city.

This research presents the case of Bangkok Metropolitan Regions, which became the site of a globally-linked real estate boom from the late 1980s to the mid-1990s. It first describes the boom of middle and upper-middle class, which became the social base of the market demand for gated communities. The latter had a major impact influencing patterns in BMR's land use changes. It then goes on to examine the redistributive implication of this property boom, showing how this was shaped by the mediation of the state and local powerful actors.

Identification of upper-middle housing project was based on the in-depth interview results of the real estate experts. Then, these criteria would be applied to calculate numbers of units and plot sizes which are 13-year (1994-2006) statistical data from the AREA. The residential projects from 1994 to 2006 of Agency for Real Estate Affairs (AREA, 2008), reveals that the majority of property developers operating in BMR focus on developing prestigious and high-end housing projects. Almost half (49 percent) of the total area was used for upper-middle residential projects in Bangkok. The class of upper-end housing projects, with lots typically costing above 7 million Baht accounted for 24 percent. Together these two categories therefore sum up 73 percent of the land developed in the residential, open-market sector during the property boom in Bangkok. These two categories represent low-density housing, usually no more than 6-7 lots per rai, due to the

spacious lot sizes. The dominance of these categories effectively limits the area available for lower class housing, where far smaller standard lot size enables more families to construct dwellings per rai of land. The remarkable gated communities were scattering located in western and eastern of Bangkok and some extend to the adjacent provinces. It comes from express way and the systematic loop completely of ring road serving traveling of upper-middle class mainly relying on private cars which was geographical proved by using GIS.

Density of housing in Bangkok during 1998 to 2008 tends to increase. The highest residential density was found in inner zone. It started from 4,090 units per sq.km. in 1998 and continuously going up to 4,369 units per sq.km. in 2008. The residential density of middle zone tends to increase from 1,741 units per sq.km. in 1998 to 2100 units per sq.km. in 2008. The residential density of outer zone also is relatively increased from 736 units per sq.km. in 1998 to 970 units per sq.km. in 2008. The linear regression models show R^2 value of 0.99 in outer zone, 0.98 in middle zone, and 0.86 in inner zone. Trend of the change of the all three zones from 1998 to 2008 discloses that the residential density of outer zone has changed 2.4 percent more than those in middle zone (1.71 percent) and inner zone (0.63 percent).

The evidence can identify the change of urban form through residential density and this phenomenon has an impact on land use which can be observed in the study areas. By comparing the area conversion between agriculture and residential land uses from 1986 to 2002, agricultural land use had been decreased from 416,231 rai in 1984 to 231,148 rai in 2002, while on the other hand urban land use (especially for residential use) had being increased rapidly from 113,119 rai in 1984 to 228,990 rai in 2002. The agriculture land use was decreased 8.44 percent whereas a change in residential land use was increases 5.04 percent.

To describe the key actors involved and understand the dynamics and mechanisms in the transformation upper-middle class expansion, changes in their housing consumption preference and behavior into gated community projects, the unstructured face-to-face interview survey of 311 residents in the selected gated communities and the in-depth interviews of real estate developers and local authorities were carried out. The housing policies and strategies were also reviewed in order to investigate housing development.

The gated community has been indirectly stimulated through housing policies and strategies i.e. 1) long-term fixed interest rate loans, 2) 46 billion baht of 3 and 5 years maturity bonds launched by GHB with guarantee by MOF, 3) reduction of special business tax from 3.3% to 0.11%, and 4) lessening of housing transfer fees from 2% to 0.1%.

The key strategy of the Bangkok Plan in 2002 for restructuring the city's urbanizing fringe is the construction of a system of metropolitan sub-centers. The five sub-centers have been promoted through the development of housing projects and the manufacturing sector. The sub-center policy partly succeeds because the number of residents and companies residing in there had increased, but many of the residents (the respondents) still commute for work and education to the city center and the sub-centers themselves, producing unintentional impacts on housing consumption and commuting patterns. Yet, the lack of a systematic and interconnected transport network and a burden on transportation and public works investment have influenced to those who live in the outer areas of Bangkok or its vicinity have to commute longer distances to reach the inner city where they work or educate and by often using personal cars with the advantage of saving traveling time and higher comfort.

The rise of gated communities is not only from enhanced links to Thailand with the global specifically through liberalized policy on international finance and foreign investment. Further entrenchment of modern lifestyle of Bangkok people themselves, which has been strongly influenced the Western style and tries to copy housing and spatial behavior of the North American model (Leisch, 2002) is another determinant factor of this trend. According to the 311 questionnaire survey of the five selected gated communities in Bangkok (2009), there are several reasons given by homebuyers why they prefer to live in the gated communities. Several reasons are they want to live in modern-style house with the luxurious materials identifying their social status and/or they want to have the good surroundings. The most important reason, which the respondents (upper-middle class) concerned when buying house in gated community, is security. They need boundary which identifies their private and prestige places by surrounding with walls, fences and guards. It is not only estate manager, but the planner officers and local residents all identified also crime and fear of crime as key reasons why the residents wanted the gates to stay. The security included CCTV cameras linked to a reception area, a concierge which would

eventually be staffed 24 hours a day, site security patrol night checks, all were observed by surveying the five selected gated communities. These reasons are closely similar to reasons of preferences articulated by middle-class and upper class consumers of gated communities in America (see for example, Blakely and Snyder 1997; McKenzie, 1994).

The developer is the key co-ordinator and catalyst for development. Based on the in-depth interviews of seven developers, it was found that the significant factors for investment in upper-middle housing projects particularly detached-single house are anticipated demand or customer lifestyle. The real estate companies do the surveys from the old customers and analyze their preferences on housing style and location. After that the developers consider land acquisition which should be occupied in cheap price. All developers agreed that transport system accessibility i.e. near express way or main road and good environment i.e. air quality are the first priority to make a decision on locational selection for gated community projects. The location should be approximately far from CBD more than 25 kilometers or nearby ringroad i.e. Rajchapruk, Ramindra. Infrastructure i.e. electricity, water, telephone etc. is not much concerned by real estate agents since the projects are established in Bangkok Metropolitan Regions (BMR) where the supply already exists. Public transportation i.e. bus is also not much considered by real estate developers because the customers do not rely upon public modes. They also gave the additional reasons to invest housing projects for upper-middle group, for example, reputation/experience of the company and quality of housing materials.

The reach of the property boom was wide and radically altered existing spatial patterns to serve urban expansion and have caused massive land conversions from rural to urban use. They also created new physical structures and complexes requiring large tracts of land that cater primarily to middle and upper classes where the theme of equity in land development has emerged. Speculative land buying and real estate development in the face of rapid urban growth are factors boosting up land prices and exacerbating the problem of urban poor shelter. The studies of property development and urban land markets in Bangkok, the actions and national policies are recognized as important mediating factors. Direct and indirect regulations, such as comprehensive plan or zoning, make urban land cheaper or more expensive for specific development uses. City government can support growth—capital accumulation in real estate—through a variety of interventions, including

tax relief, public service provision and mega project as Suvarnabhumi international airport. These policy measures have little to show in terms of providing public land for housing or regulating land use to secure adequate space for urban poor housing development.

Although the residential property development that occurred in Bangkok between 1953 and 2007 included land for both the socialized housing sector and the open-market sector, the socialized housing sector was severely marginalized. The demand is a function of the purchasing power of different groups in society, and not of the basic need for shelter of low-income groups and the poor. Land in Bangkok is scarce and further aggravates the problem since Bangkok experiences a population growth rate of 3 percent per annum during 1960 – 1970, and declined rapidly during the late 20 years. The growth rate between 1970 and 1980 was approximately 2.27 % per annum and continued to decline to 0.66 % per annum during 1990 – 2000 (Choiejit and Teungfung, 2005). The implications of these demographic trends for local housing demand have grown as the poor resettle in the city. They (immigrants) have mostly occupied hazardous places without the consent of the landowners because the average land prices in Bangkok would rise by only 3% in 2008-09 due to unfavorable economic and political sentiments (Bangkok Post, 2008). Private developers find investment in socialized housing a losing proposition. They invest in upper-middle to high-end housing projects—mostly in either type of condominium or detached-single house which they can gain certain profit. Moreover, living in the gated may create the distant social interaction since it prevents people meeting each other. It needs to explore what conditions or reasons attract them to participate in the administrative works and activities in their communities in the further research. Even though, spatial form doesn't have a determining influence on social networks that can still link.

The major criteria of middle to upper-middle class's preferences for choosing a place to live in are accessibility to public facility services i.e. education, health care, security and landscape design 'image of affluence', 'comfort', 'status'. Gating therefore involves an inevitable form of privacy and exclusivity. Others argue that gating is a feature of the growth of 'global city region' and the intensification of inequality and proximity which has accompanied urban growth and globalization of the 'free market': Violence, or the fear of it, becomes a central preoccupation of the upper classes, pushing them towards forms of fortress settlement; gated high-rise communities surrounded by walls and guarded entries. The increasing wealth of the upper and middle groups, especially in the major

urban areas, is reflected in expanded spending patterns (Hewison, 1996). Bangkok's space was in fact being shaped by a range of actors, not only large property owners but also the middle to upper-middle classes and the urban low income and poor; therefore, demands for space and its use always encounters with conflict and compromises in Thai society. The Thai State has been a key owner of land and a key actor in influencing ecological and spatial changes in the metropolis.

Conclusion and Discussion

The expansion of the middle-class and upper-class in Thailand since the 1980s resulting from the country's shift to export-oriented, technology-based industries and the growth of producer services, and the enhanced integration in the global economy has resulted in their members' pattern of housing consumption behaviors. This is strongly characterized by perpetuates spatial diffusion of upper-middle class residence towards the city's periphery, as workplaces and amenities remain concentrated in Bangkok's core area. This pattern of housing behavior is conditioned by and, in effect, further 'inward commuting', from lower to higher density zones, especially in the city's core area. This particular pattern of urban sprawl and car-dependent transport is quite similar to experience in many North American cities characterized by a dominant lifestyle based on a dispersed single-family residence on a large lot in the suburbs and private car ownership. What is probably surprising is how this same process and development have been telescoped in Thailand, a developing country, within a short period of roughly a decade.

The findings in the research illustrate an outcome of a certain trend in housing consumption in the type of gated community and associated urban form in Bangkok developing alongside the expansion of the upper-middle class. The study of gated community is not a new form of housing provision in Thailand since there are now so many gated communities in Bangkok Metropolitan Regions, which are basically housing estates of the upper middle and upper classes. However, imperatives of greater gated community have been enhanced by the growing social-spatial separation of the residential areas—spreading in lower and medium-density areas—and the workplaces and centres of amenities that have been concentrated and confined in the city core or in high-density areas. For the expanding middle-class and upper-class population, however, Bangkok will

more and more be a middle-class and upper class-oriented city – spending more on middle class transport/road support (toll highways; BTS) etc.; while spending proportionately less on support infrastructures and services for non-gated communities (especially for the low-income and urban poor areas); because consumer groups of gated communities have become more entrenched and powerful, including the gated communities developers, in the last 12 years. Expect that they will be a powerful lobby group in determining urban development policy and public expenditures on infrastructure and services in Bangkok, to support the gated communities’ constant upgrading of conditions for comfort and high-end livability.

On the other hand, the present-day land-use policy and strategy of the government of Thailand have perfectly fitted in with and strongly supported middle-class and upper-class housing consumption based on gated community. Their predisposition and stakes in housing have been promoted directly or indirectly by the following: a lenient financial lending policy promoting, among others, long-term fixed interest rate loans; reduction of special business tax; lessening of housing transfer fees; and a lack of comprehensive and effective land-use measures and planning; and accompanying with transportation policy i.e. a ‘supply-fix’ approach of increasing city road construction; low toll-way pricing; that, in turn, de-links the goal of efficient land development and transport in the city, and fails to regulate urban sprawl.

The gated communities have dramatically increased in recent decade in BMR. There are now upwards of 1,000 gated communities throughout BMR. Although much research remains to be done, it is already clear that gated communities in Bangkok present a very diverse picture, with niche marketing by developers. The motivations for purchasing properties in Bangkok Metropolitan Region (BMR) gated communities appear diverse and complex, which block the way forward in creating compact and smart cities or low-carbon cities. Compact and smart cities can be implications to cost-effective and efficient use of urban resources (land, water, energy and time as a resource). The compact and smart cities also have implications to a carbon-free or low-carbon urbanization, which is essential in climate change mitigation. The Bangkok Declaration outlines five ways to mitigate global warming - reduce energy and natural resources consumption, reduce greenhouse gas emissions, promote lifestyles that uphold the sufficiency economy, promote activities that help absorb greenhouse gases and build public awareness of global warming (Bangkok

Metropolitan Administration, 2007). No doubt, creation of many gated communities is good for the business of big real estate developers in Thailand, as well as for the modernist and globalist aspirations and lifestyle of the emergent urban middle and upper classes of Thailand. But is this a step forward or backward in creating sustainable cities in the context of climate change or when our planet is in peril. Bangkok agenda; however, has been announced to move Bangkok as a model city for sustainable development. The rise of gated communities should be realized otherwise Bangkok may move further away from serving sustainable development goal. It needs a pleading for a more socially responsible real estate development and business take into account the fundamental concerns of equity, and sustainability in the context of climate change.

Output จากโครงการวิจัยที่ได้รับทุนจาก สกว.

1. ผลงานตีพิมพ์ในวารสารวิชาการนานาชาติ (ระบุชื่อผู้แต่ง ชื่อเรื่อง ชื่อวารสาร ปี เล่มที่ เลขที่ และ หน้า) หรือผลงานตามที่คาดไว้ในสัญญาโครงการ
 - อยู่ระหว่างการปรับปรุงแก้ไขบทความ (ฉบับร่าง) ร่วมกับนักวิจัยพี่เลี้ยง
2. การนำผลงานวิจัยไปใช้ประโยชน์
 - เชิงวิชาการ (มีการพัฒนาการเรียนการสอน/สร้างนักวิจัยใหม่)

พัฒนาการเรียนการสอนโดยนำองค์ความรู้ที่ได้จากผลการวิจัยไปเพิ่มเติมการเรียนการสอนใน วิชาสังคมวิทยาเมือง ซึ่งนับได้ว่ามีประโยชน์กับผู้วิจัยซึ่งเป็นนักวิจัยรุ่นใหม่อย่างยิ่ง เนื่องจาก ผู้วิจัยได้ทราบถึงกระบวนการทำงานวิจัยเชิงคุณภาพ การตั้งประเด็นสำคัญในการวิพากษ์ถึงผลที่ได้รับกับนโยบายที่มีอยู่ปัจจุบัน
3. อื่นๆ (เช่น ผลงานตีพิมพ์ในวารสารวิชาการในประเทศ การเสนอผลงานในที่ประชุมวิชาการ หนังสือ การจดสิทธิบัตร)
 - นำเสนอบทความทางวิชาการ เรื่อง “Housing consumption of an upper-middle class and its influence on urban form” the Sixteenth International Seminar on Urban Form: ISUF 2009 Guangzhou, China, September 4-7, 2009.

Chapter 1

Introduction

1.1 Introduction

In Thailand, scholars have attributed the dramatic expansion of the middle class with the further elaborate development on capitalist production, requiring an increasingly complex and diverse range of human resource skills. A major segment of the country's economic base moved from agricultural to manufacture exports in the mid-1980s, which in turn was overtaken by technology-based product exports such as automotives, electrical goods, and computer parts in the 1990s. The latter two developments were accompanied by dramatic increase in foreign capital flows and expansion of producer services, which fuelled great demand for well-educated professionals, managers, clerks, and sales personnel to service the private business sector. This sector's employment grew from half a million in 1960 to almost 7 million in 1999 (Pasuk and Baker, 2002: 387; see also Hewison, 1996: 143-4). During this period, tertiary education in Thailand also rapidly expanded. Consequently, Thailand's workforces who are graduates of tertiary education multiplied eighteen times between 1970 and 1999 (Pasuk and Baker, 2002:386). Largely based on recognition of these recent changes in Thailand's political economy, a number of social scholars today have underscored three criteria in defining the category of the middle class in Thailand namely: occupation, income, and education level (Hewison, 1996; Askew, 2002; Ockey, 1999; Pasuk and Baker, 2002).

Rise of urban middle class along with their associated consumption is the most dramatic phenomenon fueling burgeoning housing estates of sprawling urban areas (Chua and Tan, 1999). This has become a critical dimension of urban growth and change since the middle class' consumerism has been strongly attached to material and emotional investments in the home and the housing estate (Young, 1999: 67-69). This massive enhancement in material and emotional consumption in housing has mostly been influenced by the media advertising i.e., comfort, affluence comfort, and exclusivity (Ockey, 1999; Hamilton, 1992). Therefore, types of housing – for example detached-house or high-rise building and their locations in the periphery or downtowns – presented

levels of taste of the upper-middle class, which in turn profoundly affect urban growth and spatial change. Particularly, the detached housing, consuming much more land in total than compact development, (CUPR, 1992) has been located where land is yet inexpensive in Bangkok's outskirts. This expansion of housing in the periphery, known as urban sprawl or low-density settlement, has impacts on space/land.

One form of housing where the new consumption capacity and preference of the upper-middle class of Thailand have become manifest is in the rise of gated communities. These are walled and segregated high-end residential spaces built with high-rise apartments and/or detached houses. In the latter case, housing estates would normally require relatively large tract of land at the city core or peri-urban. Walled or gated communities, which are a growing feature of urban settlement patterns throughout the world, have increasingly also become popular in Bangkok since the earlier mentioned shift in the Thai economy in the mid-1980s.

As in many other cities of the world, the rise of gated communities in Thailand, particularly in Bangkok, might have had important implications on patterns of social (in)equality in the city. Its rise as a distinct form of housing might have caused major shifts in land allocation for different types of housing and jacked up land prices in the city. The latter might have become unaffordable and tended to exclude a growing proportion of the population. This could create a situation that low income people have now become more dependent on social housing program of the government. Moreover, rise of gated communities in Bangkok might also have been increasingly eroding social cohesion and integration, and generating or worsening socio-spatial segregation, fragmentation and disconnectivities in urban life. These probable trends, of course, would have tremendous policy implications in urban development and mass housing provisioning, and in creating sustainable, socially inclusive city in the future. Unfortunately, there is current dearth of research focusing on these important developments and social issues in Bangkok at present; therefore, this research focused on such issue to study.

1.2 Objectives

- 1) To describe the significance of the rise of gated communities in Bangkok and its influence on changes in land use, spatial patterns and urban form in the last two decades.

- 2) To describe the key actors involved and understand the dynamics and mechanisms in the transformation upper-middle class expansion, changes in their housing consumption preference and behavior into gated community projects.
- 3) To assess the impact of the rise of gated communities on housing equity² in particular and on creating socially cohesive and inclusive urban life in general, and to identify relevant urban development policies and measures that can mitigate the negative or unintended effects of gated communities in Bangkok.

1.3 Research Questions

To achieve these three objectives, the following five **research questions were investigated.**

- 1) In what ways and to what extent have the rise of gated communities in Bangkok shaped new spatial patterns and urban form since the mid-1990s?
- 2) What is the relationship between the expansion of upper-middle class in Thailand and shift in their consumption capacity and behavior in housing on one hand, and the rise of gated community in Bangkok and urban form change on the other hand? Describe

² As the United Nations Centre for Human Settlements (UNCHS) describes housing inequality that an increased land and housing prices can force lower-income groups out of certain areas, while fear of violence frequently leads to a voluntary form of segregation. The latter is the case with so-called "Gated Communities" - fortified upper-income residential enclaves where private companies provide security for those who can afford it and from which "unwanted elements" can be barred. Urban spatial segregation is increasingly not only simply expressing socio-economic differences but it is also becoming the spatial embodiment of urban fragmentation and societal breakdown. To understand regarding the social-spatial problems in and among segregated urban areas, the third objective of this research defines "housing equity" as affordability of housing particularly the big segment of low-income household in the housing market which is strongly influenced by land allocation for housing through operation of the land market.

- 3) Who are the key actors (i.e. real estate developers and land authorities) and what are the mechanisms (e.g. land regulatory regime and market structure) involved in the translation of upper-middle class consumption behavior in housing into gate community projects?
- 4) How have these new housing form and shift in spatial patterns and trends affected equity in housing and land use in Bangkok in particular? How has this new housing form affected equality and inclusiveness in the urban life in general?
- 5) What are the urban development policy implications of these trends and issues for creating a sustainable and more equitable city for Bangkok metropolitan region?

1.4 Scope of the research

This research focuses on an integrated study combining approaches of social class and spatial growth particularly in housing location in order to find out their relationship leading to urban form.

A division of social class was reviewed empirically in order to define the stratification of class and reaching to the target group (upper-middle class). Socio-economic parameters of the target group will be tested through questionnaire survey again. The parameters of spatial issue consist of location of housing in both horizontal and vertical growth. The reasons of decision making to the house location will also be surveyed in order to imply development policy in equity dimension and to see the trends of urban growth/form.

The research focuses on gated communities around the urban fringe in Bangkok and the five adjacent provinces as a case study and the upper-middle class as a target group.

1.5 Conceptual Framework

The explanatory aspects of this research pertain to the following subject focus: (a) understanding the consumer behavior and considerations of the upper-middle class in housing; (b) explaining the circumstances and understanding the motivations, and considerations and of private business developers' engaged in the development and

marketing of gated community projects; (c) explaining the circumstances and understanding the motivations, stakes and considerations that shape the actions and decisions of relevant officials, planners and permit-givers of particular agencies and offices involved in urban land management and real estate development, and social housing; and, (d) explaining the relation or the impact of land allocation for gated community projects, and the gated communities themselves on equitable housing and state of social inclusion (or exclusion) in urban life and urban form.

This research has the following schema as its initial working conceptual framework (see figure 1.1). This framework may be revised, if necessary, in the process of research. The conceptual framework was further elaborated in the course of initial data gathering into a set of clear study propositions around the research questions earlier mentioned.

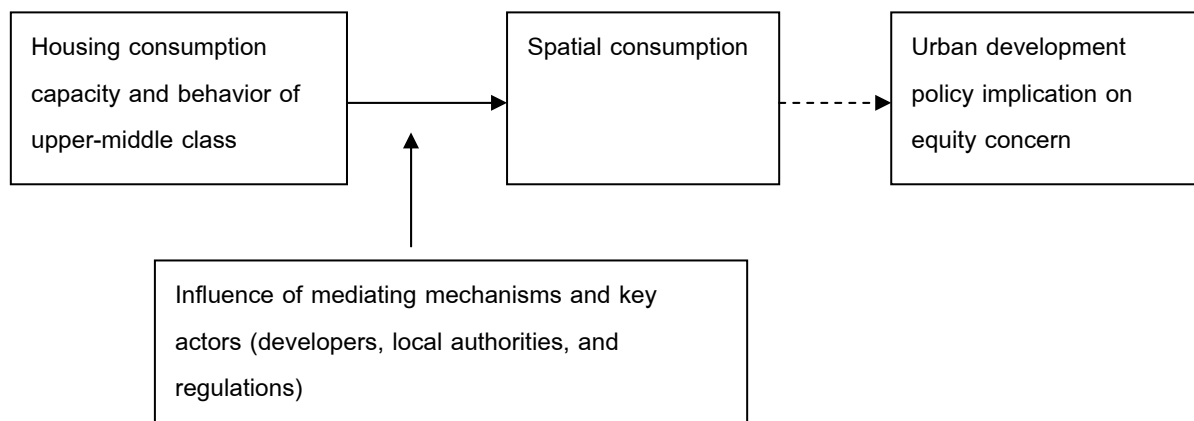


Figure 1.1: Conceptual Framework

1.6 Expected Output

- 1) The knowledge on a new type of housing (gated community) and its spatial consumption by upper-middle class in Bangkok, which implies on housing equity and influences on urban form.
- 2) Knowledge about key actors, dynamics and mechanisms involved in the translation of new upper-middle class consumption preference and behavior into gated community and spatial changes as well as new patterns in urban form.
- 3) Identification and clarification of desirable and appropriate urban development policies and measures in housing equity for a socially cohesive and inclusive urban life that can mitigate the negative effects of gated communities in Bangkok

Chapter 2

Literature Review

In this chapter, a review of relevant literature is discussed to understand the nature of housing consumption, and gain knowledge on what factors influence a change in this behavior, which further leads to an impact of urban form. In Section 2.1, trends of housing consumption was discussed which has derived from the urbanization and industrialization, and section 2.2 reviews factors which affected housing consumption i.e. lifestyle, preference and social class. Section 2.3 describes the advent of gated communities and how housing consumption has impacts on urban form and space. Finally, section 2.4 gives the conclusion.

2.1 Urbanization and Housing Needs

The urban decentralization in many of the developed countries' largest cities took place during the late 1950s and 1960s because of the complex strength of traditional agglomeration in the downtown metropolitan core areas. At first, it remained predominantly involved in shifting of residences from the central cities to the suburbs, and had been dependent on public transport technologies, and in particular on electric commuter railways and metro systems from the end of the nineteenth century onwards (Clark, 1951). A distinctly new phase, beginning after the World War II, involved decentralization outside the traditional limits of effective public transport, and thus was dependent on the use of private cars for most trips including those to workplaces. This pattern of decentralization was observed in the United States from the 1950s onwards. In Europe, it spreads progressively from Britain and the Benelux countries, which involved all the countries of the European Community by the early 1980s (Hall and Hay, 1980; Cheshire and Hay, 1989). The Asian mega-city is a basically new urban form, quite different from anything that occurred earlier in the developed Western countries (McGee, 1991). They differ not only in the urban system, but also in their urban economic performance. The explosive growth in Eastern Asia at first was concentrated in the main cities, but has increasingly diffused out of them into smaller cities within two or three hours travel time, which are networked into mega-city regions where many choose to stay

in rural areas at the periphery, engaged in a mixture of on-farm and off-farm activities (McGee, 1991; Drakakis-Smith, 1995). Essentially, these have occurred around London, New York City, and San Francisco, but the developing countries have occurred on a much larger scale and over a much shorter time frame. Their features can certainly define as Exo-urbanization in Hong Kong impelled through the Foreign Direct Investment (FDI) (Sit and Yand, 1997), Desakota in Indonesia—from desa, village, and kota, town linked by cheap transport, especially two-stroke motorbikes, buses, and trucks, which make it easy to transport people and goods (McGee, 1991).

Urbanization in developing countries is largely dominated by rural to urban migration flow and often it is one city bound—the capital of a country, which makes the size of population too huge i.e. Bangkok in Thailand, Kuala Lumpur in Malaysia, Jakarta in Indonesia, and Manila in Philippines. The rapid growth of towns and cities has been underpinned by large economics, social, political, and demographic changes (Satterthwaite, 2001). The most important of these are the large expansion in the world economies and the shifts in employment patterns from agricultural activities to industrial, service, and information activities. This large-scale urbanization means that people and businesses compete intensely with each other for space to live and work in the city. The growths put more pressure on land, which leads to a change of urban form and subsequently generates sub-urbanization and urban sprawl.

The economic activities are an important factor of urbanization and urban system. There are three kinds of activities that are prone to relocation. The first is manufacturing and associated warehousing, which were drawn to suburban locations because of access to large areas of land suitable for efficient single-floor flow production next to the new national motorway systems that were under construction everywhere during the 1960s, and also because the skilled blue-collar workforce was also moving to the suburbs. The second is research and development (R&D) and associated high-technology manufacturing, which were attracted to high-amenity areas near the rural fringe such as Santa Clara in California, Berkshire in England, the Munich region of Germany, and Kanagawa in Japan. The third is the large offices engaged in electronic processing of standardized information such as insurance or credit card operations, tended to disperse to major suburban nodes with easy access, lower office rents, and supplies of suitable clerical labor such as Reading West in London, Stamford in Connecticut, Omiya near Tokyo. These dispersions to remote places

are associated with low rents, low wages, and/or high-quality workforce (Hall and Pfeiffer, 2000).

Urbanization was witnessed from the early to the late 21st century and is an important factor of housing relocation. The development of housing demand have been influenced by economic activities but also generated through real estate markets, technology, economic requirements, and social preferences.

The real estate developers are a major agent to help determine housing location. Theirs decision is the first specific spatial commitment to convert vacant land or farm land to urban residential usage. Residential development is largely a speculative commitment not by the actual consumer, but by the developer on the basis of forecasting. The estate developers have demonstrated the capacity of quickly mobilizing the capitals and expertise to carry out the large-scale development projects. Many attractive urban areas have been built by private speculators whose middle and upper income clients demanded certain types of building or a well accepted layout of buildings (Hall and Pfeiffer, 2000: 291).

In order to arrive at this fundamental decision, the developer has to

- Choose between development projects,
- Estimate the demand for different developments,
- Decide on the quality of the building,
- Calculate how intensively the site shall be developed,
- Estimate how much he can bid for the site, obtain finance, and
- Decide whether to develop alone or in partnership with a local authority (Harvey, 2000: 26).

Where only one project is possible on a given site, the developer has to choose the one that is the most profitable, and households live where they can maximize utility, that is, achieve the greatest residential benefits. But what determines profitability and utility? The answer is accessibility—the advantages of a particular urban location in terms of movement, convenience, and amenity (Harvey, 2000: 220). Having done their calculations, developers compete with each other to obtain the site. The developer who can recognize the most profitable use (often described as the “highest and best use”) can

make the highest bid. As a result, given the perfect knowledge, a competitive price system, and no external costs or benefits, the site is used in the most efficient way.

With regard to residential location decisions, both aspects of special accessibility: concentration and complementarity are relevant. A concentration of population promotes the provision of libraries, churches, schools, and recreational and cultural facilities. Similarity for complementarity, not only does nearness to parks, golf courses, and open spaces enhance the residential attractions of a district, but often households prefer to live alongside others of the same social and cultural background, religion or race. Basically, there are three major determinants of the location of a particular activity: accessibility, environmental characteristics, and rent. Moreover, dynamic factors, chiefly the secular increase in real income and technical developments also alter location. Moreover, the governments, both central and local, influence location decisions through its policies on taxation, planning, parks, green belts and open spaces, conservation, transport and traffic, housing, schools, universities, public utilities, hospitals, and so on. The rapid development of out-of-town retailing (especially the large regional shopping centers was mainly the cause) and future planning decisions would be required to take this into consideration (Harvey, 2000: 224).

2.2 Social Class

The particular aspect of modern lifestyle and forms of consumption that logically bear heavily on housing situation in Thailand has been its upper-middle class' propensity for peripheral and suburban type of single detached home ownership, private car ownership, and associated car dependence for travel (Bae and Suthiranart, 2003; Hewison, 1996; Evers and Korff, 2000: 220-221). Therefore, it is essential to understand the origin of the class. Rousseau expressed that while man is born free and equal; society creates inequality and differentiation, which is essentially a product of wealth and power.

The class in society helps in understanding the patterns and processes of inequality of everyday life, at home, at work or in public places (Saeed, 1992: 8). Social stratification has been viewed differently, for instance, the amount of material possessions and controls over production is considered in Marxist theory, whereas Weber adds the more abstract notions of prestige and lifestyle to material possessions. The dividing lines between the classes are not clearly captured so that it would be difficult to identify precisely at a certain

class for people. It is necessary; however, to categorize everybody within classes for a census. The yearly income of the household or the neighborhood³ classification is used to classify divisions to people. Weber argued that only economic facets cannot identify a level of people's classes; he constructs the ideal types—class, status and power—which help in developing theoretical explanation (see figure 2.1).

- 'Class' refers to the degree of access and control over the processes of production and distribution of material goods;
- 'Status' refers to the position in the established hierarchy of social roles and functions, and
- 'Power' refers to access and control over the legal mechanisms of influence and authority.

According to Weber, the social mobility⁴ of possession of material property, education and skills, and manual labor power constructs a three-class society: low, middle, and high classes (Giddens, 1973).

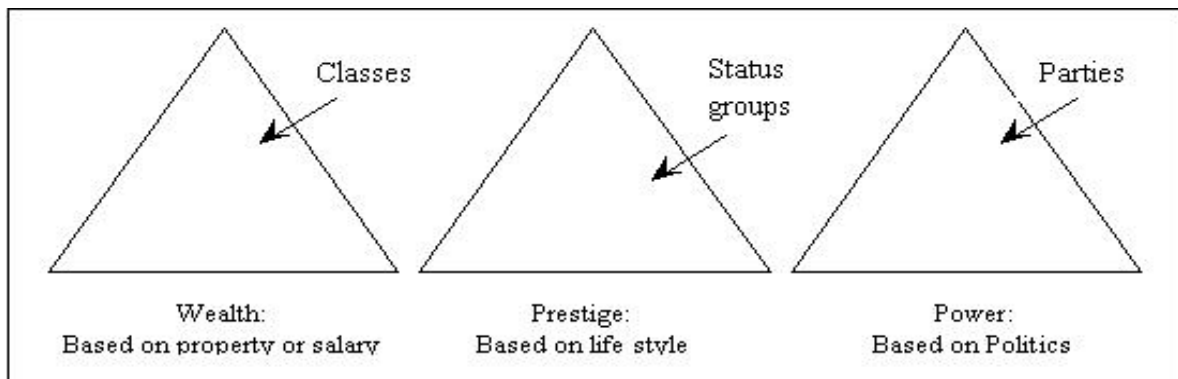


Figure 2.1: Weber's ideal types: The three components of social division

Source: Saeed, 1992 adapted from Smelser, 1981

Several researches have attempted to identify the characteristics of the middle class, however, it still generally broad. Maleva (2002) described the features of middle to upper-middle class including 3 indicators:

³ Neighborhoods can be classified by the land and rent prices.

⁴ Mobility means the ability to move from one social stratum to the next, preferably higher.

- *material resource indicators* i.e. level of income, the amount of monetary savings and the amount of property ownerships;
- *non-material resource indicators* i.e. level of education, professional qualifications, occupation; and
- *social evaluation of self indicators* i.e. the success in adapting to new economic conditions, level of comfortable current life.

Some scholars consider the social class in term of middle to upper-middle class in occupation, income, education level, status of private car, and mobile phones (Askew, 2002: 172; Ockey, 1999: 245; Chua and Tan, 1999: 145). The evidence of U.S. Census Bureau suggests that there is no real definition of the middle class and it always has been more of a state of mind than an actual economic status. However, according to the 2002 census data, the middle classes are families whose annual income ranges from about \$40,000 to \$95,000. Working couples with six-figure salaries typically have two cars, which they must pay to maintain, insure, fuel, and park (Baker, 2003). Therefore, the level of occupation, income, education, and the number of private cars were applied as indicators of the upper-middle class for this research

2.3 Factors influencing housing selection

There are three major individual factors which have an impact on housing selection: lifestyle, preferences and value and social class

2.3.1 Lifestyle

Lifestyle is a concept that is often used in sociology and political theories. It is the overall context of behavior that a single person regularly practices. Lifestyle is based on the individual organization and the expressive formation of everyday life. Lifestyles are also found in similar form in other persons too. Thus, lifestyles manifests a 'belonging together' as well as being different from others, form other groups.

The core of the concept is the behavior that can be observed as well as attitudes, aims in life, social relations, and types of communication. Lifestyles are influenced by age, education, milieu, gender, forms of living together (e.g. small households, number of

children), the built and socio-ecological environment (urban, rural), professional status, income, consumption, and self-defined social class. The quantitative research on lifestyles focuses on the behavior of large groups. Such groups can be defined as social classes (or strata). Bourdieu's theory of 'habitus' (1977) had become famous in this context. It is a complex concept referring primarily to the non-discursive aspects of culture that bind individuals to larger groups. He defines 'habitus' as a system of dispositions: durably acquired schemes of perception, thought and action, engendered by objective conditions but tending to persist even after an alteration of those conditions. Bourdieu saw habitus as the key to reproduction because it was what actually generates the regular practices that make up the social life. It is the product of social conditioning and so links actual behavior to class structure. The distribution of three types of resources among the population is unequal: the economic capital, educational capital, and social capital. The degree of ownership on these types of capital positions: the members of a society either in the working class, the petty bourgeoisie or the bourgeoisie. Growing up in one of these classes has led to specific forms of habitus, i.e. latent forms of thinking, perceiving, and evaluating.

2.3.2 Preferences, Values, and Attitudes

"Basic demographic data can reveal hidden truths about complex social questions. The data have this power because demographic trends explain how society changes on the deepest level. When income distributions or immigration patterns change, for example, the behavior of individuals often change in response, on a mass scale" (Edmonson, 1999). Particular in a metropolitan society, which the middle-class is in large numbers and its characteristics of living style, preference, values and attitudes may have an influence on development policy. This section reviews living style of the upper-middle class regarding socio-economic aspects, and the policy implementation supports upper-middle class preferences.

The **preference** on location is especially relevant because growing income allows increasingly more people to live in low density areas, which increase the numbers of car usage, pollution, and energy consumption (Hall and Pfeiffer, 2000). As the smallest social unit in society, household is net consumers of resources, bringing about the demand for goods and services. As residential units, households are inextricably related to dwellings

(Diepen, 1995). The home is the origin for most trips involving activities such as working, shopping, and recreation. Therefore, dwelling location has to be considered in relation to outside facilities used by household members. Although various destinations can be visited successively in a chain, the house will eventually be the point of return. This fixed point in the two-dimensional space forms the starting point for the activity pattern of that household and it shapes the opportunities for the space organization of the household. Therefore, taking up residence somewhere has a major impact on the way households organize their activities and their space (Diepen, 2000).

Besides, the preferences of developers and commuters have impacts on housing preferences; the different favor of politicians and policy makers also has an influence on a motivation of housing consumption. As Anderson, Kanaroglou, and Miller (1996) observed that public policies promote suburbanization that results in construction of commuter roads (connecting central areas with suburbs) and local roads (accessing easily to new housing areas), similarly, policies promote homeownership in the urban fringe where cheap land is available, leading to more energy consumption.

It is generally acknowledged that **values and attitudes** play an important role in empirical social sciences in general, and for policy development and implementation in particular.

The UK National Centre for Social Research developed surveys on issues that systematically deal with attitudes. It presents itself on its webpage as follows:

‘The British Social Attitudes Survey is the leading social research survey in Britain. Each year around 3,300 randomly selected adults are asked to give their views on an extensive range of topics. The questions asked are developed and funded in collaboration with grant-giving bodies and government departments. Topics include housing, work, transport, government spending and voting habits, as well as religion, racism and illegal drugs. New areas of questioning are added each year to reflect policy changes and current affairs, but all questions are designed with a view to repeating them periodically to chart changes over time.’⁵

⁵ <http://www.natcen.ac.uk/natcen/pages>

Examples of the attitudinal surveys carried out by the National Centre for Social Research is the time series on British Social Attitudes (example Park et al., 2003) or National Travel Survey (for example DFT, 2005). One problem the researcher faced to develop the conceptual framework aiming also at quantitative measuring was that in these surveys, which carry often 'attitude' in the title of explicitly measure attitudes, the concept itself remains undefined.

This is also the case in the survey that covers regions (EU) or survey of many countries on a worldwide basis (World Value survey). The Centre for Comparative Social Surveys, London carries out the **European Social Survey** (ESS) and has done ample work on developing the questionnaire (Centre for Comparative Social Surveys, 2004).

The deliberation on the questionnaire development touched upon some fundamental concepts. It has become clear that behind opinions, attitudes and actions are value systems. Schwartz (2004) argued that most social scientists view values as deeply rooted, abstract motivations that guide, justify attitudes, norms, opinions and actions such as the following:

- Values are basic orientations presumed to underlie and influence individual variation on many of the constructs that researchers from different disciplines will want to study through the ESS.
- Values can provide predictive and explanatory powers in the analysis of attitudes, opinions, and actions.
- Moreover, values can reflect major social changes in societies and across nations. Hence, values are a prime candidate for inclusion in the core module of the ESS. (Schwartz, 2004: 261)

He also criticizes that researchers distinguish less between values and attitudes, and that usually measure values with sets of attitude questions in specific domains of life such as religion, morality, politics, works, etc. He then suggests that attitudes should be measured in relation to the 'nature' of value. The major features of the conception of basic values implicit in the writings of many theorists and researchers are as follows (p. 262):

- **Values are beliefs**, cognitive structures that are closely linked to affect. When values are activated, they become infused with feeling.

- **Values refer to desirable goals.** For example, social equality, fairness and helpfulness are all values.
- **Values transcend specific actions and situations.** Obedience and honesty, for example, are values that may be relevant at work or in school, in sports, business and politics, with family, friends or strangers. This feature of values distinguishes them from narrower concepts like norms and attitudes, concepts that usually refer to specific actions, objects, or situations.
- **Values serve as standards or criteria.** That is, values guide the selection or evaluation of actions, policies, people, and events. People decide whether actions, policies, people or events are good or bad, justified or illegitimate, worth approaching or avoiding, by considering whether they facilitate or undermine the attainment of cherished values.
- **Values are ordered by importance** relative to one another. The ordered set of values forms a system of value priorities. Cultures and individuals can be characterized by their systems of value priorities. Do people attribute more importance to achievement or to justice, to novelty or to tradition, to wealth or to spirituality? Which of these values are more or less important as guides and justifications for the decisions taken by actors in societal institutions (legal, political, economic, educational, family, religious, etc.)?
- **The *relative* importance of the set of relevant values guides action.** Any attitude or behavior typically has implications for multiple values.

While these definitions of values and their functions are helpful, the question still remains on how attitudes are defined in the European survey. Curtice and Bryson (2004) identified three types of attitudes that were subsequently also measured that are as follows:

- **Left-right orientation:** This dimension is widely thought to be at the heart of differences in social and political attitudes between the middle and working classes.
- **Libertarian-authoritarian orientation:** The dimension thus helps capture the values behind the traditional religious cleavage found in many European polities.
- **Environmentalism:** It is expected to be related to attitudes towards housing and industry.

Attitudes and values have also been measured in the world value survey lead by R. Inglehart (University of Michigan). For the different World Values Survey,⁶ an extra web site has been introduced (<http://www.worldvaluessurvey.com>). The analysis carried out by Inglehart and Baker (2000) on value systems based on previous world value surveys show the following:

‘The two most important dimensions that emerged tapped scores of variables and demonstrated that the worldviews of the peoples of rich societies differ systematically from those of low-income societies across a wide range of political, social, and religious norms and beliefs. These two dimensions reflect cross-national polarization between *traditional* versus *secular-rational* orientations toward authority; and *survival* versus *self-expression* values.’ (ibid, p. 23)

Each of the two dimensions was divided into 5 variables. There is no need to go further into the value discussion for the analysis of the Ingleharts and Baker’s article, and further publications (e.g. Inglehart, 2000; Welzel and Inglehart, 2005) reveal that the ‘concept of attitude’ is widely used but not defined. Thus, Fraser et al’s (2001) definition of ‘attitudes’ is a collection of beliefs, feelings, and intentions towards a person or group of objects. The theoretical basis that Fraser et al. used for measuring attitudes is the dissonance theory as originally developed by Festinger (1950).

2.4 The Rise of Gated communities and its impacts

Many scholars elaborate characteristics of gated community; however, an influential publication was offered the definition by Blakely & Snyder (1997: 2).

Residential areas with restricted access in which normally public spaces are privatized. They are security developments with designated perimeters, usually walls or fences, and controlled entrances that are intended to prevent penetration by non-residents.

As Atkinson and Blandy (2006) defines gated communities that restricts public access, usually through the use of gates, walls, and fences. These residential areas may also employ security staff or CCTV systems to monitor access. In addition, gated communities may include a variety of services such as shops or leisure facilities. The growth of such

⁶ Thailand is not included in the surveys carried out so far.

private spaces has inquired how these developments have arisen. Living in a gated community means signing up to a legal framework which allows the extraction of money to pay for maintenance of common-buildings, common-services, such as rubbish collection, security and cleaning. Therefore, a combination of these socio-legal agreements and a physical structure includes gated and walls enclosing space which can finally achieve some clarity of definition. Gated communities may define a walled or fenced housing developments, to which public access is restricted, characterized by legal agreements which tie the residents to a common code of conduct and collective responsibility for management.

It is now well documented that gated communities can be seen as a response to the fear of crime (Atkinson et al., 2004) but other drivers also appear significant. In particular the desire for status, privacy and the investment potential of gated dwellings all form important aspects of the motivation to live behind gated. For many housing researchers drawn to new social problems and forms, gated communities appear a profoundly interesting and relatively new object of study in the European context. While this may be numerically insignificant, the wider symbolic character of such development at a time when the government is committed to pursuing styles of development which allow permeability, affordable housing and diverse housing tenures appears problematic. There seems much to learn from an international perspective on such issues.

The existing research agenda has focused on the residential choices of a select demographic group, largely characterized by self-interest and personal affluence as well as a desire for disengagement. Locational choices made by affluent households affect outcomes for the poor in terms of city sustainability, security and social segregation. The urban segregation has represented the crystallization of wider social divisions and problems that are largely negative in their impact. This research focuses on how gated communities produce increased social and spatial changes.

Understanding space and a city require a serious consideration of and looking into various constitutive critical elements and dimensions. Spatial pattern/urban form⁷ influenced by transportation, which has countered segmental development in favor of the

⁷ Urban forms are identified to include the radial concentric (a), the lobe city (b), the linear poly-nucleic (c), the concentric poly-nucleic city (d), the linear city (e) and the grid city (f) [Roo and Miller, 2000].

horizontally deployed, functional integration. Technological innovation can also shape the city through communications regardless of its the proximity of central areas. These results in outward migration of population, and a city might experience segregation growth (Saunders, 1989). Further, urban form could be considered from the perspectives of milestone periods -- modern and postmodern. Thus, the modern city is a city focusing on production and factory. During this period, social life revolves around industrial production, social administration and the commercialization of leisure. The modern consumption is theorized as an activity. Subsequently, the industrial class structure becomes eroded and fragmented by growing service employment and consumption creating a post-modern era characterized by a consumption theorized as an identity. (Glennie, 1998). In this conception the links between consumption and urban form ran in both ways: the physical and social space town. Consumers are now freer to construct their own social personalities through processes of construction.

The critical literature about factors influencing urban form has been focused on three major related issues according to Saunders (1989): spatial units, organization and production, individual and class structure.

In the spatial perspective, the urban form is discussed as an issue of population migration. The centrifugal dispersal of the population is seen as occurring well before the mass production of automobile. Locational shift to the suburb is considered as mostly coming from housing rather than industry. In this perspective, the movement of people to suburb regions is essentially a product of the real estate and construction industries' shift to supplying the demand of massive number of single-family suburban housing consumers (Sale, 1975). This urban expansion results from policy intervention, actions of speculator, local political leaders, and the political influence and real estate interests. First, the intervention of public policy and government i.e. incentives (low-interest loans, tax-exempt development bonds, real estate abatement), regulations and subsidies affects metropolitan spatial patterns unanticipated and uncoordinated. Second, the speculator is the first group to invade the fringe of city. The speculator can be both local people and outside people or organization. Third, spot builder and local political leader relationship results in violation of density and zoning restriction particularly at the margin of urban development, which can be seen in the pattern of suburban sprawl. Fourth, the political influence and real estate interests help each other through breaking zoning act or making a process of

land use decision easier. With the permission, the politician can make money. The location pattern of new residential and industrial wealth in the suburbs could not have been produced without these actors who made such place highly demands.

In the organization and production perspective, urban form is also regarded as being laid down through policy and/or institution intervention, estate developers, and the consumers (Gottdiener, 1985). It is regularly asked however the consumer contributes to urban expansion/urban form. The conventional analysis however explains shifts in urban form can be attributable to the use of commuter railway in the earlier period and, then later, to the mass use of automobile which promoted the separation of residence from work places and shops. Conversely, the poor housing is seen as being located close to the center areas or their working places, whereas the elite select to dwell in outer areas far from the metropolitan (Gottdiener, 1985). The city thus grows along the transportation routes and infrastructures as known in the forms of linear city or finger shaped city.

In individual and social class perspective, urban morphology is set up through the prism of social class and consumption particularly in the context of rapid urbanization and economic growth. According to Fisher (1976), urbanization has produced new environments, new types of people and new ways of life. The products of increasing urbanization include the increased size of population, the increased density of population and the increased heterogeneity or differentiation of population. Urbanization in the context of rapid economic growth has expanded in “middle class”. The massive improvements in material life and its attendant cultural practices constitute discursively the ‘culture of consumption’⁸ or ‘consumerism’⁹. Their evidences included prestige cars, international fashion with brand names, penetration of fast foods into housing estates, and international chain i.e. café (Starbuck), fast food (KFC, McDonald) (Chua, 1998). Shifts of income, work, and employment indirectly affect individuals’ and households’ consumption (Willen 1992 in Glennie 1998).

⁸ Consumption relates to the volume and taxonomy of all spending that was in any way potentially variable or discretionary (Glennie, 1998).

⁹ Consumerism is emphasized to recognize that is ‘the ways in which consumption ceases to be simple appropriation of utilities, or use values, to become a consumption of signs—and images in which the emphasis upon the capacity to endlessly reshape the cultural and symbolic aspect of the commodity makes it more appropriate to speak of commodity-signs’ (Featherstone, 1995: 75).

The study of urban shape mostly underscores the spatial dimension. However, it should not be overlooked that society and social change is a fundamental aspect in the determination of urban form. This point is of special significance in the present-day period. Changes in society are factors that contribute to spatial patterns, and these changes are complementary to politics and the public sector, meaning both to the public sector and to society or segments of it (i.e. upper-middle class).

The social sciences literature about gated communities has been highly publicized, and three types of arguments are now part of a general theoretical discourse (Goix, 2006), which especially focuses on the relationship between gated communities and social segregation.

First, gated enclaves are described both as a physical and obvious expression of the post-industrial societal changes (fragmentation, individualism, rise of communities), as part of a commoditization trend of urban public space (Dear & Flusty, 1998), and as a penetration of ideologies of fear and security supported by economic and political actors (Davis, 1990, 1998; Flusty, 1994; Marcuse, 1997).

A second set of argument presents gated communities as systems of urban pathologies, among them social exclusion is considered to be pre-eminent. Voluntary gating and the decline of public spaces in cities are seen as being detrimental to the poorest social class (Blakely & Snyder, 1997; Caldeira, 2000; Glasze et al., 2002).

Finally, the rise of private enclaves is argued to be a 'secession' by an elite opposed to the welfare redistribution system (Goix, 2006), given the assumption that public provision of services is inefficient (Foldvary, 1994). The debated about gated communities and segregation; however, has been a lack of empirical arguments to sustain it, as it is difficult to gather a representative sample of gated communities at a local scale.

In more recent decades, gated communities, as mentioned earlier, have become a growing feature of urban settlement patterns throughout the world. In the US alone, roughly 15 million live at present in privately regulated living communities. This number would become larger if high-rise apartment buildings with security arrangements regulating entry (or vertical walled communities) are added to the list. Gated communities function as socially discriminatory spaces whose access is only open to a narrow band of

income eligible – i.e. upper-middle and upper classes – of people (Marcuse 2000). They too represent privatization of public spaces (Hayden 2006, Low 2006). Moreover, since gated communities commonly require large tracts of land or premium lots, their rise in the landscaped cities commonly influence the local land market, triggering drastic price changes since demand cannot be met by quick adjustments in supply of land (Edwards 2000). This dynamics has huge implications on housing equity in the city.

Therefore, since space is a scarce resource, access to housing easily becomes conflict-laden and equity issue comes up front because the access of space is associated with life chances in the urban systems (Gottdiener, 1985; Saunders, 1989). It is important to examine housing consumption, specifically as expressed in the rise of gated communities today, in terms of socio-spatial (in)equality issues. Access to housing of upper-middle consumers has excluded the space for the low-income people. Since space/land is a scarce resource, land for low-income housing is more difficult for the poor to obtain (Gilbert, 1992); however, the low-income people needs to struggle inevitably for occupying a shelter as a basic need of human beings in urban areas.

2.5 Concluding remarks

The unprecedented increase in prosperity over the last 25 years has created a significantly large urban upper-middle class group. This has brought rapid change to communities, often with negative side effects, such as housing consumption behaviors, the loss of familiar open space, and traffic congestion. New modes of gated community combined with population growth have fueled successive waves of suburban expansion in the 20th century. Technological progress is likely to increase housing choice and community diversity even further in the 21st century, enabling more people to live and work outside the conventional urban forms of our time. All of these factors are bound in a controversy that goes by the term "sprawl." The heightened public concern over the character of our cities and suburbs is a healthy expression of citizen's demand for solutions that are responsive to our changing needs and wants. Yet, tradeoffs between different policy options for addressing these concerns are poorly understood.

Reflecting on complexity and multidimensionality of the housing consumption in terms of gated communities, it requires seeking factors affecting on this housing consumption behavior of middle to upper-middle class and how this further has impact on

urban form and social exclusion. This research question is in line with the evident in Newman and Kenworthy's (1998) suggested that the pattern of housing is related to social class, especially in a higher level. Therefore, individual housing studies regarding social class need to be paid more attention.

Chapter 3

Research Methodology

This research is descriptive and explanatory in nature. It describes and analyses the current scope, patterns, and characteristics of gated communities in Bangkok in the immediate past and at present. It has identified the types of income-groups, professions, age groups, and other relevant socio-economic attributes that have formed the main clientele group of gated communities. It has also identified the distinguishing features, amenities and other salient characteristics of gated communities (including spatial and locational characteristics) and examines the fit of these factors to the preferences and certain attributes of the members of the urban upper-middle class.

The research used a mixed method approach, employing both quantitative and qualitative methods of data gathering and analysis. In data gathering, it used the following techniques: survey method (using both probability and non-probability sampling method; Delphi technique; focus group interview; individual unstructured interview; and records review. To conduct this research, the following key steps were carried out.

3.1 Reconnaissance Survey

The study started with a reconnaissance survey that was conducted to identify the physical urban area (urban expansion, transportation system, and traffic network).

3.2 Area Selection

The basic issue dealt with here is the appropriate descriptive criteria to be used and applying these criteria in selecting the target residential areas and/or gated communities and their upper-middle class clientele. The basic assumption is that social differentiation causes spatial differentiation. Thus, residential areas of the respondents can be classified with respect to characteristics describing the type of residence—detached housing, which is prevailing, found in periphery areas of Bangkok. Besides housing types to identify sample areas, the minimum characteristics are location, density, utilization of land and price.

Delphi method and/or focus group interviews were conducted among a number of real estate developers, market agents and selected clients of high-end housing to arrive at a consensus on the appropriate criteria to be used in identifying the target category of gated communities of members of the upper middle-class of Bangkok Metropolitan region. Prior to conducting Delphi method and/or several focus group interviews, secondary materials have been studied to construct a tentative set of criteria to be validated or triangulated through these interviews¹⁰.

There are approximately 100 real estate companies in Bangkok. This research selected 7 companies for interviews in order to get acquainted with the criteria of housing classification. The following companies were selected: Land and House Public Co., Ltd., Sansiri Public Co., Ltd., Pruksa Real Estate Public Co., Ltd., Preecha Group Public Co., Ltd., Property Perfect Public Co., Ltd., Noble Development Public Co., Ltd., and Sammakorn Public Co., Ltd.

The individual unstructured interviews were carried out in 2008 and lasted between 60 and 180 minutes. These interviews were recorded through a tape recorder and handwritten notes. Seven experts in real estate development were contacted and interviewed, namely:

- Dr. Teerachon Manomaiphibul, Property Perfect Public Company Limited, Chief Operating Officer,
- Mr. Vorayuth Pongsuwan, Preecha Group Public Company Limited, Senior Executive Vice President,

¹⁰ There are several useful studies that have served as the starting point for construction of the appropriate criteria to categorize gated communities of upper-middle class in Bangkok Metropolitan Region. The Housing Business Association and Government Housing Bank (2006), for example, reports a housing situation in Bangkok Metropolitan Region (BMR) where are totally 722,773 housing units in 2006 which is classified to horizontal residences (detached-house, twin-house, townhouse, and commercial house) 506,142 units (70%) and vertical dwellings (condominium) 216,231 units (30%). Of 722,773 housing units, detached-houses are the most numbers (325,561 units) followed by 216,631 units of condominiums. For the locational concern, the top five horizontal houses located in Bangkok periphery are included Nongchok, Minburee, Bangkuntein, Bangkhen, and Klongsamwa respectively; moreover, the areas have been expanded to the five adjacent provinces of Bangkok.

- Mr. Uthai Uthaisangsuk, Sansiri Public Company Limited, Executive Vice President in Business Development and Project Management,
- Mr. Theeraphon Voranithiphong, Noble Development Public Company Limited, Vice President,
- Mr. Nopporn Sunthornjitcharoen, Land and House Public Company Limited, Deputy Director in Operation,
- Ms. Nathicha Jitbunjong, Sammakorn Public Company Limited, Assistant Marketing Manager, and
- Mr. Prasert Taedullayasatit, Preuksa Real Estate Public Company Limited, Director and Chief Business Officer.

In order to gain a criterion of single-detached housing classification among the real estate experts' opinions, each real estate expert was interviewed two rounds in which consumed approximately two month for each round. After revising and validating the criteria to be used through Delphi technique and/or series of focus group interviews with key informants, a list of gated communities¹¹ were made on the basis of these set criteria. Among these were selected randomly. The statistical random and the number of sample were set subsequently in relation to the numbers of households in each gated community.

The criteria of gated community classification which was derived from the in-depth interviews through Delphi technique consist of housing prices. After getting the upper-middle gated community projects, the purposive random sampling¹² was applied and the research gained the five sample areas named as Settasiri *Sanambin-nam*, Saransiri *Ratchaphruek-Chaengwattana*, Burasiri *Sanambin-nam*, Perfect Place *Onnut-Suvarnbhumi* and Perfect Place *Ramkamheang-Suvarnbhumi* (see their physical characteristics in chapter 5). Two gated communities of Perfect Place are a lot of units of housing (more that 1,000

¹¹ The statistical gated community data in Bangkok has not been collected by either government offices or housing bank; therefore, it needs to apply the data from the private agency. This research used housing data from 1992 to 2008 collected by Agency for Real Estate Affairs (AREA).

¹² Since the research selected upper-middle gated projects in which the residents need high privacy and security, some of those selected therefore turned out to be those that have traditionally disallowed any survey to be conducted in their premises. Therefore, the research needed to conduct the questionnaire surveys only in those projects that were willing to cooperate.

units) whereas the other three gated communities are in approximately 300 units in each gated. Therefore, the sample numbers in each project are inconsistency. The sample sizes of each gated community were presented in table 3.1

Table 3.1: Details of the selected five gated communities

Name of gated community	Housing Unit	Questionnaire
Settasiri <i>Sanambin-nam</i>	299	47
Saransiri <i>Ratchaphruek-Chaengwattana</i>	300	78
Burasiri <i>Sanambin-nam</i>	299	57
Perfect Place <i>Onnut-Suvarnbhumi</i>	1,000	65
Perfect Place <i>Ramkamheang-Suvarnbhumi</i>	1,000	64
Total	2,898	311

Source: Questionnaire survey, 2008

3.3 Questionnaire Instrument Development and Data Collection

Questionnaire survey (Probability Sampling). Spatial and social related literature were reviewed and used to construct questionnaires. Variables and indicators were developed. The questionnaire was included four major parts: socio-economic characteristics, housing preferences, impacts of external factors on making decision of housing location and type, and social interaction in the community (the questionnaire sheet added in appendix A). Some of the questions were either a bi-variate or Likert scale (scales 3, 4 or 5). At the end, one open question was added, allowing the respondents to give their suggestions on living in the gated community.

The survey of 311 residents in the selected gated communities was carried out from November 2008 to January 2009 by random interview technique in choosing every 4-5 units. This survey was conducted during the weekend (Saturday and Sunday) since most of respondents stay at house in the weekend and work at their offices in the weekdays. The head of the household is the target group in the questionnaire of the study because of

his/her highest decision-making and income earner in the household. The respondents were defined as a resident of the household who are at least 20 years old. However, some of the household heads were uncomfortable to answer the questionnaire; therefore, the spouse was considered to be an alternative in the questionnaire. To facilitate and speed up the data collection process, some unstructured face-to-face interviews were also carried out.

Pre-testing of the questionnaires was organized in order to adapt and fit them to the objectives of the study. Since the data was collected in Thai, the questionnaire was translated to English to make sure that there was consistency in both the Thai and English versions.

The questionnaires were pilot-tested with 30 respondents in the five locations, 12 of them being females. Minor changes were made after this pilot testing. There were several variables in the questionnaire survey (See Table 3.2 below).

Table 3.2: A summary of the variables for the questionnaire survey.

Variable type	Complex Variables	Simple Variables
1. Socioeconomic characteristics of upper-middle residents in the gated community	Household status	- Head of the household, - Couple/spouse, - Other
	Gender	- Male - Female
	Age	Year
	Marital status	- Single - Married - Divorced - Widow
	Education	- Under high school - High school - Diploma - Undergraduate - Graduate - Other

Variable type	Complex Variables	Simple Variables
1. Socioeconomic characteristics of upper-middle residents in the gated community	• Occupation	• Mid-level government official • High-level government official • Mid-level state enterprise official • High-level state enterprise official • Mid-level private sector employee • High-level private sector employee • Business owner • Freelance • Other
	• Household member	• person
	• Household income	• Baht per month
	• Household expense	• Baht per month
2. Housing features in the gated community	• Housing area	• Square wa
	• Floor space area (current)	• Square meter
	• Floor space area (old)	• Square meter
	• Living period	• Year
	• Reasons to buy a new house	• Need to replace or move out of old residence due to wear and tear • Expanded household and need for larger space • New income capacity • New single household/couple • Moving of office to new location • Living near their child school • Investment/Speculation • Other
	• Housing price	• Baht
	• Amortization	• Yes/No • If yes, how many Bath?

Variable type	Complex Variables	Simple Variables
3. Factors for decision making to choose the new house location	• Reasonableness Housing price (value for money) • Prestige of the housing project • Reputation of the developer company in real estate business • Reliability of security • Locational advantage (e.g. near CBD, near old residence) • Overall physical layout of the community (ex. Street size, common public space size, landscaping etc.) • Space area of residence • Dominant architectural style (e.g. modern, tropical style) • Leisure Facilities in village (e.g. park, clubhouse, pool) • Accessibility of Public facilities nearby (e.g. hospital, school) • Dependability of Public utilities (e.g. road, electricity, water supply) • Social interaction or neighborliness of the residents • Accessibility Public transportation (e.g. bus, MRT)	• Likert scale (low to high)
4. Gated community association and community life	• Members of association or project	• Yes / No
	• Gated Operators	• Project developer firm • Property management firm • Membership and elected officers of the Association
	• Payment for the member	• Baht per month
	• Frequency of association's membership meeting	• Time per year
	• Frequency of your taking part in the meeting	• Time per year

Variable type	Complex Variables	Simple Variables
4. Gated community association and community life	• Association report	• Yes / No
	• Types of association report	• Regular written report • Oral presentation in membership meeting
	• Level of community ties	• Neighbourly and tight-knit • Friendly • Distant or private
	• Level of involvement in association management affairs	• Very active • somewhat active • Not very active
	• Level of involvement in association-sponsored activities	• Very active • somewhat active • Not very active

3.4 Qualitative Interviews and Opinion Survey

The purpose of the opinion survey for the present study was to understand the mechanisms, actions and motivations of key actors involved in the translation of new upper-middle class consumption in housing into spatial changes and patterns in the urban form, individual real estate developers, policy makers and land and urban planners were interviewed (Unstructured Individual Qualitative Interviews). These key informant interviews also covered issues and practices relevant to understanding the implications of gated community projects to the state of social housing in BMA and to issues related to developing a socially inclusive urban life and form. The three major key performants are 1) developers and real estate marketing agents, 2) managers (legal associations or gated entrepreneurs) who are responsible for the public services in the gated communities and 3) the local government officials who work for the five selected gated communities. The interview forms were presented in Appendix C.

3.4.1 Developers and Real Estate Agents

A questionnaire survey (Non-Probability or Purposive Sampling) was conducted among scores of developers, and real estate marketing agents, regarding their opinions and practices in product development and marketing of gated communities among their target

clients. This survey included their opinions about their target upper-middle class clients or buyers. The list of developers and real estate agents were the same as in section 3.2.

3.4.2 Gated Community Managers

According to the five selected gated communities as named in Table 3.1, the research set the interview sheet dealing with the topic of administration and management of public services in gated community, type and charge of facilities in the project and the constraints and barriers of cooperation of government officials. Four gated communities are still under the developer firm's operation since the housing projects are still on sale. Only one gated community, Settasiri, the project entrepreneur transferred public facilities to the homeowners and they voted a group of representatives regarding the land Allocation Act 2543 B.E.¹³ in order to supervise the housing facilities.

3.4.3 Government Officials

Local Government officials who are in charged with the selected five gated communities were interviewed in order to have their opinion on their administration on housing particularly gated communities, public services provision, and constraints. The interviews were carried out in 2008 and lasted between 50 and 180 minutes. The data was recorded in a tape recorder and handwritten notes.

Furthermore, the research also studied and used of the secondary data such as official records review (official policy papers of the government and statistics related to land use and development projects; corporate documents and papers of developer firms;

¹³ The Land Allocation Act 2543 B.E has set up 3 options in managing the infrastructure and the housing project community after the ownership transfer 1) the buyer organizes the housing project juristic persons according to this legislature or another law to receive the property transfer for managing the property and providing maintenance within the time period that the land developer has given and that must not be less than 180 days from the day that the buyer is informed by the land developer 2) the land developer is granted the permission from the committee to proceed in any kind in order to keep the maintenance of the infrastructure 3) the land developer registers to transfer the property for public use. Based on these options, it is found that there is an important management option - the organization of the housing project juristic persons.

and, media reports and advertising materials on gated community projects). These also included unpublished recent theses and studies on social housing and urban land use.

Table 3.3: Interview Details for Civil Servants, Policy Makers, and Planners

Local government officials	Responsibility for Gated Community
Bangplub Tambol Administrative Organization	Saransiri <i>Ratchaphruek-Chaengwattana</i>
Rachatewa Tambol Administrative Organization	Perfect Place <i>Onnut-Suvarnbhumi</i>
Nontaburee Municipality	Burasiri <i>Sanambin-nam</i> Settasiri <i>Sanambin-nam</i>
Minburee District	Perfect Place <i>Ramkamheang-Suvarnbhumi</i>
Ladkrabang District	Perfect Place <i>Ramkamheang-Suvarnbhumi</i>

3.5 Data Analysis

The data and information collected for this study were processed through qualitative and quantitative analysis techniques. Qualitative analysis was employed for data from key informant interviews and from some open-ended questions. It was used to established and developed key variables and categories to use in surveys. It was also applied to be able to interpret certain patterns and characteristics whose pervasiveness would later be measured through the use of quantitative surveys. Qualitative data and analysis basically revolved on issues on housing purchase, and association and lifestyle in gated community.

The empirical analysis of the quantitative survey has been done by using the statistical software. As previously mentioned, the survey covered issues that included socioeconomic data; housing characteristics, impacts of factors on making decision of housing location and type, and association and social interaction in the community. Many responses were in the form of Likert scale. The chi-square test, t-test and ANOVA analysis were chosen to investigate based on the objectives. Because of the lack of comprehensive survey of gated communities on a local scale, this research has had to use a database derived from secondary sources and the questionnaire surveys. Both data sets were integrated within a Geographical Information System (GIS), in order to visualize the location of gated communities in and around Bangkok.

Chapter 4

Study Areas

This chapter describes the historical development of Bangkok from past to present in terms of growth of space (4.1), demography (4.2), society (4.3), economic (4.4) and transportation (4.5).

4.1 Spatial Growth

Bangkok was founded as the new capital of Thailand in the Chakkri dynasty in 1782, after the fall of the 400-year-old city and polity of Ayutthaya. The significance of its new foundation contained two key points: first, a tradition of royal city as a symbolic and structural locus of political power, social hierarchy and religious legitimacy and second, the complementary roles of an international port city and a centre for the accumulation and conversion of surplus extracted from a subject peasantry (Evers, et al., 1987). It had become the center of wealth in both commerce and trading with the diverse background of ethnic and religious population. Bangkok was composed of two parts with the Chao Praya River in between the lands—the eastern part called ‘Krung Thep’ and the western part named ‘Thon Buri’.

The spectacular sprawling of Bangkok metropolis that goes on until today, has its roots in the past, that still influences the present (Askew, 2002). During the expansion of western colonial powers i.e. the pressure from British trading interests, economic forces and a modernizing state policy in the 1850’s pushed Bangkok and its hinterland into a period of accelerating change by promoting agricultural production, particularly rice, and centralizing the export economy on Bangkok through a transport infrastructure. The expansion of rice production was achieved through the intensification of rice farming based on traditional lines, not through technological innovations in farming methods as one might expect. The capitalist system of Thailand emerged by the investment and accumulation of a) European trading, b) the overseas and local Chinese, and c) the Sakdina group¹⁴. The tax revenues funded the road building projects of Bangkok (Porphant, 1994).

¹⁴ The Sakdina group means the royal Privy Purse Bureau, or the king’s personal budget, which directed state revenues into investment and loan business, including urban land, trade, manufacture and transport infrastructure (Suehiro, 1989).

From the mid-nineteenth century the influence of the expanding capitalist economy and the modernizing centralist state as well as education promotion in Bangkok generated a new dynamics of urban population growth and primacy. The growth rate of population of the capital in 1913 was 12 times the size of the next largest urban center of Chiang Mai and gradually increased to 15 times by 1937, then to 20 times by 1947 and continued to 51 times by 1980 (Askew, 2002). From 1900 to 1936 the built-up area of the capital expanded, but was unevenly populated and ecologically diverse. The driving force of population growth was from Chinese immigrants. Sompop (1989) remarked that the emancipation of slavery system in 1905 did not unleash a wave of rural-urban migration because income from rice farming was higher than from wages from urban labor. However, from 1932, under the new military/bureaucratic regime, Thai involvement in the non-agricultural workforce was encouraged through the promotion of industries, the application of compulsory employment quotas for manufacturing firms and the banning of ethnic Chinese from vending activity (Kanchada, 1989). Policies aimed towards nationalizing key industries led to the formation of state enterprises in industries such as petroleum. The most important result was the emergence of 'bureaucratic capitalism'.

By the beginning of the post-war after the Second World War, a large number of manufacturing and trading enterprises in both urban and rural areas had been taken over or penetrated by the state. Bangkok became a 'metropolitan complex'. Its territory was delimited by the municipal administration of the BMA. The waves of migrants were from all over the country in search of profit, education, employment and survival. From the many transformative processes took place, defined variously in terms of state representation and policy, urban functions as a center of government and prestige were considerably enhanced, but new dimensions also emerged as economic change articulated more space and more diverse society - many different types of 'Bangkok people' emerged for Bangkok became simultaneously a key industrial city, a city of the poor, a city of the middle classes and a tourist city (Askew, 2002: 49). Throughout the 1950s and into the next decade economic growth was led by services (i.e. trading and banking; Chatthip, 1968). At the same time, consumer goods imports were steadily rising, largely serving the as-yet-small urban elite and middle classes, whose consumption levels increased throughout the decade (Ingram, 1971). For example, between the years 1947 and 1957 the

number of private cars in the municipalities of Bangkok and Thonburi increased by over 650%, representing 87% of all private cars in Thailand (Bongsadadt, 1973).

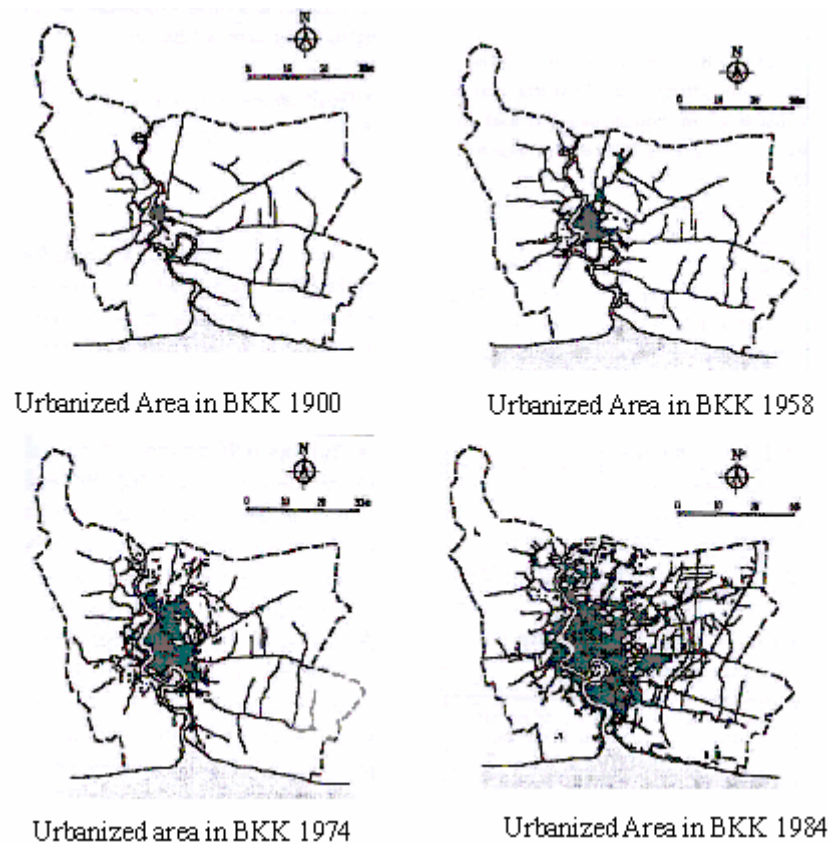


Figure 4.1: Urban Growth in Bangkok Metropolitan Area (1900 – 1984)

Source: JICA (1996)

The significant economic development policy came in 1957 with more aid, technical support and funding from Chinese business elites and private domestic capital (Darling, 1965; Phongpaichit and Baker, 1995). To boost industrial growth, foreign investment and diversification in the national economy, the National Economic Development Board (NEDB)—subsequently changed to National Economic and Social Development Board (NESDB)—and the Board of Investment (BOI) were established in 1958 with the cooperation of Western advisory, i.e. western-trained, Thai technocrats (Keyes, 1987; Ingram, 1971). The policy formulation was left to overseas consultants and Thai technocrats including the production of a development plan of Bangkok worked out by an American consultant team; therefore its name ‘The Greater Bangkok Plan 2533 or the ‘Litchfield Plan 1960’. This plan aimed to establish land-use zoning and directions for Bangkok’s growth for the next three decades (Sternstein, 1982). The plan was never implemented.

Bangkok area tripled from 13 km² in 1900 to 43 km² in 1936 (Mekvichai, 1998: 242). In 1947, Bangkok covered an area of between 60 to 70 km² and expanded to 90 km² by 1960 with the population of over 2 millions (Donner, 1978). By 1970 the built-up area of the city had expanded to 184 km² (Sternstein, 1976). The built-up area of the sprawling metropolitan complex then reached 239 km² in 1980 and it continued to expand (see figure 4.1). A master plan was produced by the Department of Town and Country Planning in 1971 which estimated population growth of Bangkok for 1990 upwards to 6.5 millions. Although the 'Greater Bangkok Plan BE 2543' (CE2000) was produced by the City Planning Division of the Municipality of Bangkok, Bangkok would continue to be in the 'rapidly growing city' because this office was not officially authorized to develop general plans and the various power holders in the city were dominated by property interests (Askew, 2002). At present (2005), Bangkok's area covers 1,568.737 km².

Critics monitor that the mistake of Bangkok's continuous growth was already in Litchfield's plan which imposed a prescriptive western urban model onto a pristine indigenous city (Bello et al., 1998) and the plan assumed growth. At that time the 'automobile city' was already emerging with the tacit support of government, of industry and of the urban middle classes. Another factor was that there was no legal framework or political will to impose comprehensively the planning ideals of the Americans i.e. radiant city by Le Corbusier. However, the Bangkok Master Plan was finally adopted in 1992; its commitment to comprehensive planning was only a symbolic exercise. As Nims (1963) had already noted much earlier that even though increasing numbers of western-educated Thai Planning professionals and national technocrats, planners would be kept busy monitoring and mapping the dynamic spaces of the metropolis on paper, their functions were restricted to 'painting the colors' of the land uses they could not control.

The rapid increase of the urban population had brought about the need for housing. "On the national scale, there are approximately 3,000 slums and poor urban communities, including 25 million people throughout Thailand. Bangkok is the capital city with a population of 10 million people currently. It contains the oldest and largest overcrowded area, close to the Port Authorization of Thailand. This congested area consists of 18 low socioeconomic communities and cover an area of 320 acres. These areas include approximately 70,000 households with 320,000 individuals who are suffering from overcrowding, poor housing, poor hygiene, and poor sanitation (Piaseu 2003, 3). The low-

income people and the urban poor are the most vulnerable migrant group because they live in the crowded areas with strong links to local economies and employers (Rabibhadana, 1978). Squatter settlements occupied and still occupy land in the inner and middle ring areas of the city; it is mostly land of the government, sometimes belonging to private organizations or institutions like temples. The low income persons had to rely on such 'arrangements' because of critical factors like accessibility to work and the fact that much of the unused land controlled by government departments was located in these areas. The National Housing Authority was finally established to coordinate public housing provision in 1973. Due to the unbalanced regional growth, the decentralization policy and polycentric model of metropolitan development was addressed in the forth national plan (1977-1981) but the growth patterns continued to be determined by market and demographic forces (Ruland and Ladavalaya, 1996).

Private landownership and the dynamics of the urban land market were the key determinants of settlement patterns and land use in Bangkok. The paradoxical permissiveness of the Thai administrative system - together with the fragmented and competing jurisdictions of government agencies - allowed the urban environment to deteriorate further under the pressure of increasing traffic congestion and pollution. While regulations and building standards existed to control building heights in some districts, there was no regulation of plot sizes in the city, so that private subdivision could proceed at the desire of developers and landowners. Moreover, without enforceable land use controls, planners could not hope to channel or forecast traffic flows in the expanding city (Kammeier, 1984). This was due to a number of central factors: the growth of a real estate and development industry financed from profits made in the commercial sector; a reorientation of the building industry to housing estate development following a drop in investment in infrastructure projects and micro-speculation by the middle classes of the city (Durand-Lasserve, 1980). Due to unregulated land use, the land pockets—under-utilized, farm, vacant areas—in the periphery were gradually occupied by private landowners who had and have the economic decision power to control the land in the newly expanding districts either in the north, the northeast or the east of Bangkok (Chatchaisittikul, 1986).

Increasing land prices in the inner city, increasing accessibility and motorized mobility through the expanding road network, cheaper land parcels in the urban fringe with

the promotion of the increase availability of financing through banks and financial institutions, many estate companies responded to the housing demand in the growing the city (Vichiennoi, 1982; Issarathip, 1986). The suburban landscape has now become an additional feature of the middle class for new houses (Askew, 2002: 64). This goes hand in hand with the transformation of the household structure from the extended to nuclear families. As an example, newly-married couples prefer to have independence from the parental household by setting up their new households in the suburb (Rajavatanadhanin and Kothandapani, 1983: 209-215).

Globalization furthermore facilitates people's lives through electronic communication and its impact on space (Castells, 1997). To a certain extent, telecommunication becomes a factor of housing relocation to the suburb especially for middle-class Bangkokians who create virtual communities across the metropolis and beyond through the radio, mobile phone and internet (Cate, 1999). Bangkok has been a site where symbolic capital is accumulated and displayed at all levels of urban life, expressed most conspicuously in the rising middle classes (Askew, 2002).

Because of the changes in the economy, the daily activities and land use, the urban space, governed by the Bangkok Metropolitan Administration, was inevitably to gain the denomination 'Bangkok Metropolitan Region' (BMR) which refers to BMA and the five adjacent provinces. Moreover, under the economic restructuring processes of the late twentieth century, the new 'name' of Bangkok was set up by the NESDB planners; they now call it 'Mega-urban Region' or 'Extended Bangkok Metropolitan Region' (EBMR) according to which the area stretches north to Ayutthaya, east to Chachoengsao, and along the coast to Rayong (Nophakhun, 1993; Kaothien, 1995).

4.2 Demographic Growth

The 1st to the 8th National Economic and Social Development Plans (1961-2001) focused on country development through industrial development. Bangkok should become and has become the center for economic development accompanied with rapid population growth due to in- and inter-country migration. The population has increased from 2.1 million in 1960 to 3.1, 4.7 and 6.3 millions in 1970, 1980 and 2000 respectively (table 4.1). The registered population of Bangkok is 5.8 millions in 2003 (BMA, 2004); however, their

study on the non-registered population in Bangkok indicated that the population may be 8.87 million (Department of City Planning, 1998 in BMA & UNEP, 2003) or about 10 million including the day-time population (Thavisin and Suwarnarat 1995: 11). The growth rate was higher than 3% per annum during 1960–1970, declined between 1970 and 1980 to approximately 2.27% per annum and continued to rapidly decline to 0.66% per annum during 1990–2000.

Table 4.1: Annual Population Growth in Bangkok and its vicinity during 1960-2000

	1960	1970	1980	1990	2000
BMA	2.1	3.1	4.7	5.9	6.3
Vicinity	1.2	1.4	1.9	2.7	3.8
BMR	3.3	4.8	6.6	8.6	10.1

Unit: Million

Source: National Statistical Office, (NSO, 2001)

Note: BMA = Bangkok Metropolitan Administration

Vicinity = Nonthaburi, Patumtani, Samutprakarn, Nakornpatom, and Samutsakorn

BMR = BMA + Vicinity

Such population growth in Bangkok was mainly due to natural growth coupled with, more importantly, huge migration from other provinces to Bangkok (Nanthamongkolchai, 1999 cited in Choiejit, 2002). Between 1975 and 1980, the net migration to Bangkok was 10.7 thousand comparing to only seven thousand between 1965 and 1970 (Piampiti, 1985 cited in Choiejit, 2002). The number increased to 30.4 thousand between 1985 and 1990 over the whole periods. The great number of net in-migrants is an important factor contributing to the rapid growth of Bangkok population.

The highest population increases have taken place in the middle and outer zones and the surrounding provinces of Bangkok. Evidence covering the period 1987-2000 shows that the population densities in the inner areas have decreased from 15.27 to 11.09 thousand per km² (around 3.25 to 2.36 million people) whereas the density in outer areas has increased from 0.77 to 1.28 thousand per km² (approx. 0.67 to 1.12 million people; BMA and UNEP, 2001: 14). The average population density of Bangkok in 2002 is 3,686 per km² (NSO, 2002).

Rapid population growth not only occurred in Bangkok but took also place in five provinces surrounding Bangkok, which are provinces of Nonthaburi, Pathumthani, Samutprakarn, Nakonpathom, and Samutsakorn, and the population growth rate of these surrounding provinces was higher than that for Bangkok.

4.3 Social Changes

In the past, Thailand had a class stratification named the Sakdina comprised of four groups (chao=princes, khun-nang=nobles, phrai=commoners, and that=slaves) each defined by the number of men under the control and the amounts of the land owner. Whoever owned many persons and land meant that they had high power and status in society (see for more details in Rabibhadana, 1975). During the reign of King Chulalongkorn (1868-1910), the sakdina system was abolished and modern education was introduced. The formation of a new generation of Thai society subsequently took place and assumed the direction of public life with the aim of Thailand becoming modern nation state. Tertiary and technical education was one of the key forces underlying the growth of the elite within this socio-economic formation. The state's education expansion program of the later 1950s, boosted by overseas scholarship schemes, produced an educated and well-paid professional stratum. In 1970, by virtue of the concentration of administration and business in Bangkok, three quarters of Thailand's university graduates resided in the metropolis (Thai University Research Associates, 1976: 256). With the rise of these strata consumption power was also concentrated in the metropolis. The growing disparity in household income between the Bangkok and the provinces was a clear indication of this trend. Between 1960 and 1970 the household income in the Bangkok-Thonburi area grew at a rate higher than the nation's average, with the household income for the metropolis averaging 11,234 baht in 1970 compared with 3,849 baht for Thailand as a whole (Prasert, 1987).

The urban middle classes were the greatest beneficiary of the economic boom and the growth of heterogeneous social formation was one of the more striking developments in the post-war period (Phongpaichit, 1980: 19). Bangkok became the centre of consumption for a growing Thai and Sino-Thai middle stratum and the focus of social mobility and status acquisition. Expansion saw growth and diversification across a spectrum of occupations in the private sector, including small-scale trade, technical,

manufacturing and service sectors. These groups comprised a broad petty bourgeoisie whose opportunities grew with the burgeoning urban domestic economy, a professional and white collar stratum which spanned both government services and business, and an entrepreneurial bourgeoisie whose fortunes were linked more directly to overseas capital.

4.4 Economic Growth

Thailand had experienced the high level of economic growth during 1987–1995 with an average growth rate of 10% per annum. In the 1990s, globalization pressures intensified and generated a range of financial liberalization measures in Thailand. Bangkok was selected as an important regional and international hub for passenger traffic, air freight and shipping cargo. Massive flows of foreign capital were now directed into Bangkok. As the powerhouse of Thailand's industrial export surged, the center of its key financial institutions and the conspicuous site of new wealth, Bangkok was also the critical base of the emergent financial globalization trends. Since 1997 Thailand has been confronted with the economic recession due to the economic crisis that swept throughout Asia. The 'flush' of bankruptcies among the Bangkok bourgeoisie, both large and small, was one conspicuous result of the crash, as was the halt to high-rise building projects which scarred the city skyline into the next century (Crispin 2000). Over 1,300 factories were closed. Industrial areas such as Rangsit were particularly affected by the mass lay-offs with at least 1.6 million people unemployed during the peak of the crisis; notably, women formed a higher proportion among these laid-off workers in low-end manufacturing (Bangkok Post 31 July 1998; Sanitsuda, 1998; Naraphaibun, 1997). One official short-term solution to the crisis was to capitalize on the plummeting currency by promoting tourism - particularly combined with shopping in Bangkok. But the crisis did vindicate the earlier misgivings of technocrats concerning unsustainable and thinly based growth. It strengthened their arguments for greater state direction of the economic restructuring and of regional equity. Ironically, this task required greater reliance on the global economy and institutions than ever before through encouraging FDI into high technology industry and seeking international assistance for rural employment and human resource development (Mehotra, 1999). For policy-makers and their advisors, further integration into the global order was the only solution (Viravan, 1998; Sprague 2000).

During the period of rapid economic growth but prior to the economic crisis the economic structure had shifted from an agricultural base economy to an industrial base economy with increasingly complicated products and product diversification. Bangkok and its vicinity were to become the very significant economic center of the country, because nearly half of the gross national product (GNP) ‘belonged’ to them. The proportion of Gross Regional Product (GRP) had tremendously increased between 1981 and 1990, even though the proportion somewhat decreased to 49.1 in 1999 because of the national policy to promote rural development programs and the Eastern Sea Board development projects (Nanthamongkolchai, 1999 cited in Choiejit, 2002). However, the majority of economic and social activities are – after the crisis - still located in Bangkok and its vicinity. The figures demonstrate this development. Bangkok was ranked first for the per capita income (54,305 Baht) in 1981 which was nine times higher than that of the northeastern region with the lowest per capita amounting to 6,142 Baht. In 1999 the annual per capita income in Bangkok was still the highest at about 229,000 Baht which was nine times higher than the lowest (25,367 Baht) which was registered for the northeastern region. This means that the gap between the richest and the poorest regions in terms of per capita income has not changed for at least 20 years; on the contrary, the gap has become larger.

4.5 Transportation Development

During the early period of Krung Rattanakosin (King Rama I to King Rama III reigns), most of the people settled mainly along both sides of the Chao Phraya riverbank and along several canals nearby. Due to the river and significant canals, Bangkok residents resorted to waterways for their commuting. In the reign of King Rama IV the transportation system shifted from waterways to roadways. Many roads were constructed paralleling with the Chao Phraya River; roads which passed through many business areas and districts with foreign consular offices. The road construction stimulated a number of key changes in the urban system including land use (and land prices).

The first road of Bangkok named ‘Charoen Krung’ or ‘New Road’ served European residents and was to be cut parallel to the river. Road building at that time aimed to encourage trade and revenues and to facilitate shop houses and land-based markets (Sternstein, 1976). New clusters of private commercial and residential developments followed the routes of new roads across and out of the city to initiate the sprawl (Askew,

2002: 83). Since the motor car was first introduced in the period of King Rama V roadways were widely used and become increasingly important, while waterways declined in use. During King Rama VI Reign, over 120 new roads and many bridges were built (Porphant, 1994). The major bridge over the Chao Phraya River named 'Buddha Yodpha Chulaloke' connected Bangkok to Thonburi, to the west side of Chao Phraya River, which also brought urban civilization to Thonburi. Most of canals were not dug anymore, many were filled and only major ones have been kept 'transport operational' ever since. Ultimately, public transportation by tram was given up because of the promotion of roadway transport and private car use (Surasawadi, 2000; Ruengsilp, 1984; Poboorn, 1997).

Besides, rail and tram transports were also introduced during King Rama V reign (1868-1910). Railways were constructed from Bangkok to other provinces while trams served for public transportation within Bangkok. As regards the progress of the **railways** development at the end of King Rama V reign the total length of lines open to traffic amounted to 774 km. At the end of King Rama VI reign (1910-25), the total length increased to 1,804 km and by the end of King Rama VII reign (1924-34) and King Rama VIII reign (1934-46), 418 km and 259 km respectively was added. Total length of the lines was 2,481 km in 1946. It now (2005) has a total route length of 4,041 km. (SRT, 2005). In 1951, the State Railway of Thailand (SRT) became a state enterprise.

However, car and vehicle ownership increased dramatically after the Second World War. Vehicle ownership and income per capita in the 1990s are quite revealing. When comparing these two variables of different cities in the Asia Pacific region, then low income cities such as Bangkok and Kuala Lumpur are similar or not higher than those of established industrialized cities like Tokyo for example (Marcotullio, 2005). Road capacity in Bangkok has also increased over the years. The Bangkok area has remained at 1,568.737 km² from 1986 till today (2009). The road's length of Bangkok was 2,785.01 km in 1986 and increased to 4,076.13 km in 1999. The road surface in 1986 was 19.25 km² and rose twofold to 38.71 km² in 1999. On the one hand vehicle population in 1986 was 1,385,801 and climbed up to 4,162,846 in 1999. Thus, while the road surface area increased only 101% the number of vehicles went significantly up by 200%. On the other hand, road capacity in 1986 was 71,990 vehicles per km² and increased to 107,539 vehicles per km² in 1999. At present (2002), there are 675 roads covering a road surface areas of 34.52 km² (Department of Traffic and Transportation in BMA & UNEP, 2003: 15). Public

and private means of transport generate an enormous number of trips per day. In 2003, there were about 16.5 million person trips per day in Bangkok; public transport trips count for 45% of the total trips per day (Taneeranaqnon, 2004).

The tremendous growth of private car ownership and the comparatively low road capacity inevitably lead to chronic traffic congestion. In order to alleviate it the Expressway and Rapid Transit Authority of Thailand (ETA) has established a Master Plan for expressways in Bangkok and its vicinity in 1981. All the projects have been accomplished and now serve approximately 1.2 million vehicles per day with the revenue 38 million Baht per day (ETA, 2005). The 'third stage expressway system' is under construction. The total length of this line will be 40.4 km; only 4.7 km have been completed so far. The total length of expressways in Bangkok and its vicinity provinces is approximately 175.9 km (ETA, 2005).

To cover road demand Bangkok's road network is not quite adequate: It is a radial system with insufficient circumferential roads. Furthermore, Bangkok has only 11 % of urbanized land under roads, which compares 'poorly' with typical Western figures of around 20% (Orn, 2002: 9). A traffic speed survey carried out in 2000 showed that during the rush hour the average speed was 10-12 km/hour in the inner area with 19-21 km/hour in outer areas (BMA and UNEP, 2001: 21). In order to serve road demands and relief congestion, several transport projects have been proposed and also implemented i.e. the elevated rail system (Skytrain), the Underground Mass Rapid Transit System (MRT), several new express and toll ways as well as the Middle and Outer Ring Roads (see figure 4.2). Projects such as these were a product of more concerted efforts of 'NESDB technocrats' and of BMA governorship in order to implement long-term goals. The approaches have both been more professionalized and responsive to the growing demands of the middle-class Bangkok electoral constituency (Askew, 2002: 90); at the same time, these projects stimulate more mobility (Hirsch, 1977; Goodwin, 1996; BMA and UNEP, 2001: 21). Critics monitor that these approaches reflect a policy that is likely to consider the transport system in terms of class differences under the dominance of the elite and favoring middle-class transport preferences (see e.g. Tadiar, 1995; Christensen, 1993) in Askew, 2002: 84). In the face of the evidence presented above it seems that the projects deal with symptoms only. Mobility, congestion, the use of energy and pollution (noise, small particulate matter) continually increase.

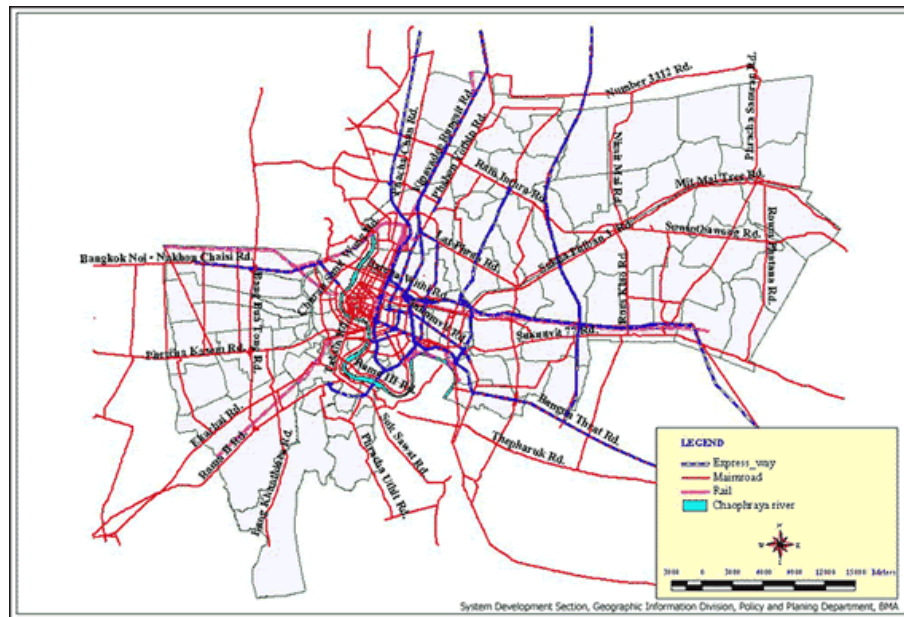


Figure 4.2: Bangkok Transport System: Expressway, Main road, Rail
Source: BMA, 2005

It is not only politics and policies that induce private car using but also modern life-styles and economics shape mobility and its infrastructure as well. Some of the primary causes of the continuing growth in vehicle travel are the rapid growth of suburban and, more recently, remote sub-urban areas which have resulted in longer commuting trips. Increasing income and the desire to own a car, if economically feasible, are major causes of rapid growth in car ownership (Bae and Suthiranart, 2003; Zahavi, 1980). From vehicular registration statistics, it was found that in the year 2000 the number of vehicles registered in Bangkok was 4.5 million, increasing by 113 percent from 1991 and compared to 20 million for the whole country. The increase of vehicles in Bangkok is not proportionate to the increase of roads as mentioned above which causes low speed, traffic congestion and delays in transportation (UNEP, 2001). Until 31 December 2003 almost 5.5 million vehicle licenses have been issued for Bangkok; among them 1.7 million for private cars and 2.3 million for motorcycles (DLT 2004). The average car registration in Bangkok is currently (2003) 58,061 cars per month or around 1,935 car registrations per day.

Chapter 5

Consumption of Gated Community Housing

Forces of globalization today, such as for example liberal flows of international mobile and speculative capital in real estate development in developing countries and the enhanced operations of various global companies in these places serve as positive influences to the expansion of upper-middle class and enhancement of their preferences and purchasing capacity in housing. These forces thus generate more gated community housing projects in developing countries. Some scholars have noted that such globalization can be a double-edged sword (Goldblum and Wong, 2000; Sajor 2003). It may bring greater upward mobility for middle to upper-middle classes and expansion of their lifestyle options, but it may also threaten the opportunity of low-income people to access the land and housing and worsen inequality in society. This is especially significant in Southeast Asian region that has been the site of both rapid property development in the last two and a half decades and a witness too to the dramatic expansion of upper-middle classes in the region's countries particularly Thailand which has an influence to housing demand particularly in the form of gated community. Therefore, this chapter presents the empirical data relevant to this phenomenon. There are five major sections: the expansion of middle and upper-middle class (Section 5.1); the rise of gated community (Section 5.2); gated community's features (Section 5.3); the various agents and mechanisms involved in this consumption and their impacts (Section 5.4); and the consequence of expanding distinctly middle and upper-middle housing consumption on spatial change and social inequality (Section 5.5).

5.1 Recent Expansion of Middle and Upper-middle Class

Ever since 1986, Thai economy had changed from an agricultural-based to an industrial-based which affected to economic sectors. Bangkok, the capital of Thailand and the center of industrial investment, occupational diversity and high employment opportunity, is the living place of approximately 10 per cent of the total population of Thailand (about 60 millions) and accounts for more than 45 percent of the economy in Thailand. A major segment of the country's economic base moved from agricultural export

to manufacture export in the mid-1980s, which in turn became dominated by higher technology-based products exports, such as automotive, electrical goods and computer parts, in the 1990s. The latter two developments were accompanied by dramatic increases in foreign capital flows and the expansion of producer services, fuelling great demand for well-educated professionals, managers, clerks and sales personnel to service the private business sector. This sector's employment grew from a half a million in 1960 to almost 7 million in 1999 (Hewison, 1996, pp. 143–144; Phongpaichit and Baker, 2002, p. 387). This trend toward the concentration of economic and human resources in Bangkok gained momentum during the period of rapid growth from the late 1980s to the mid-1990s, with metropolitan Bangkok's gross regional product rising from 31.1 per cent of GDP in 1980 to 51.5 per cent in 1994. The absence of rapid rural depopulation in Thailand, despite the widening income disparity between the capital and rural areas, can be attributed to the two segmented character of the Thai labor market based on the level of education—workers with qualified education and without sufficient education qualification (Chalornphob 1992, pp. 53–62). The agricultural population continued to account for as much as 47 per cent of the civilian labor force until 1990. This unevenness between the economic and occupational structures aggravated another imbalance, namely, the wide geographic gap in development – that is, between the capital city and the rural areas. The farming population in the rural areas did not benefit fully from urban prosperity, whereas the “middle and upper-middle class,” became the main beneficiary of the fruits of urban-centered development. This class also manifested and championed a form of political consciousness advantageous to its own class interest (Nithi 1993, Girling 1996).

Thai scholars began to consider these new elite categories capable of replacing bureaucrats and other old elites. This newly emerged class consisted of people who belonged to the urban upper-middle income such as hotel managers, proprietors of construction businesses, independent craftsmen, professionals, and administrative officials (Juree 1979) and have the strength of their bargaining powers or professional expertise in the market (Voravidh 1993, p. 125). Sixty percent of middle class (bureaucrats, old elites, professionals and highly paid employees are new middle class (Funatsu and Kagoya, 2003). Furthermore, the middle-class was divided into three categories based on the service or tertiary sector: the self-employed owners of small businesses and proprietors of local shops (sometimes referred to as the old middle-class); the professional, managerial and

technical workers (often referred to as the upper middle-class); and the lower middle-class (sometimes referred to as white-collar proletariat), which is a heterogeneous category including people working as office staff, sale representatives, teachers, nurses and clerks (e.g. Giddens, 1979; Goldthorpe, 1983; Funatsu and Kagoya, 2003; Crompton, 2004).

Scholars have attributed the dramatic expansion of the middle to upper-middle class with the further elaborate development of capitalist production, requiring an increasingly complex and diverse range of human resource skills. On the other hand, during this period tertiary education in Thailand also rapidly expanded. Consequently, Thailand's workforces who are graduates of tertiary education multiplied 18 times between 1970 and 1999 (Phongpaichit and Baker, 2002, p. 386). Largely based on recognition of these recent changes in Thailand's political economy, a number of social scholars today have therefore underscored three criteria in defining the category of the upper-middle class in Thailand: occupation, income and education level (Hewison, 1996; Ockey, 1999; Askew, 2002; Phongpaichit and Baker, 2002). The particular aspect of modern lifestyle and its forms in Thailand has been attributed to the country's middle to upper-middle class propensity for peripheral and suburban type of single detached home ownership, private car ownership and associated car dependence for travel (Hewison, 1996; Evers and Korff, 2000, pp. 220–221; Bae and Suthiranart, 2003).

5.1.1 Clarification of Upper-middle Class

In this section some features of 'middle class' and 'upper-middle class' would be presented. The main concern is the characteristics of 'urban upper-middle class'. The figures presented in this section are based on the field survey carried out in 2008. This survey only establishes weekend wherein the respondents spend their holidays at home. The following analysis is based on the answers of 311 respondents of the five selected gated communities. For the descriptive analysis of this section, it needs to explore middle class prior to investigate the upper-middle class since Thailand does not have any statistical records and criteria of social class. The data and criteria were used for the categorization of middle class mainly deriving from PhD thesis of Wanpen Charoentrakulpeeti (2006) and of upper-middle class taking from 311 respondents of this research.

As elsewhere in Asia, Bangkok does not have a homogeneous social formation. The middle class is a varied social stratum. So what is the Bangkok middle class? The middle class remains notoriously difficult to define and to disaggregate (Hewison, 1996). According to the 3 indicators of middle class proposed by Maleva (2002), they include *material resource indicators* i.e. levels of income, the amount of monetary savings and the amount of property owned; *non-material resource indicators* i.e. the levels of education, professional qualifications, occupation; and *social evaluation of self indicators* i.e. the success in adapting to new economic conditions, the levels of comfortable current life. Largely based on the recognition of recent changes in Thailand's political economy, a number of social scholars today have therefore underscored three criteria in defining the category of the middle class in Thailand: occupation, income and education level (Hewison, 1996; Askew, 2002; Ockey, 1999; Phongpaichit and Baker, 2002). The particular aspect of modern life style and forms of consumption that logically bear heavily on the transport situation in Thailand has been its middle class' propensity for peripheral and suburban type of single detached home ownership, private car ownership and associated car dependence for travel (Bae and Suthiranart, 2003; Hewison, 1996; Evers and Korff, 2000: 220-221). The importance of these issues cannot be overstated. This research would select some indicators only and look for empirical evidence to identify the prevalence of Bangkok's upper-middle class based on middle class criteria. The per capita income is applied as material resource indicator whereas the levels of education and occupation are the indicators of non-material resources and car ownership is a symbol for the social evaluation (self indicator).

As mentioned above that the categorization of class in Thai society is quite difficult due to lack of the criteria and the data; therefore, classifying upper-middle class needs to consider the characteristics of middle class. The below is middle class's features, which frequently refers to the 'new rich' with major differences in education occupation and income (Ockey, 1999).

- The tertiary education or university system – also in Thailand - had been oriented towards the new, education seeking middle class of capitalist society (Anderson, 1977). Correspondingly, education has been of great significance for the middle class. Hewison (1996) noted that the achievement of tertiary education is typically ascribed to the middle class. Tertiary education can be vocational education and training, college, and university.

According to the National Statistical Organization (NSO) 1,564,322 or 29.84% of all educated residents (5,242,080) of Bangkok had graduated to the level of bachelor degree in 2004 (NSO, 2004).

- The occupation of the middle class encompasses a range of professionals, public and private bureaucrats and the self-employed (Hewison, 1996). Occupationally, the middle class sometimes called “service class” (Goldthorpe, 1983) because their work is mostly in the service sector, which can be disaggregated into three fairly distinct groups (Phiriyarangsarn and Phongpaichit, 1992; Hewison, 1996). Firstly, the lower middle class is a heterogeneous category, including civil servants, workers in semi-government authorities and in private companies working as office staff, sale representatives, teachers, nurses and electricity, telephone and postal organizations. Secondly, the upper middle class is made up mainly of those of the ‘service class’ i.e. professional, managerial and technical workers. Lastly, the old middle class consists of self-employed owners of small businesses and proprietors of local shops. In the case of Thailand, the Ministry of Labor classified the employment sector into three sectors: 1) primary sector i.e. agriculture, forestry, mining; 2) secondary sector i.e. manufacturing, construction and public utilities; and 3) service sector i.e. i.e. retail, wholesale, transport, communication service, finance, insurance, education, entertainment, transportation, and government workers. The number of employees in the service sector was considered as the major employment of Bangkok’s middle class. Of all employees of Thailand, the proportion of service sector included 29% in 1989, then decreased to 24% in 1994 due to the financial crisis, and subsequently slightly recovered to 25% in 2000 (MOL, 2000). Whereas Bangkok has employed workers in service sector above 62% in 1998 (OCMLT, 2000a).

- Incomes¹⁵ of the middle class, therefore, should take tertiary education and the occupation of government officials, private employees and the self-employed into

¹⁵ The average annual income of Bangkok’s residents was 78,794 baht (year 2000) or 6,566 baht per month. In 2002, an the average monthly per capita income was 8,500 baht compared to those of the whole kingdom people with only 3,924 baht on average (NSO 2002). In 2004, an average monthly per capita income of Bangkok’s residents increased to 9,126 baht whereas that of the whole Kingdom went up to 4,284 baht per month (NSO, 2005). The enforcement of a minimum wage in Bangkok was 165 baht per day in 2002, then revised to 181 baht in August 2005 (MOL, 2005a) and latest increase is 184 baht for January, 1 2006 (MOL, 2005b).

consideration. For government employees, the official salary standard of a new bachelor graduate was 6,360 baht per month which had been used since 1995 (Office of the Civil Service Commission [OCSC], 2004) before it was modified to 7,260 baht per month in 2004 (OCSC, 2004), and increase to 7,940 baht per month in 2008. For the private sector employee, the new bachelor graduate can gain a salary that is higher than those working for government; it rose from approximately 9,369 to 14,111 baht per month and it might be increased to 27,500 baht on average if the employee has a higher education degree or experiences (Thailand Management Association, 2001).

- The key distinctions of the middle class in the Thai metropolis are private lives, aspirations and values (Vichit-Vadakan, 1979). The most dramatic physical symbol of the rise to prominence of the middle classes, along with the associated consumption and social status is the private car, the mobile phone and the shopping mall (Chua and Tam 1999: 145-149; (Castells, 1989; Lewis, 1998). Focusing on strategic new transport intersections, huge mall complexes serve an expanding middle-class population whose lifestyle patterns depend on the automobile and on conspicuous consumption (Askew, 2002: 82). Private motor vehicles have become increasingly common throughout Thailand particularly in Bangkok. In 1989, an average of one in three of Bangkok residents owned a vehicle, and 12,000 vehicles a month were being added to the 1.8 million vehicles already registered. Until 2003, the number of the vehicles increased to 5.3 million of which 1.8 million are private cars (with not more than 7 seats) according to the figures of the Department of Land Transportation (DLT, 2004). So that by the beginning of the new century approximately 33.2% of Bangkok's residents people have private car.

Based on the above four criteria to identify who is middle class, the next section takes these criteria in order to investigate the characteristics of middle class and upper-middle class which is based on the 311 respondents who live in the selected upper-middle gated communities. Prior to the characteristics of middle and upper-middle class, the research needs to elaborate generally socio-economic characteristics of the five gated communities. Of the 311 respondents, 55% are female, 45% are male, and 42 years old on average. Almost 86% of the respondents consider themselves to be the head of the household; the others are either parents (4%) or a child (10%) (a child group is on an average 31 years old or between 22 and 50 years old) of the head of the household. The proportion of single (included divorce and widow) and married status of the respondents is

27% and 73% respectively. A majority of the respondents have a bachelor degree or above (86.5%) and the other 13.5% are below bachelor degree (high school and diploma). Each household consists on an average 4 members with at least one household car. Approximately 89% of the respondents have jobs; the others are studying, retired or housewife. Around 41% of all the respondents work for private sector employee (26% middle-level position and 15% high-level position). The others are own business (18%), freelance (12%), government officials (10%), state enterprise (10%), and others (11%). The estimate of the average household income is 139,571 baht per month. (Approximately 4,000 USD a month). Their household expenses are 65,432 baht per month in average

Table 5.1: The Characteristics of Middle and Upper-Middle Class of the five gated communities

Criteria	Gated no.1	Gated no.2	Gated no.3	Gated no.4	Gated no.5	Avg. Total
1. Education (Bachelor and above) (%)	81.5	84.4	82.4	82.4	91.5	86.5
2. Average household income (Baht/month)	126,532	163,225	122,434	159,327	130,000	139,571
3.1 Occupation in Middle level at Public & private sectors (%)	37	28	46	32	38	37
3.2 Occupation in high level at Public & private sectors (%)	25	17	21	19	32	22
3.3 Occupation in Middle level at freelances & own-business sectors (%)	23	36	27	37	28	30
3.4 Occupation in other group	15	19	6	12	2	11
4. Car ownership (in %)	100	100	100	100	100	100

Source: Author's analysis, 2009

Considering the socio-economic features of the respondents in each gated community in order to identify the characteristics of middle and upper-middle class, the results show that 81-92% of all respondents graduated in bachelor degree and above (Table 5.1), the average household income range is between 122,434 and 163,225 baht per month. All respondents work for public and private companies in middle-level position 28-46% and in high-level position 17-32% or are in self-employed 27-37% and 100% of all respondents own at least one private car. Thus, it can be assumed that the major group of this research is the representative of Bangkok's upper-middle class.

5.2 Increase of Gated Community

The main features of modern lifestyle and consumption of the middle to upper-middle class are for example Japan and Korea favorite fashion, fast food eating, car commuting and living in good environment (e.g. Robinson and Goodman, 1996; Osborne, 2004). Their living styles are mostly seen in condominium in downtown and/or detached single house in peripheral areas. The total number of housing units in the Bangkok Metropolitan Region (BMR)—Bangkok and the five adjacent provinces—was only 1,036,411 in 1982 (AREA, 1999: 37) and reached to 3,477,640 units in 2002, which was an increase of 2.4 times during a period of two decades. This rapid housing increase occurred during 1990s period, the housing market was very high competition due to the foreign investment and stock market. In 1995 half of 300,000 units in BMR which were purchased were unoccupied condominium. Another housing type is detached-single house which is mainly seen as gated community and would be found out in the following subsection.

5.2.1 Acquiring Criteria of Classification the level of gated community

In order to study an increase of gated community for upper-middle class, it needs to identify a criterion to divide levels of gated community; however, it does not have any comprehensible separation in the Thai context. Therefore, the authors applied the Delphi technique which is a method to set the criteria from the experts' opinion. The Delphi technique¹⁶ greatly improves the chances of obtaining unbiased estimates and forecasts that

¹⁶ Delphi is relatively simple and cheap to implement and has been adopted for diverse applications

take full account of the knowledge and judgment of experts (Rowe, 2007). The in-depth interviews of eight experts in real estate development were conducted two times. The experts work for different real estate companies and have the housing project in a form of gated community although some of them also have an investment in the other types of dwellings i.e. condominium, twin house, and town house. The eight selected real estate companies were named Land and House, Summakorn, Saansiri, Property Perfect, Preecha group, Prueksa, Nobel House and Mankong Kehakarn. The interviewees are in the high position of the company i.e. director, deputy director, senior executive, or vice president.

Each of the interviews consumed time about one hour even or above and all the process of the each round used approximately two months due to the difficulty to making the appointment of the high position experts. All the questions of first round are open-end since we wanted the experts to set up the criteria (see the first-round interview sheet in Appendix B1) and to draw the closed answer based on the sample experts' opinions. The first-round experts' opinion was summarized that household income is the most important indicators to classify housing level. However, we cannot be applied household income as an indicator for such classification since the housing data acquired from Agency for Real Estate Affair (AREA)¹⁷ have been recorded in types of housing price and plot size; therefore, it needs to gather the second-round in-depth interviews. After grouping the answers from the experts, the second-round in-depth interview started again for the same persons as the first round. There were only 7 experts to participate for this round. All the questions in this round were closed questions which derived from the summary of the first-round interview. The second-round result can be grouped as shown in table 5.2. The experts gave first rank to housing price as the most significant indicator to divide the level of detached-single houses; other indicators can be seen in appendix B2. Four of all experts considered that three to five millions Baht of a detached-single house is suitable to

in business and government since its origins in the 1950s. It can be used for nearly any forecasting, estimation, or decision making problem not barred by complexity or ignorance. Delphi is designed to reveal panelists' knowledge and opinions via their forecasts and the reasoning they provide. This format allows testing of knowledge and learning by panelists as they refine their forecasts but may also lead to conformity due to group pressure.

¹⁷ AREA was appointed by the Government Housing Bank (GHB) of Thailand to conduct a survey of unoccupied housing units in private housing projects in the BMR.

represent in a level of upper-middle level and more than seven million Baht is appropriate for a high-end detached single house. However, housing price between five to seven million Baht still be filled in either upper-middle or high-end group. The research would put this gap of housing price into upper-middle group since the remaining interviewees consider this five to seven million Baht of housing price into upper-middle group. Therefore, it can be concluded that housing price is the best criteria to categorize detached-single houses and the appropriateness of housing price for upper-middle group is three to seven million Baht and for high-end group is above seven million Baht. Then, these criteria would be applied to calculate numbers of units and plot sizes which are 15-year statistical data from the AREA. The investigation of the rise of gated community in Bangkok was analyzed in the next section.

Table 5.2: Indices/factors applied to divide house into classes

Factor	Category		Numbers of Experts (person)
	Upper-middle class	High-end class	
<u>Housing price</u>			
- 1 st criteria	3-5 M.	> 7 M.	4
- 2 nd criteria	3-7 M	> 10 M.	2
-3 rd criteria	5-10 M	> 10M.	1

Source: The 2nd round in-depth interviews of real estate experts in 2007

5.2.2 Trends of Gated Community in Bangkok

After getting the criteria (housing price) as presented in table 5.2 above, this research then would applied housing data which is collected by Agency for Real Estate Affair (AREA) from 1994 to 2006. The housing data was divided every five year in a period and was managed along with the housing plot size criteria since the research aims to seek urban expansion. The expansion of the gated communities in Bangkok can be subdivided into three phases: 1) 1994-1996, 2) 1997-2001, and 3) 2002-2006. According to table 5.3 presented the statistics of new detached-single housing projects in Bangkok during 1994 to 2006. During the 1994-1996 period of the so-called booming period, the gated communities represented by numbers of detached single houses were very high about

40,244 units, more than half of the total was built in the lower-middle housing project (22,545 units). The next group of upper-middle housing projects, with lots typically costing 3 to 7 million Baht accounted for 15,059 units or 2.188 square kilometers land conversion. The reasons giving to this highly housing increase are from some policies and incentives i.e. low interest rate of foreign loan (loan reached 800 billion baht in 1996). The policy had attracted the foreign investment into housing market particularly residence for the exclusive social status.

Table 5.3: Single-Detached Housing Prices by Class of Projects in Bangkok (1994-2006)

Housing price groups (Project class)*	1994-1996		1997-2001		2002-2006	
	Number of lots	Area (km²)	Number of lots	Area (km²)	Number of lots	Area (km²)
Below 3 MB. (Lower-middle housing project)	22,545	2.803	4,220	0.260	8,795	0.817
3-7 MB (Upper-middle housing project)	15,059	2.188	3,475	0.580	23,573	4.250
Above 7 MB (High-end housing project)	2,640	0.474	618	0.157	9,280	2.715
Total	40,244	5.465	8,313	0.997	41,648	7.782

Source: Calculated based on the data of Agency for Real Estate Affairs (AREA, 2008)

The second period during 1997 to 2001 can be considered as downturn period of housing market because Thailand had faced the economic crisis in 1997. Thai baht was attacked by currency speculators and the fixed currency exchange system and allowing the baht to float. The baht suddenly depreciated. Foreign capital inflows diminished and financial institutions stopped lending to many businesses including real estate companies. Many real estate investors had faced cash flow problems as bank lending stopped and housing demand dropped precipitously. The number of housing developers dropped drastically, from about 2,000 to only 200 companies (Vanichvatana, 2004). The new detached single house rapidly decreased to 8,313 units. More than half (4,220 units) of all detached-single house units were built in lower-middle housing project class which consume the areas of 0.260 square kilometers and also followed by upper-middle housing

project group (3,475 units) and land consumption within this class were 0.580 square kilometers which was higher than those in lower-middle housing project.

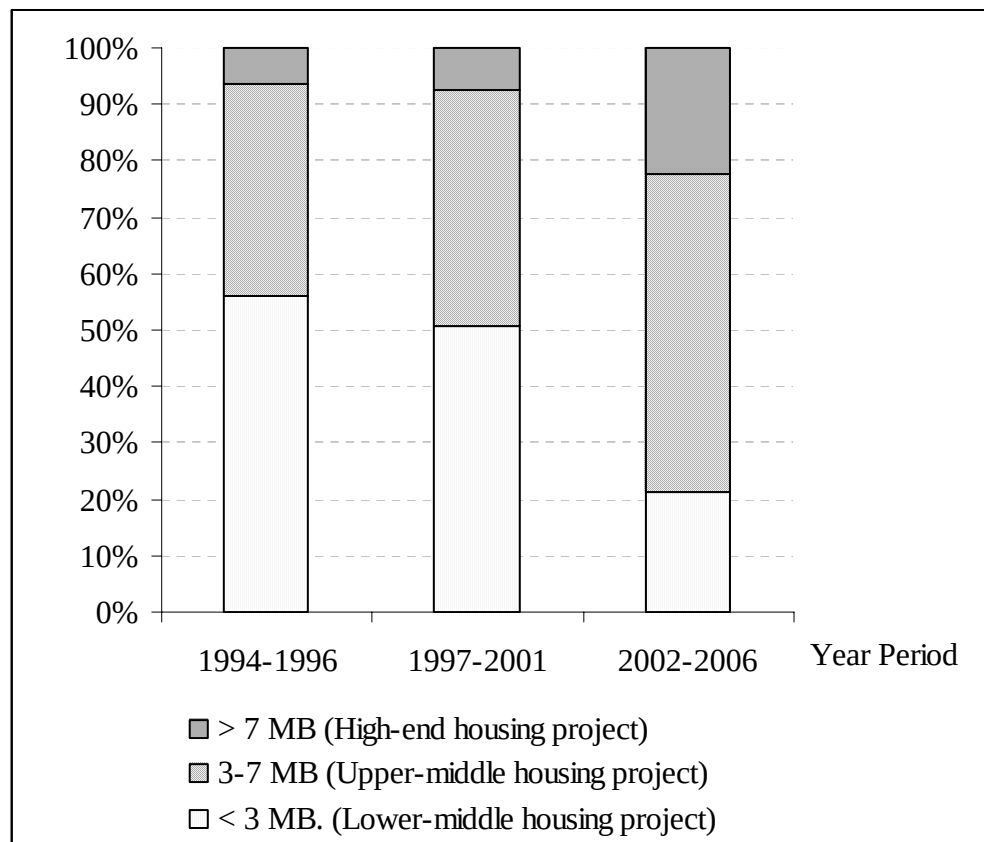


Fig 5.1: Cumulative Percentage of Single-Detached Housing Prices by Class of Projects in Bangkok (1994-2006)

The financial situation turns to better in the 2002-2006 period (see figure 5.1) with the reinforce policies in both demand and supply sides i.e. decreasing fees for housing transferring and resolving non-performing loan problems by amendments to the Bankruptcy Act and increase investment capital through property funds for the supply side (Jatusripitak 2002). Furthermore, developers began paying much more attention to design and quality, which could recover the housing market in the type of detached-single houses almost seven times (41,648 units) during 2002-2006 especially in the upper-middle housing class changing from 3,475 units in a period of 1997-2001 to 23,573 units in 2002-2006 period and increasing more than ten times for high-end housing project (2,640 units in 1994-1996 to 9,280 units in 2002-2006). In contrast to lower-middle housing price project tended to decrease from 22,545 units during 1994-1996 to 8,795 units in 2002-2006

period. Concerning the spatial consumption, it was found that total areas of the upper-middle detached single houses during 2002-2006 approximately 4.250 square kilometers more than the other two groups (2.715 square kilometers in high-end and only 0.817 square kilometers in lower-middle housing groups) (see table 5.3). These empirical data is significant evidence showing that upper-middle to high-end detached-single houses or so called gated community have continuously increased.

5.3 Features of Gated Community

Several parameters are concerned to identify the features of gated community, for example, wall, fence or guard around the gated, privatized public space (Blakely and Snyder, 1997) completing with swimming pools, kindergartens, clubhouse, facilities. Based on the five selected gated communities, residents are protected from the crime with the best security. Residents in **Perfect Place (Onnut-Suvarnbhumi)**, for example, are blocked by two electronically controlled gates at the entrances: one marked ‘residents’, and the other ‘visitors.’ Additionally, the high bridge is constructed in order to make safety as seen in **Perfect Place (Ramkamheang)**. The gated community is deserved several amenities surroundings i.e. shopping mall, hospital, school and college. **Burasiri Sanaambinnarm**, for example, is closed by various amenities including The Mall Ngam Wong Wan department store, Central Town Rattanaibet, Tesco Lotus Supermarket, Nontawet Hospital, the Ministry of Health, etc. **Saransiri Ratchaphruek-Chaengwattana** is deserved several amenities surroundings i.e. Impact Arena, The Mall Ngam-wongwan, Big C, Carrefour, Bangyai city, Kasemraj hospital.

There are several detached-single house types (see in appendix B2) and space areas varying from 128 square meters to 390 square meters. The average housing price of 311 samples is 5,760,000 Baht and 220 of all samples still amortize in average 38,756 Baht per month. Some of them are decorated in tropical style and others are created in European style.

Residential Building Types: As shown in the following illustration, the residential buildings, which are found in the site, are single houses, which almost are 2 storey buildings (see selected housing types in figure 5.2). Amenities i.e. club house, fitness center, park have also been provided in the gated communities (see figure 5.3). The

amenities and facilities provided in the gated communities, which are a symbol of exclusiveness and luxury has generally been conveyed through the advertisement. It enhances customers' desire to live in. Some slogans to catch the attention of the customers through the advertisement are:

- Choose among various models of contemporary Thai garden houses, each with the aim to maximize the amount of utilized space
- The project to articulate the beauty of eastern artistry through the modern tropical architectural style, drawing you in from the entrance, public areas, and club house building.
- Improve family activities in a Balinese-style clubhouse dominating an extra-large 1.2 rai plot of space. Both interior and exterior building materials are natural in order to meticulously create a harmony with the surrounding environment. Enjoy the Open Air ambience inside, with Service lockers on the bottom floor and a complete fitness center on the upper floor.
- A deluxe clubhouse, corridor designed especially for a touch of nature in the garden.
- Exclusive master club surrounding with large lake
- Variety of Outdoor and Indoor sports, well-equipped fitness room, and big swimming pool are provided.
- Refresh yourself among the trees with the concept of a Green Terrace-a corridor of green foliage extending from the public areas in the front to the end of the project perimeter and connecting to the 6 Garden Terraces, smaller park areas, each with their own themes such as Wooden Terrace, Lawn Terrace, and Zen Terrace.
- Every property lot faces North or South in order to increase your enjoyment of the natural breeze.
- Multiple parks and gardens throughout the project, totaling over 3 rai of green space.
- Amuse yourself on your days off in the Semi-Olympic swimming pool, with a Pool-side pavilion in the shadows of a myriad of trees

Single Houses		
 Perfect Ramkamhaeng	 Burasiri Sanambinnarm	 Perfect Onnut-Suvarnnabhumi
 Perfect Onnut-Suvarnnabhumi	 Settasiri Sanambinnarm	 Saransiri Ratchapruk- Chaengwattana

Fig. 5.2: Housing types in the selected gated communities

Source: Authors' surveying in 2008

Amenities and Facilities in gated communities		
		
Entrances of gated communities	Entrances of gated communities	Large lake
		
Drive golf	Club house & swimming pool.	Shops at club houses
		
Fitness center	Fitness room	Sauna room

Fig. 5.3: Amenities and Facilities in the selected gated communities

Source: Authors' surveying in 2008

Spatial and Locational Preferences: Several reasons give rise migration to periphery i.e. extremely expensive land in Bangkok core, high density of population and intense pollution which make life within the city less attractive. Housing schemes catering for the upper-middle income groups are established at the **periphery** i.e. new sub-centers of Bangkok like the areas around Ramkamhaeng University, Ladprao, Bangkapi, Nonthaburi. The emergence of gated communities has been accelerated with the extensive

expressway construction and the ring road expansion which would in fact help ease the city's severe traffic problem. The favorite location of gated communities relies on road accessibility since the upper-middle class's commuting is mainly depends on private vehicles. All of the five selected gated communities are located near highway, expressway or motorway (see figure 5.4). **Perfect Place (Onnut-Suvarnbhumi)**--connected to the Samutprakarn province and closed to the new airport and named as Nong Ngu Hao--, for example, lies on Onnut road and approximately 8 km far from airport link and motorway (see figure 5.5). However, the area has still not any planned in mass transit serving which most respondents rely on private auto for their commuting. Another project named **Burasiri Sanaambinnarm** is located on the main road of Sanambin-Nam, near the Nonthaburi intersection and easy access to city center via the Ngam Wong Wan Expressway. **Saransiri Ratchaphruek-Chaengwattana** is located on Ratchaphruek road, north of Bangkok and well-connected to downtown with the new road project Rama IV bridge which is just opened and near Chaengwattana road and Vibhavadi Rangsit road.

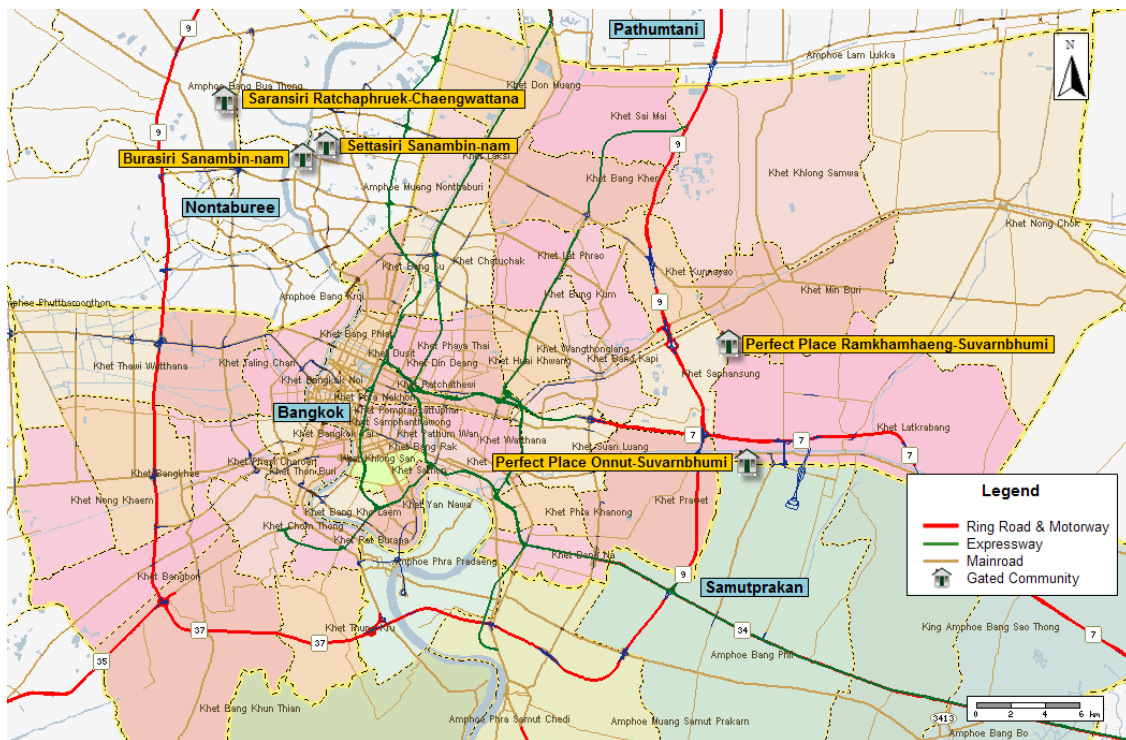


Fig. 5.4: Location of the five selected gated communities



Fig. 5.5: Location of Perfect Place (Onnut-Suvarnbhumi) and Burasiri Sanaambinnarm

If one considers a relative trend correlation between transport network and location of gated community, it is remarkable that gated communities are located near places of extensive expressway construction and the ring road expansion. In order to investigate the location of gated communities based on the recorded addresses collected by AREA during 1994 to 2006), the research applied Geographic Information System (GIS) to visualize. It was divided into three phases: 1994-1996, 1997-2001, and 2002-2006. During 1994-1996 there were only inner ring road with 45 km in length and the expressway in the sections of Chalm-mahanakorn, Sriraj, and Chalongraj with the total length of 83.2 km. 40,244 units of gated communities were found spreading, many in the middle and outer areas of Bangkok and a few along inner ring road and the expressway due to expensive land price in the inner area which is not appropriate to the high space consumption of detached-single houses (figure 5.6). In the next period (1996-2001), eastern and western outer ring road (131 km) and motorway were constructed with the extension of expressway called Buraphavidhi section (55 km.) (see figure 5.7), this period gated communities increased only 8,313 units due to the economic crisis in 1997. The location is obviously seen along the expressway to the north. The last period (2002-2006), ring road in the south (34 km) were opened which makes ring road completely; moreover, this period airport link project has been planned in the east in order to serve the Suvarnnabhumi airport (figure 5.8). The remarkable gated communities were scattering located in western and eastern of Bangkok and some extend to the adjacent provinces. It comes from the systematic loop completely of ring road serving traveling of upper-middle class mainly relying on private cars. There were 42,884 units of gated communities during this period. However, all the three periods and to date, gated communities have been established along the outer main roads i.e. Raj-utit in the east, Sukaphibal in the north, Pracha-utit and Rama II in the south, and Ekkachai, Bhuddamontol in the west.

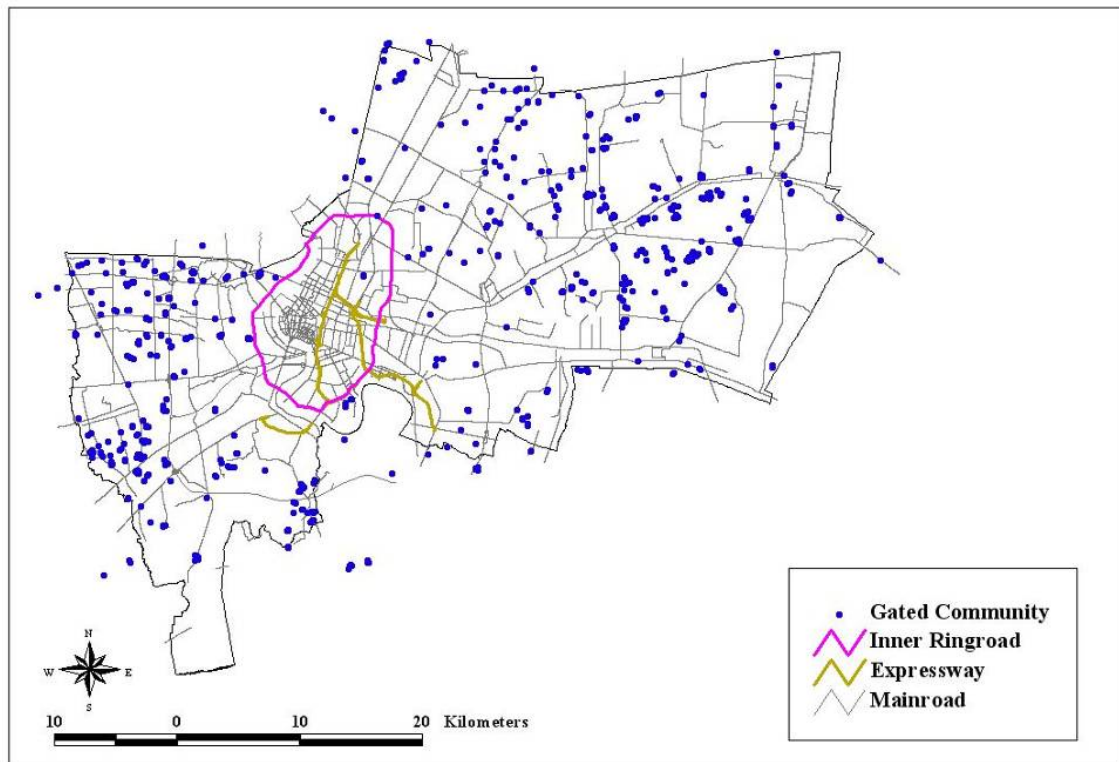


Fig. 5.6: Gated communities during 1994-1996

Source: Authors' plotting using GIS

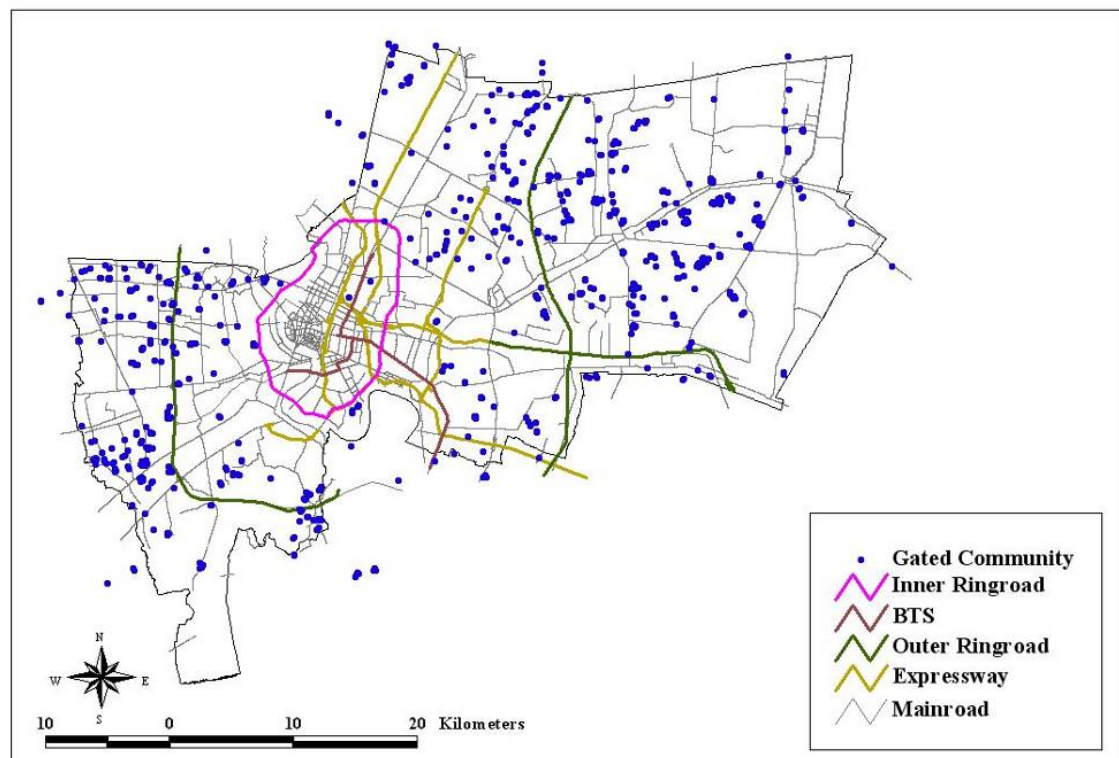


Fig. 5.7: Gated communities during 1997-2001

Source: Authors' plotting using GIS

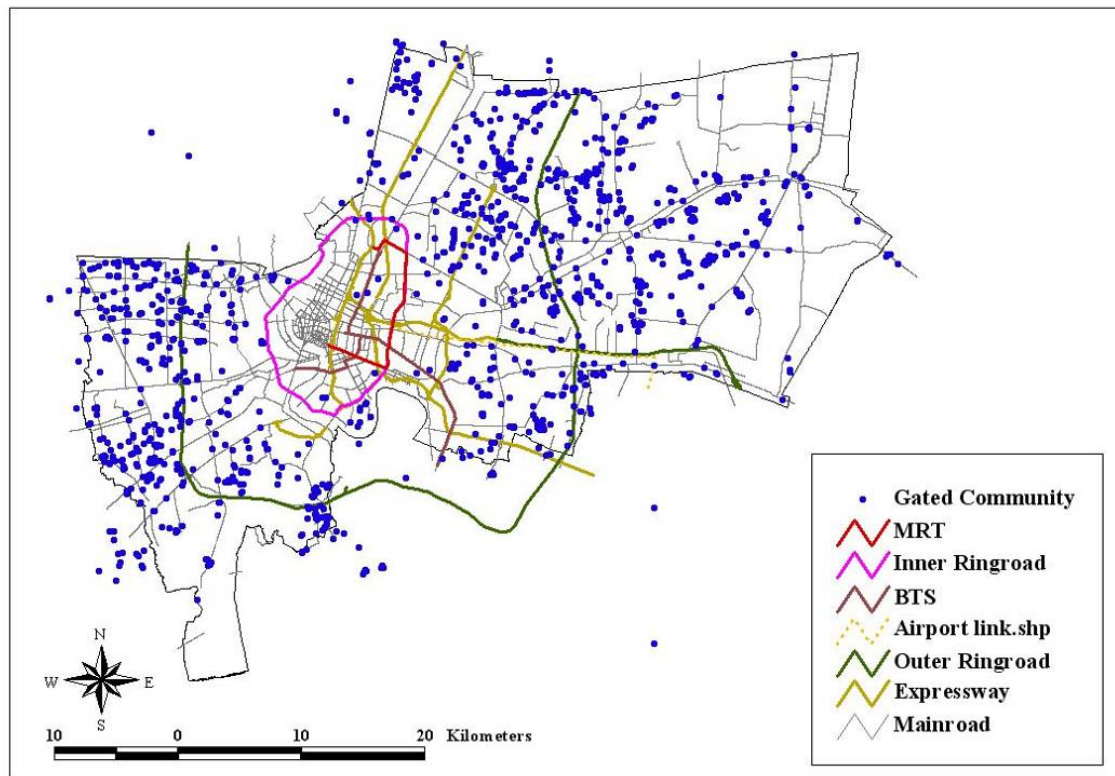


Fig. 5.8: Gated communities during 2002-2006
Source: Authors' plotting using GIS

5.4 Dynamics and Mechanisms in the transformation upper-middle class expansion, changes in housing consumption preference and behavior into gated community projects

The expansion of the middle-class in Thailand since the 1980s resulting from the country's shift to export-oriented, technology-based industries and the growth of producer services, and the enhanced integration in the global economy has resulted in their members' pattern of highly gated community behavior. This is strongly characterized by lower housing density areas. This pattern of housing consumption is conditioned by and, in effect, further perpetuates spatial diffusion of upper-middle class residence towards the city's periphery, as workplaces and amenities remain concentrated in Bangkok's core area. The three key roles (planner, developer, and landowner) are described as catalyst for development. This part would scrutinize the housing development throughout policies and measures and the key actors stimulating housing preference in gated community.

5.4.1 Housing Development in Thailand: Policies and Strategies

House is one of human basic needs. Anyone desires to own the perfect living space in good environment; however, housing in a capital city as Bangkok Metropolitan is neither easily affordable nor accessible. It is due to the fact that Bangkok is a center of government, business, and services in Thailand resulting to an attraction of a lot of migrants driving up demand and housing needs. Mostly, non or low-skilled migrant live with their cousin in slum or deteriorate areas whereas the high-skilled residents or migrants get the higher opportunities to seek the high salary job. The former is difficult to own a house while the latter can buy a house with the good surroundings even in the gated community. This section would investigate the development of housing in Thailand particularly Bangkok throughout the policies and plans from 1940 to 2008 in order to answer the first objective.

At the beginning in 1940, housing policy is under responsibility of Government Housing department, Ministry of the Interior. Housing development in Thailand during 1950 -1953, government launched the public housing projects for low-income people in order to relocate them from slum and squatter along railway and canal and to improve their living places. National Housing Authority has been responsible for slum and low-income housing with the assistance of World Bank and United Nations and Government Housing Bank supported loan for land and house construction and renovation. The public housing project which was supported the loan for buying land, constructing or renovating houses by Government Housing Bank as known in Piboon Wattana Project, Tongmahamek Project, and Din Dang Project (see chart in figure 4.3). After getting invasion problems of public places i.e. both sides of railway and river, housing policy had emphasized on slum and squatter during 1970s. The responsibility is under National Housing Authority (NHA) with the assistance of World Bank and United Nations. There were 4 types of the projects, 1) Community Housing Project for low-middle-high income people in Bangkok and its adjacent provinces; 2) Special Project for Community Services for middle to high income people in Bangkok; 3) Housing project for government officials working in Bangkok and the Regions; 4) Slum Renovation Project for low income people in Bangkok. All of the organizations working as public organizations for building houses by subsidy and loan, especially for people who cannot afford the house.

Whereas, NHA has taken charge in slum and low income housing, the private developers had boomed during 1980s especially housing for middle to high income group. The Government Housing Bank supported credit system i.e. providing low interest rates to homebuyer which led the housing units increasing to 50,000 units per year. The most favorite areas are in Bangkok and its adjacent provinces.

During the 1990s period, Thailand was transformed from an agricultural-based economy to an industrial-based economy which stimulated the housing market to very high competition due to the foreign investment and loan with low interest rate and the 5-year income tax exemption to developers who could invest housing for low-income people. The strategies in this period resulted to unusual housing growth increasing to 170,000 units. Consequently, in 1997, economic crisis had an impact on housing market which led to housing stock in Bangkok Metropolitan Region (Bangkok with the five adjacent provinces) more than 150,000 units and 80% of them were in Non-Performing Loan (NPL). The government gave the solution to these problems by stimulating real estate through the following packages in 1998:

- Housing loan measures
 - o Support commercial banks to extend repayment period to 30 years for both old and new customers.
 - o Support financial institutions to provide loans for real estate development complied with credits for residential housing.
 - o Support residential mortgage loan programs through Specialised Financial Institutions (SFIs) such as Government Housing Bank (GHB) and Government Savings Bank (GSB)
- Demand side measures
 - o Persuade Thai citizens in foreign countries to buy real estates in Thailand
 - o Restructure law on land occupation for foreigners who have investment fund more than 25 million baht to be able to occupy the land not larger than one rai.
- Increase the capacities of customers to buy or mortgage through exemption of personal income tax for early- retired person who receive provident fund.

In 1999, the new set of residential housing stimulus package included 1) long-term fixed interest rate loans, 2) 46 billion baht of 3 and 5 years maturity bonds launched by

GHB with guarantee by MOF and 3) purchasing unfinished housing projects by NHA—50 percent complete construction with the above 60 percent customers. With the national policy strategies, the housing market had taken off. During the 2000s, housing sector has faced the adaptive phase. During Prime Minister of Taksin Chinnawattra in 2002, there were several strategies launched in order to develop real estate such as, for example, reduction of special business tax from 3.3% to 0.11%, lessening of housing transfer fees from 2% to 0.1%, and provision of long term fixed rate mortgage by GHB. Houses and townhouses recovered and raised consumer's ability to purchase housing by increased ability to service debt.

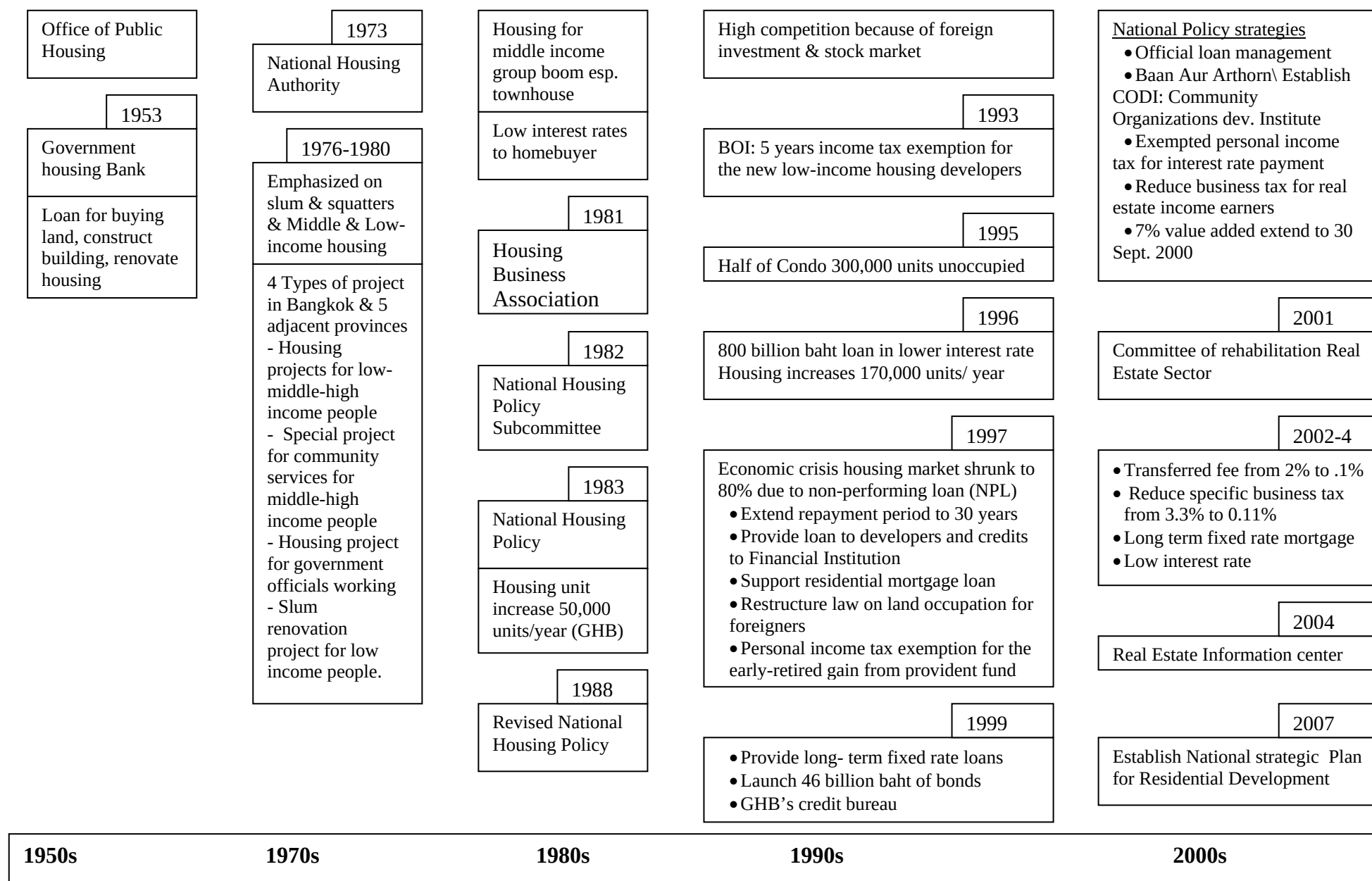
Whereas solving slum problem and enhancing quality of life of the low-income people, the new project named Baan Aur Arthorn organized by NHA and Baan MunKong organized by Community Organizations Development Institute (CODI) have been launched. Usually in the Thai context, the term 'slum' refers to 'a group of buildings with a housing density of not less than 15 houses per rai (0.16 ha), in an area characterized by overcrowding and flooding with deteriorated and unsanitary conditions that offer stuffy, damp and unhygienic accommodation, and which might be harmful for health, security or as the source of illegal or immoral activities.' (NESDB & GHB, 1995). The government determines housing policy for various low income people during 2003-2007 as following.

- Eu Aor Thorn housing project for low income people in the city with the household income not more than 10,000 Baht per month. Baan Eur-Ar-torn is a housing program targeting lower-middle income people who want to own a house. There are two types of houses: (1) detached house on a 20–25 sq wah (80–100 sq m) plot located in the suburban areas of Bangkok, and (2) apartment units located in the intermediate zone of Bangkok.
- Baan Man Kong project for low income people living in slum and squatter areas. Baan Mankong targets the slum and squatter dwellers in Thailand. This program attempts to create security of tenure for the slum and squatter people on the land they currently occupy. The government encourages the communities to either negotiate for a long lease period or buy the land from the landowners. If the negotiation is a success, the government, through CODI and NHA will provide the

mortgage for the land at a special interest rate, and subsidize the infrastructure cost (Noppaladorom, 2004, pp. 77–89).

- Housing for People Project for low income people who own the land but cannot construct the house.
- Housing loan for state and state enterprise officials project with the cooperation between Government Housing Bank and Government Pension Fund
- Housing for Social Security Office's members' project for low income people who are the members of Social Security Office with the assistance of Government Housing Bank.
- Low income housing for rural residents (in the process of studying the project).

Fig. 5.9: Summary of Housing Development in Thailand during 1950s to 2000s



5.4.2 Upper-middle class consumer

The rise of gated communities is not only from globalization policy but also from lifestyle of Bangkok people themselves, which has been strongly influenced the Western style and tries to copy housing and spatial behavior of the North American model (Leisch, 2002). This section discusses the empirical data in order to find out preferences or values of residents in gated communities.

According to the 311 questionnaire survey of the five selected gated communities in Bangkok (2009) and the five adjacent provinces, the average housing area of upper-middle class is 73 square wa (48 square wa in minimum and 200 square wa in maximum). The space area in a house is 200 square meters in average (82 m² in minimum and 1,000 m² in maximum). The respondents live in their houses for 2.8 years in average. The average housing price is 5.76 million Baht (median 5.2 millions and mode 5 millions) varying from 2 millions to 16 millions. Seventy-four percent of all respondents still amortize by installment with the average payment 38,576 baht per month or 35,000 baht per month in median and 30,000 baht per month in mode.

There are several reasons given by homebuyers why they prefer to live in the gated communities. Several reasons are; they want to live in modern-style house with the luxurious materials identifying their social status and/or they want to have the good surroundings. Table 5.4 presents preference scaling and mean averages of the factors for decision-making to buy a house in the gated communities. Based on 311 questionnaire survey of the five selected gated community in Bangkok and the vicinity, the respondents took security as the most important reason (4.42) into consideration to buy houses in gated community projects for upper-middle class. They need boundary which identifies their private and prestige places by surrounding with walls, fences and guards. Security is one of the features of the estate to draw customer attention to buy a house in the gated community because criminal incidents within the neighborhood. It is not only estate manager, but the planner officers and local residents all identified also crime and fear of crime as key reasons why the residents wanted the gates to stay (Monzi and Smith-Boweus, 2006 in Atkinson p.162). The security included CCTV cameras linked to a reception area, a concierge which would eventually be staffed 24 hours a day, site security patrol night checks, all were observed by surveying the five selected gated communities.

Table 5.4: Frequency of factors for decision making to buy a house in the gated community

Factor	Mean	Very High	High	Neutral	Low	Very Low	Total
Security	4.39	154	124	32	1	0	311
Landscape design in the gated	4.20	116	144	49	2	0	311
Amenity in gated i.e. swimming pool, club house	4.09	99	147	60	4	1	311
Entrepreneur Royalty	4.07	92	156	56	6	4	311
Neighborhood interaction	3.68	60	122	107	15	7	311
Accessibility to public transportation services	3.54	62	104	99	32	14	311

Source: Authors' survey in 2008

The second reason which most upper-middle class respondents give to why they live in gated community is landscape design in gated community. Design can be included public parks with functional zone for various recreations i.e. drive golf, picnic or party celebration. For example, respondents in Perfect Place (Onnut-Suvarnnabhumi) gated community celebrate festival around the fantastic lake design. Moreover, the design can identify the social class of the residents. The third reasons that the respondents living in upper-middle gated community provided for their favorites are amenity (4.09). The amenities including swimming pool, club house, restaurant, laundry, etc. are found in all samples of gated communities. The following reason is reputation of Real Estate Company (4.07). The selected five gated communities for the research are operated by the two companies. Firstly, Saansiri Co.,Ltd—the second top five housing companies of Thailand—operates housing project named **Saransiri** Ratchaphruek-Chaengwattana, **Burasiri** Sanambin-nam, and **Settasiri** Sanambin-nam. Sansiri developed and sold over 4,003 homes worth over 17.4 billion baht in 2007, and has a market capitalization in excess of 5.3 billion baht. Recently Sansiri received an award from Asia Pacific Commercial Real Estate Awards to be “Best Residential Project of Year 2006”. Secondly, Property Perfect

Co.,Ltd.--the top five real estate companies in Thailand—operates the other two selected projects named **Perfect Place Ramkamheang-Suvarnbhumi** and **Perfect Place Onnut-Suvarnbhumi**. Property Perfect Co.,Ltd. gain EIA monitoring awards during 2005 to 2007. The respondents are not much care about neighborhood interaction observing from their answers give into neutral more than 107 respondents from 311 respondents with the average only 3.68. Smith-Bowers and Manzii (2006) called this stereotypical view of gated communities is that they embody a form of dystopian living, behind which community ties are non-existent with neighbors discouraged from developing social interactions. In particular, they are seen to encourage affluent groups to increase their social distance from what is perceived as the other. A common representation of gating is derived from Davis' (1990) *City of Quartz*, where the concept of 'Fortress America' encapsulates an increasing polarisation between rich and poor in cities such as Los Angeles' Davis contends that "we live in 'fortress cities' brutally divided between 'fortified cells' of affluent society and 'places of terror' where the police battle the criminalized poor" (p.224). Davis' thesis is deliberately polemical, but nevertheless highly influential in construction a negative image of the gated society. However, they gave good neighborhood relationship and accessibility to public transportation services to the low important factors (3.68 and 3.54 respectively). This may imply that they mostly access facilities and amenities by private vehicle which is relevant to the principles of privacy and exclusivity of Coy (2006) that the inhabitants in the gated community are extreme opposite to public accessibility in order to fulfill the motives of their self-segregation.

The evaluation of residential development in the past has been reviewed and made the systematic development framework with the cooperation of government and private sector by concerning the people. Household as the consumer of residential services and its decision agent makes the initial speculative commitment. The consumer then makes his locational choice from the supply of residential lots or residential packages provided by developers. The developer's decision is the first specific spatial commitment to convert vacant land or farm land to urban residential use. Residential development is largely a speculative commitment not by the actual consumer but by the developer on the basis of forecasting consumer performances.

5.4.3 Real Estate Developers

The developer is the key co-ordinator and catalyst for development. Activated by perceptions of potential yields, the developer assembles the inputs to production, organizes the production process and markets the product (Craven, 1969; Kaiser and Weiss, 1970; and Drewett, 1973). The behavioral approach to the study of decision agents in urban growth is concerned with the explanation and prediction of land development. It focuses on the formulation and testing of regularities of decision behavior among individuals and groups involved in the development process. The previous part focused on the household as the consumer or residential services and its decision to locate on the gated communities. However, this section establishes the developer as the decision agent who makes the initial speculative commitment. The consumer then makes his locational choice from the supply of residential lots or residential packages provided by developers. The developer's decision is the first specific spatial commitment to convert vacant land or farm land to urban residential use. Residential development is largely a speculative commitment not by the actual consumer but by the developer on the basis of forecasting consumer preferences.

Based on the in-depth interviews of seven informants in developer sector—who are in CEOs or middle-level managers (see more details in chapter 3, section 3.2), it was found that the significant factors for investment in upper-middle housing projects particularly detached-single house are demand or customer lifestyle. The real estate companies do the surveys from the old customers and analyze their preferences on housing style and location. After that the developers consider land acquisition which should be occupied in cheap price. All developers agreed that transport system accessibility i.e. near express way or main road and good environment i.e. air quality are the first priority to make a decision on locational selection for gated community projects. The location should be approximately far from CBD at least 25 kilometers or nearby ringroad i.e. Rajchapruk, Ramindra. Absence or lack of basic services infrastructure (i.e. electricity, water, telephone etc) is not much of a concern to real estate agents developers since the projects are established in Bangkok Metropolitan Regions (BMR) where the supply of these already exists. Presence of adequate public transportation (i.e. bus) is also not a big consideration by real estate developers because the customers generally do not rely upon public modes. Key informants also gave as additional reasons to invest housing projects for upper-middle group; it needs to create reputation/experience to the company since customers concern

this as one of major factors for decision-making to buy a house. For example, Sansiri real estate Co.,Ltd. received an award of “Best Residential Project of Year 2006” from Asia Pacific Commercial Real Estate and Property Perfect Co.,Ltd received EIA monitoring awards during 2005 to 2007.

The surveying of customer’s preference implies client-oriented factors to be important strategy to acquiring an understanding of its needs which Coiacetto (2001) called this group of developers as specialized client developers and they may encourage innovation and facilitate their diffusion operating over a wider geographical area.

5.5. Impact of new housing form and shift in spatial patterns and equity in housing

This part aims to assess the impact of the rise of gated communities on spatial change in section 5.5.1 and housing equity¹⁸ in section 5.5.2 and on creating socially cohesive and inclusive urban life in general.

5.5.1 Impact of the rise of gated communities on spatial changes

During the last two decades, the physical extension of Bangkok expanded from roughly 302 square kilometers in 1987 to nearly 613 square kilometers in 1995 (BMA, 1999). This indicates that considerable suburbanization of business and employment has been taking place in the extended regions of Bangkok (Suthiranart, 2001). The spatial pattern of the Bangkok growth may be called ‘concentrated decentralization’ which is generally recognized as having a long-standing history (Marcuse, 2008). The pattern of

¹⁸ As the United Nations Centre for Human Settlements (UNCHS) describes housing inequality that an increased land and housing prices can force lower-income groups out of certain areas, while fear of violence frequently leads to a voluntary form of segregation. The latter is the case with so-called "Gated Communities" - fortified upper-income residential enclaves where private companies provide security for those who can afford it and from which "unwanted elements" can be barred. Urban spatial segregation is increasingly not only simply expressing socio-economic differences but it is also becoming the spatial embodiment of urban fragmentation and societal breakdown. To understand regarding the social-spatial problems in and among segregated urban areas, the third objective of this research defines “housing equity” as affordability of housing particularly the big segment of low-income household in the housing market which is strongly influenced by land allocation for housing through operation of the land market.

business activities movement away from city centers looks as if it is deconcentration, that is, a spreading out of activities over a broader landscape; however, a concentration remains the pattern taking place both within central cities. The movement of major firm and shopping centers to the lower density areas around the suburb is a pattern that has been increasing evident. The key strategy of the Bangkok Plan in 2002 for restructuring the city's urbanizing fringe is the construction of a system of metropolitan sub-centers. The five sub-centers have been promoted through the development of housing projects and the manufacturing sector. Five metropolitan sub-centers surroundings Bangkok are composed of Lad Krabang in the East served for the new international airport and industrial estate, Taling Chan in the West for a combination of office, light industry, commerce and housing, Bang Khun Tian in the Southwest its potential for light industrial and service uses along with high density housing, Minburee in the west, for commercial nodes and mix land uses, and Lam Lukka in the north for the potential to support a large center that integrates service and employment uses to serve the surrounding areas (see locations of the five sub centers in figure 5.10). High intensity of land utilization, land prices, low accessibility, and bad traffic are factors that have contributed to the creation of sub-centers. Those who live in the outer areas of Bangkok or its vicinity have to cover (on average) longer distances to reach the inner city and by often using personal cars with the advantage of saving traveling time and higher comfort due to lack of effective and efficient public transport services (OECD, 1998; Suthiranart, 2001; Surasawadi, 2000; Poboorn, 1997). The travel destinations and distances of the two selected sub centers Bangkhen and Minburee were studied by Charoentrakulpeeti (2006) and found that over 38 percent of residents in each subcenters commuting to the downtown for working. She suggests that the sub-center policy partly succeeds because the number of residents and companies residing in there had increased, but many of the residents (the respondents) still commute for work and education to the city center and the sub-centers themselves, producing unintentional impacts on housing consumption and commuting patterns.

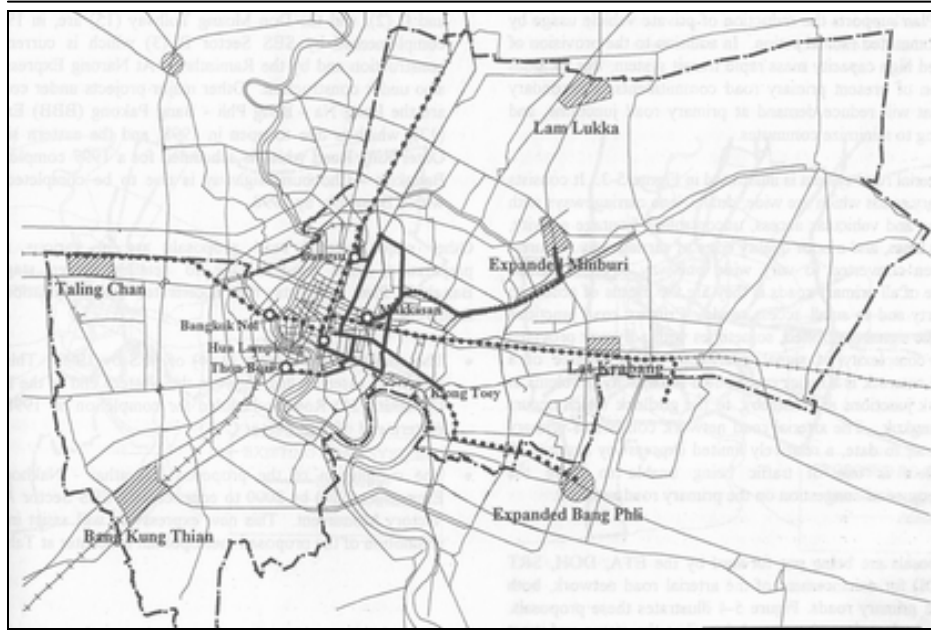


Fig. 5.10: The Locations of Five Sub Centers in Bangkok

Source: BMA, 1996.

Besides the failure of sub center concept unable to pull people from the downtown to the suburb, the other evidence supports Bangkok in a form of concentrated decentralization is a change of residential density between downtown, middle zone the suburb. Residential density was captured as an important factor of urban form (Ewing et al., 2002). These criteria have been applied to measure urban form in Europe and North America and developed Asian mega cities like Seoul and (Jenks and Burgess, 2000). In order to investigate urban form in a type of concentrated decentralization, the research would apply residential density to measure by dividing Bangkok to three zones: inner zone—most areas in this zone are service activities and vertically residential areas, middle zone—mainly commercial and office building, and outer zone—transitional use from agriculture to residential with the new commercial location around. Figure 5.11 illustrate residential density of Bangkok during 1998 to 2008 and indicate that residential density of all three zones tend to increase. The highest residential density is found in inner zone. It started from 4,090 units per sq.km. in 1998 and continuously going up to 4,369 units per sq.km. in 2008. The residential density of middle zone tends to increase from 1,741 units per sq.km. in 1998 to 2100 units per sq.km. in 2008. The residential density of outer zone also is relatively increased from 736 units per sq.km. in 1998 to 970 units per sq.km. in 2008. The linear regression models show R^2 value of 0.99 in outer zone, 0.98 in middle zone, and 0.86 in inner zone. However, trend of the change of the all three zones from

1998 to 2008 discloses that the residential density of outer zone has changed 2.4 percent more than those in middle zone (1.71 percent) and inner zone (0.63 percent).

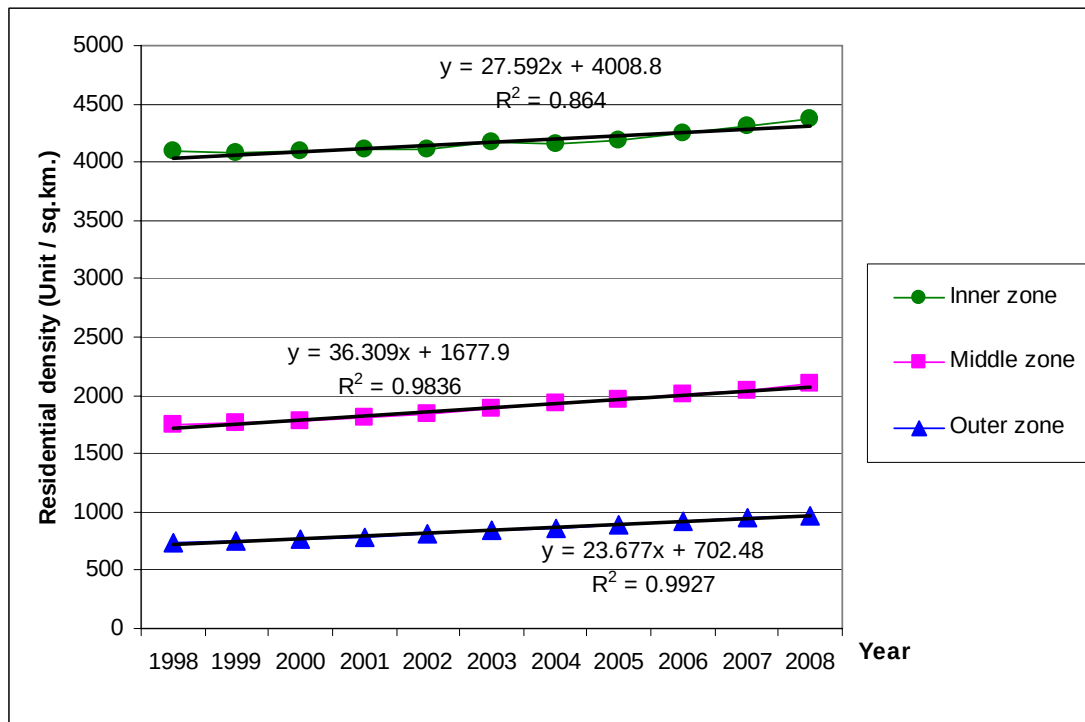


Fig. 5.11: Residential density in Bangkok during 1998 to 2008

Source: Adopted by author (2009) data from Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior

The above evidence can identify the change of urban form through residential density and this phenomenon has an impact on land use which can be observed in the study areas. By comparing the areas of each land-use patterns in 1986, 1995 and 2002 as shown in below Table 5.5, conversion of agricultural land-use can be obviously seen a significant reduction by about half from 416,231 rai in 1984 to 231,148 rai in 2002. Comparing the percent change between 1995 and 2002, it was found that agricultural land use was decreased 8.44 percent. In contrast to changes in agricultural land use, the residential land use increased twice times from 113,119 rai in 1984 to 228,990 rai in 2002. The big change is 5.04 percent found during 1986 to 1995. This is in line with Mandhavan and Kubo (2001) study on land use change in Bangkok with the application of Landsat 5-TM satellite images in 1988 and 1994 in the same seasons. They summarized changes in the spatial pattern that 2% of agricultural land was lost. The results demonstrated that the pattern of change in the urban land classes in Bangkok was that of agriculture lands to open lands;

open lands to residential, and residential to commercial. However, the land-use pattern, urban functions, and their conversion trends are largely depended on the other factors, particularly the demographic and economic characteristics.

Table 5.5: Land Use Area of Bangkok

Land Use classification	Area (rai)			Change 1986-1995		Change 1995-2002	
	1986	1995	2002	Area (rai)	Percent / year	Area (rai)	Percent / year
Residential	113,119	207,186	228,990	94,067	5.04	21,804	1.36
Commercial	11,147	29,782	38,318	18,635	6.95	8,536	3.18
Industrial	13,759	18,370	17,321	4,611	2.79	-1,049	-0.86
Warehouse	4,008	6,084	7,697	2,076	3.79	1,613	2.99
Government institution	29,190	23,676	28,504	-5,514	-2.59	4,828	2.42
Education	8,188	10,098	12,127	1,910	2.10	2,029	2.39
Religious	4,427	5,472	7,228	1,045	2.12	1,756	3.47
Recreational	2,498	6,439	15,959	3,941	6.80	9,520	8.52
Road	24,030	53,590	80,544	29,560	6.13	26,954	4.78
Agricultural	416,231	367,763	231,148	-48,468	-1.46	-136,615	-8.44
Vacant land	290,229	188,074	236,859	-102,155	-6.04	48,785	2.94
Water body	63,634	63,926	75,765	292	0.05	11,839	2.23

Source: Department of City Planning, BMA, 2004

The above result shows urban form of Bangkok can be indicated as concentrated decentralization pattern—residential density in the center still increase whereas this in the suburb also go along with. This change of spatial pattern can be described also by the evidence of land use change. Agricultural land use has chronologically decreased whereas residential land use has increased. However, we cannot make a decision that which types of housing consume much more land than others. Therefore, in the next part, we try to investigate the evidence to support our argument that detached-single house mostly pervasive in the suburbs consume a lot of land than other housing types i.e. condominium, townhouse.

During 1996-2005, new house in the market were more than 700,000 units in Bangkok and the five adjacent provinces including above 500,000 units in horizontal residences and almost 220,000 units in high-rise condominiums (GHB, 2006). Real estate development for middle-income households now takes place at the city center as well as in the urban periphery. At the **city center**, the developers are engaged in the construction of high-rise buildings since the late 1980s (Evers and Korff, 2000) particularly by the transformation of slum areas to middle and upper-class housing, that is from unprofitable to profitable land use. The success of real estate development in form of condominiums depends on the location within Bangkok, which, following the advertisements, is in all cases a central location in the 'heart of the city' to 'avoid the hassle and frustration of Bangkok's interminable traffic'. The condominiums in Sukhumvit road, for instance, can easily be pictured as the locus for new middle-class lifestyles (Askew, 2002: 239). Location of condominium within Bangkok is not only a significant factor but a variety of facilities can be also regarded as important aspects such as a mini-supermarket, restaurants, sports complex, health club, tennis court, swimming pool, security services, personalized parking space and landscaped gardens. The offered services like the department store; the entertainment plaza etc. has sometimes no place in the condominium; it is necessary to access these services by private transportation through quiet streets (Sois) that are connected with other 'central' locations by major roads. During the early eighties, the condominium market in the inner city is split for those in a middle-income group priced between 250,000 to 400,000 baht and for the upper-income group priced from 1.5 to 2 millions or even higher. Between 27-30% of the income is used for the payment of mortgages. (Askew, 2002) This pattern is consistent across all income categories, including the lower end of the middle-income group. With these prices, the middle-income group can also buy town houses at locations further away from the city center.

As land within Bangkok is already very expensive and because of the density of population and pollution which make life within the city less attractive, housing schemes for the middle-income groups are established at the **periphery** i.e. new sub-centers of Bangkok like the areas around Ramkamhaeng university, Ladprao, Bangkapi, Nonthaburi etc. (Evers & Korff, 2000). According to in-depth interview of Rachadheva Tambol Administrative Organization (TAO), Samutprakarn province, local official disclosed the evidence on the growth of gated communities in his responsible areas that there are only 4

gated communities in 2005 and now (2009) more five projects are operated because of an attractions of Suvarnnabhumi airport nearby. He also gives an additional reason for this rapid increasing that resulted from the modification of comprehensive plan which was used to formulate Rachadeva TAO for industrial land use in a 1997-2001 plan and now revising to commercial land use. This causes 20% decrease of manufacturing. Another result of in-depth interviews supports the growth of gated communities from Minburee district official. Numbers of population in Minburee have grown up 100-200% for five years and among most of these new immigrants registered their houses in gated communities.

The increasing wealth of the upper and middle groups, especially in the major urban areas, is reflected in expanded spending patterns (Hewison, 1996). Housing estates, complete with swimming pools, kindergartens, parks, security facilities, have mushroomed on the rice fields that previously surrounded Bangkok. The upper and middle classes are buying houses of apartments, often as a second home. Askew (2002: 85) remarks that Bangkok's space was in fact being shaped by a range of actors, not only large property owners but also the middle classes and the urban low income and poor. The Thai State has been a key owner of land and a key actor in influencing ecological and spatial changes in the metropolis, despite its ill-coordinated activities and legal inability in enforcing land-use controls. The living style of middle class for choosing a place to live are 'image of affluence', 'comfort', 'status' (Ockey, 1999) and good environment and high security (Savasdisara, et al., 1986). One has to add modern shopping malls, condominiums, golf courses and highways (Askew, 2002: 171). The urbanization process gives rise to the change of land-use pattern of the city. The increase of detached single house in gated communities in the periphery is characterized by unplanned, sprawl and ineffectively regulated by local and federal authorities. An increase of detached single residences has responded to the increasing demand for middle to upper-middle income housing (Choiejit and Teungfung, 2002).

5.5.2 Impact of the rise of gated communities on housing equity and social network

Internationally, the 1980s and 1990s witnessed an unprecedented flow of international portfolio investment in real estate (Forbes and Thrift, 1987; Knight, 1998; Sassen, 1998). This flow of capital included speculative property investment, facilitating

‘boom and bust’ property cycles (Pugh, 1997; Vanichvatana, 2007). These property investment and projects contributed to the rise in importance of global cities. The reach of the property boom was wide and radically altered existing spatial patterns to serve urban expansion. It had also caused massive land conversions from rural to urban use. They also created new physical structures and complexes requiring large tracts of land that cater primarily to middle and upper classes implicating a major equity issue in land development. Speculative land buying and real estate development in the face of rapid urban growth are factors boosting up land prices and exacerbating the problem of urban poor shelter. In studies of property development and urban land markets, the actions and national policies are recognized as important mediating factors. Direct and indirect regulations, such as comprehensive plan or zoning, make urban land cheaper or more expensive for specific development uses. City government can support growth—capital accumulation in real estate—through a variety of interventions, including tax relief, public service provision and mega project as Suvarnabhumi international airport. These policy measures have little to show in terms of providing public land for housing or regulating land use to secure adequate space for urban poor housing development.

The development of residential real estate in Bangkok has been dominated by national property firms. Five of property firms are highly ranked among the top 1000 cooperation of Bangkok named as Land and House, Quality House, Saansiri, Property Perfect, and Nobel House. All of them are involved with banking and finance. Ownership and control of banking and financing institutions have allowed them to use domestic and international finance capital to generate funds for mega property projects. All these property firms also have significant network to international sources of capital and technology. Land and House has partnership with Government of Singapore Investment Corporation and HSBC (Singapore) Nominees PTE Ltd. in Singapore, Chase Nominee Limited 42 and State Street Bank and Trust Company in USA, and State Street Bank and Trust Company for Australia with approximately 22 percent share in 2009. Similarly, Quality House has various joint ventures with foreign investor i.e. Government of Singapore Investment Corporation and American International Assurance Company (APEX & TIGER) while the Property Perfect is said to have substantial partnerships with Japan Asia Group and Deutsche Bank AG, London Prime Brokerage. Another major

source of foreign financing of all five companies is through the stock exchange, where they are listed and where foreign investors buy shares of their stocks as portfolio investments.

Although the residential property development that occurred in Bangkok between 1953 and 2007 (see more details in section 5.4.1) included land for both the socialized housing sector and the open-market sector, the socialized housing sector was severely marginalized. It is claimed that in Thailand, national-level officials in charge of major land development decisions and policies are influenced and manipulated by powerful real estate interest groups and often pursue a goal of rapid economic growth regardless of its adverse social and environmental impacts (Setchell, 1995). Such a pattern of land use is hardly surprising, when the market is given a free hand as the allocator of land for housing. The main players in property development boom are big private corporations, whose calculations are based on signals of effective demand in the housing market. Effective market demand is a function of the purchasing power of different groups in society, and not of the basic need for shelter of low-income groups and the poor.

Land in Bangkok is scarce and further aggravate the problem created by a booming but largely speculative property market focused on high-end housing. Bangkok experienced a population growth rate of 3 percent per annum during 1960 – 1970. Despite this growth rate declining to 2.27% between 1970 and 1980, and further to 0.66% per annum from 1990-2000 (Choiejit and Teungfung, 2005), local housing needs of the poor continue to increase as they continue to resettle in the Bangkok in huge numbers. They (that is, the poor immigrants) have mostly occupied hazardous places without the consent of the landowners. Private housing market has nothing to offer them as affordable options. The developers do not invest in this type of housing since they find investment in this sector a losing proposition. Constraint of the private developers in investing in socialized housing is compounded by the fact that the average land prices in Bangkok would rise by only 3% in 2008-09 due to unfavorable economic and political sentiments (Bangkok Post, 2008). They therefore focus tightly on investing in upper-middle to high-end housing projects—mostly in a type of detached-single house in gated community—which they can gain a certain profit.

The society in gated community has become atomistic behavior. According to 311 resident respondents in gated communities, 57% of them fairly participate in association

management affairs, 32 percent are not interested to involve in (see table 5.6). For the level of involvement of residents in association-sponsored activities other than management or governance (i.e. social or charitable event), 59 percent fairly involve in the activities and 25 percent are interested to join the activities. Only 16 percent are interested to take part in the activities. Although 57 percent of respondents in the five gated communities mostly take part in administrative tasks and activities of their communities, they feel friendly their neighbors (64 percent) and almost 30 percent feel distant friendly. Only 6 percent feel tight-knit to their neighbors. However, these results of social interaction in the gated community may not be able to conclude that living in the gated community prevent people meeting each other since this research do not compare the results to other neighborhood types i.e. low-cost housing, condominium. It needs to explore what conditions or reasons attract them to participate in the administrative works and activities in their communities in the further research. Even though, spatial form doesn't have a determining influence on social networks that can still link.

Table 5.6: Level of participation in the five gated communities

	Highly involve		Fairly involve		Slightly involve		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level of administrative participation in gated	35	11.3	177	56.9	99	31.8	311	100.0
Level of participation in activities	78	25.1	182	58.5	51	16.4	311	100.0

Source: Questionnaire survey, 2009

Table 5.7: Level of neighborhood relationship in the five gated communities

	neighborly or tight-knit		friendly		Distant friendly		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Level of neighborhood relationship	19	6.1	200	64.3	92	29.6	311	100.0

Source: Questionnaire survey, 2009

In conclusion, the major criteria of middle to upper-middle class's preferences for choosing a place to live in are accessibility to public facility services i.e. education, health care, security and landscape design 'image of affluence', 'comfort', 'status'. One has to add modern shopping malls, condominiums, golf courses and highways (Askew, 2002: 171). Gating therefore involve an inevitable form of privacy and exclusivity. Others argue that gating is a feature of the growth of 'global city region' and the intensification of equality and proximity which has accompanied urban growth and globalization of the 'free market': Violence, or the fear of it, becomes a central preoccupation of the upper classes, pushing them towards forms of fortress settlement; gated high-rise communities surrounded by walls and guarded entries. The increasing wealth of the upper and middle groups, especially in the major urban areas, is reflected in expanded spending patterns (Hewison, 1996). Bangkok's space was in fact being shaped by a range of actors, not only large property owners but also the middle classes and the urban low income and poor; therefore, demands for space and its use always encounters with conflict and compromises in Thai society. The Thai State has been a key owner of land and a key actor in influencing ecological and spatial changes in the metropolis.

Chapter 6

Conclusion

6.1 Conclusion

Bangkok Metropolitan Region is a conglomeration of Bangkok, the capital of Thailand, and the five adjacent provinces (Samut Sakorn, Samut Prakarn, Pathumtanee, Nontaburee, and Nakorn Patom) located in the central of Thailand. BMR is now considered the most important industrial and commercial centre in Thailand. In the last three decades, the area has been transformed from agricultural processing centre into manufacturing and residential locations. The developments were accompanied by dramatic increase in foreign capital flows and expansion of producer services requiring an increasingly complex and diverse range of human resource skills. This sector's employment grew from half a million in 1960 to almost 7 million in 1999 (Pasuk and Baker, 2002: 387; see also Hewison, 1996: 143-4). Consequently, Thailand's workforces who are graduates of tertiary education multiplied eighteen times between 1970 and 1999 (Pasuk and Baker, 2002:386). A number of social scholars today have underscored in defining the category of the middle class in Thailand, namely: occupation, income, and education level (Hewison, 1996; Askew, 2002; Ockey, 1999; Pasuk and Baker, 2002).

Rise of urban middle class along with their associated consumption is the most dramatic phenomenon fueling burgeoning housing estates of sprawling urban areas because of material and social symbolic meaning attached to consumption of quality housing. Therefore, types of housing – for example detached-house or high-rise building and their locations in the periphery or downtowns—represented hierarchy of tastes of the upper-middle class, which in turn profoundly affect urban growth and spatial change. One form of housing where the new consumption capacity and preference of the upper-middle class of Thailand have become manifest is in the gated communities. These are walled and segregated high-end residential spaces built with high-rise apartments and/or detached houses. In the latter case, housing estates would normally require relatively large tract of land at the city core or peri-urban. Walled or gated communities, which are a growing feature of urban settlement patterns throughout the world, have increasingly also become popular in Bangkok. The rise of gated communities in Bangkok have important

implications on patterns of social (in)equality in the city. Its rise as a distinct form of housing have caused major shifts in land allocation for different types of housing and jacked up land prices in the city.

This research presents the case of Bangkok Metropolitan Regions, which became the site of a globally-linked real estate boom from the late 1980s to the mid-1990s. It first describes the boom of middle and upper-middle class, which became the social base of the market demand for gated communities. The latter had a major impact influencing patterns in BMR's land use changes. It then goes on to examine the redistributive implication of this property boom, showing how this was shaped by the mediation of the state and local powerful actors.

Identification of upper-middle housing project was based on the in-depth interview results of the real estate experts. Then, these criteria would be applied to calculate numbers of units and plot sizes which are 13-year (1994-2006) statistical data from the AREA. The residential projects from 1994 to 2006 of Agency for Real Estate Affairs (AREA, 2008), reveals that the majority of property developers operating in BMR focus on developing prestigious and high-end housing projects. Almost half (49 percent) of the total area was used for upper-middle residential projects in Bangkok. The class of upper-end housing projects, with lots typically costing above 7 million Baht accounted for 24 percent. Together these two categories therefore sum up 73 percent of the land developed in the residential, open-market sector during the property boom in Bangkok. These two categories represent low-density housing, usually no more than 6-7 lots per rai, due to the spacious lot sizes. The dominance of these categories effectively limits the area available for lower class housing, where far smaller standard lot size enables more families to construct dwellings per rai of land. The remarkable gated communities were scattering located in western and eastern of Bangkok and some extend to the adjacent provinces. It comes from express way and the systematic loop completely of ring road serving traveling of upper-middle class mainly relying on private cars which was geographical proved by using GIS.

Density of housing in Bangkok during 1998 to 2008 tends to increase. The highest residential density was found in inner zone. It started from 4,090 units per sq.km. in 1998 and continuously going up to 4,369 units per sq.km. in 2008. The residential density of

middle zone tends to increase from 1,741 units per sq.km. in 1998 to 2100 units per sq.km. in 2008. The residential density of outer zone also is relatively increased from 736 units per sq.km. in 1998 to 970 units per sq.km. in 2008. The linear regression models show R^2 value of 0.99 in outer zone, 0.98 in middle zone, and 0.86 in inner zone. Trend of the change of the all three zones from 1998 to 2008 discloses that the residential density of outer zone has changed 2.4 percent more than those in middle zone (1.71 percent) and inner zone (0.63 percent).

The evidence can identify the change of urban form through residential density and this phenomenon has an impact on land use which can be observed in the study areas. By comparing the area conversion between agriculture and residential land uses from 1986 to 2002, agricultural land use had been decreased from 416,231 rai in 1984 to 231,148 rai in 2002, while on the other hand urban land use (especially for residential use) had being increased rapidly from 113,119 rai in 1984 to 228,990 rai in 2002. The agriculture land use was decreased 8.44 percent whereas a change in residential land use was increases 5.04 percent.

To describe the key actors involved and understand the dynamics and mechanisms in the transformation upper-middle class expansion, changes in their housing consumption preference and behavior into gated community projects, the unstructured face-to-face interview survey of 311 residents in the selected gated communities and the in-depth interviews of real estate developers and local authorities were carried out. The housing policies and strategies were also reviewed in order to investigate housing development.

The gated community has been indirectly stimulated through housing policies and strategies i.e. 1) long-term fixed interest rate loans, 2) 46 billion baht of 3 and 5 years maturity bonds launched by GHB with guarantee by MOF, 3) reduction of special business tax from 3.3% to 0.11%, and 4) lessening of housing transfer fees from 2% to 0.1%.

The key strategy of the Bangkok Plan in 2002 for restructuring the city's urbanizing fringe is the construction of a system of metropolitan sub-centers. The five sub-centers have been promoted through the development of housing projects and the manufacturing sector. The sub-center policy partly succeeds because the number of residents and companies residing in there had increased, but many of the residents (the

respondents) still commute for work and education to the city center and the sub-centers themselves, producing unintentional impacts on housing consumption and commuting patterns. Yet, the lack of a systematic and interconnected transport network and a burden on transportation and public works investment have influenced to those who live in the outer areas of Bangkok or its vicinity have to commute longer distances to reach the inner city where they work or educate and by often using personal cars with the advantage of saving traveling time and higher comfort.

The rise of gated communities is not only from enhanced links to Thailand with the global specifically through liberalized policy on international finance and foreign investment. Further entrenchment of modern lifestyle of Bangkok people themselves, which has been strongly influenced the Western style and tries to copy housing and spatial behavior of the North American model (Leisch, 2002) is another determinant factor of this trend. According to the 311 questionnaire survey of the five selected gated communities in Bangkok (2009), there are several reasons given by homebuyers why they prefer to live in the gated communities. Several reasons are they want to live in modern-style house with the luxurious materials identifying their social status and/or they want to have the good surroundings. The most important reason, which the respondents (upper-middle class) concerned when buying house in gated community, is security. They need boundary which identifies their private and prestige places by surrounding with walls, fences and guards. It is not only estate manager, but the planner officers and local residents all identified also crime and fear of crime as key reasons why the residents wanted the gates to stay. The security included CCTV cameras linked to a reception area, a concierge which would eventually be staffed 24 hours a day, site security patrol night checks, all were observed by surveying the five selected gated communities. These reasons are closely similar to reasons of preferences articulated by middle-class and upper class consumers of gated communities in America (see for example, Blakely and Snyder 1997; McKenzie, 1994).

The developer is the key co-ordinator and catalyst for development. Based on the in-depth interviews of seven developers, it was found that the significant factors for investment in upper-middle housing projects particularly detached-single house are anticipated demand or customer lifestyle. The real estate companies do the surveys from the old customers and analyze their preferences on housing style and location. After that the developers consider land acquisition which should be occupied in cheap price. All

developers agreed that transport system accessibility i.e. near express way or main road and good environment i.e. air quality are the first priority to make a decision on locational selection for gated community projects. The location should be approximately far from CBD more than 25 kilometers or nearby ringroad i.e. Rajchapruk, Ramindra. Infrastructure i.e. electricity, water, telephone etc. is not much concerned by real estate agents since the projects are established in Bangkok Metropolitan Regions (BMR) where the supply already exists. Public transportation i.e. bus is also not much considered by real estate developers because the customers do not rely upon public modes. They also gave the additional reasons to invest housing projects for upper-middle group, for example, reputation/experience of the company and quality of housing materials.

The reach of the property boom was wide and radically altered existing spatial patterns to serve urban expansion and have caused massive land conversions from rural to urban use. They also created new physical structures and complexes requiring large tracts of land that cater primarily to middle and upper classes where the theme of equity in land development has emerged. Speculative land buying and real estate development in the face of rapid urban growth are factors boosting up land prices and exacerbating the problem of urban poor shelter. The studies of property development and urban land markets in Bangkok, the actions and national policies are recognized as important mediating factors. Direct and indirect regulations, such as comprehensive plan or zoning, make urban land cheaper or more expensive for specific development uses. City government can support growth—capital accumulation in real estate—through a variety of interventions, including tax relief, public service provision and mega project as Suvarnabhumi international airport. These policy measures have little to show in terms of providing public land for housing or regulating land use to secure adequate space for urban poor housing development.

Although the residential property development that occurred in Bangkok between 1953 and 2007 included land for both the socialized housing sector and the open-market sector, the socialized housing sector was severely marginalized. The demand is a function of the purchasing power of different groups in society, and not of the basic need for shelter of low-income groups and the poor. Land in Bangkok is scarce and further aggravate the problem since Bangkok experience a population growth rate of 3 percent per annum during 1960 – 1970, and declined rapidly during the late 20 years. The growth rate between 1970

and 1980 was approximately 2.27 % per annum and continued to decline to 0.66 % per annum during 1990 – 2000 (Choiejit and Teungfung, 2005). The implications of these demographic trends for local housing demand have grown as the poor resettle in the city. They (immigrants) have mostly occupied hazardous places without the consent of the landowners because the average land prices in Bangkok would rise by only 3% in 2008-09 due to unfavorable economic and political sentiments (Bangkok Post, 2008). Private developers find investment in socialized housing a losing proposition. They invest in upper-middle to high-end housing projects—mostly in either type of condominium or detached-single house which they can gain certain profit. Moreover, living in the gated may create the distant social interaction since it prevents people meeting each other. It needs to explore what conditions or reasons attract them to participate in the administrative works and activities in their communities in the further research. Even though, spatial form doesn't have a determining influence on social networks that can still link.

The major criteria of middle to upper-middle class's preferences for choosing a place to live in are accessibility to public facility services i.e. education, health care, security and landscape design 'image of affluence', 'comfort, 'status'. Gating therefore involve an inevitable form of privacy and exclusivity. Others argue that gating is a feature of the growth of 'global city region' and the intensification of equality and proximity which has accompanied urban growth and globalization of the 'free market': Violence, or the fear of it, becomes a central preoccupation of the upper classes, pushing them towards forms of fortress settlement; gated high-rise communities surrounded by walls and guarded entries. The increasing wealth of the upper and middle groups, especially in the major urban areas, is reflected in expanded spending patterns (Hewison, 1996). Bangkok's space was in fact being shaped by a range of actors, not only large property owners but also the middle to upper-middle classes and the urban low income and poor; therefore, demands for space and its use always encounters with conflict and compromises in Thai society. The Thai State has been a key owner of land and a key actor in influencing ecological and spatial changes in the metropolis.

6.2 Discussion

The expansion of the middle-class and upper-class in Thailand since the 1980s resulting from the country's shift to export-oriented, technology-based industries and the

growth of producer services, and the enhanced integration in the global economy has resulted in their members' pattern of housing consumption behaviors. This is strongly characterized by perpetuates spatial diffusion of upper-middle class residence towards the city's periphery, as workplaces and amenities remain concentrated in Bangkok's core area. This pattern of housing behavior is conditioned by and, in effect, further 'inward commuting', from lower to higher density zones, especially in the city's core area. This particular pattern of urban sprawl and car-dependent transport is quite similar to experience in many North American cities characterized by a dominant lifestyle based on a dispersed single-family residence on a large lot in the suburbs and private car ownership. What is probably surprising is how this same process and development have been telescoped in Thailand, a developing country, within a short period of roughly a decade.

The findings in the research illustrate an outcome of a certain trend in housing consumption in the type of gated community and associated urban form in Bangkok developing alongside the expansion of the upper-middle class. The study of gated community is not a new form of housing provision in Thailand since there are now so many gated communities in Bangkok Metropolitan Regions, which are basically housing estates of the upper middle and upper classes. However, imperatives of greater gated community have been enhanced by the growing social-spatial separation of the residential areas—spreading in lower and medium-density areas—and the workplaces and centres of amenities that have been concentrated and confined in the city core or in high-density areas. For the expanding middle-class and upper-class population, however, Bangkok will more and more be a middle-class and upper class-oriented city – spending more on middle class transport/road support (toll highways; BTS) etc.; while spending proportionately less on support infrastructures and services for non-gated communities (especially for the low-income and urban poor areas); because consumer groups of gated communities have become more entrenched and powerful, including the gated communities developers, in the last 12 years. Expect that they will be a powerful lobby group in determining urban development policy and public expenditures on infrastructure and services in Bangkok, to support the gated communities' constant upgrading of conditions for comfort and high-end livability.

On the other hand, the present-day land-use policy and strategy of the government of Thailand have perfectly fitted in with and strongly supported middle-class and upper-

class housing consumption based on gated community. Their predisposition and stakes in housing have been promoted directly or indirectly by the following: a lenient financial lending policy promoting, among others, long-term fixed interest rate loans; reduction of special business tax; lessening of housing transfer fees; and a lack of comprehensive and effective land-use measures and planning; and accompanying with transportation policy i.e. a 'supply-fix' approach of increasing city road construction; low toll-way pricing; that, in turn, de-links the goal of efficient land development and transport in the city, and fails to regulate urban sprawl.

The gated communities have dramatically increased in recent decade in BMR. There are now upwards of 1,000 gated communities throughout BMR. Although much research remains to be done, it is already clear that gated communities in Bangkok present a very diverse picture, with niche marketing by developers. The motivations for purchasing properties in Bangkok Metropolitan Region (BMR) gated communities appear diverse and complex, which block the way forward in creating compact and smart cities or low-carbon cities. Compact and smart cities can be implications to cost-effective and efficient use of urban resources (land, water, energy and time as a resource). The compact and smart cities also have implications to a carbon-free or low-carbon urbanization, which is essential in climate change mitigation. The Bangkok Declaration outlines five ways to mitigate global warming - reduce energy and natural resources consumption, reduce greenhouse gas emissions, promote lifestyles that uphold the sufficiency economy, promote activities that help absorb greenhouse gases and build public awareness of global warming (Bangkok Metropolitan Administration, 2007). No doubt, creation of many gated communities is good for the business of big real estate developers in Thailand, as well as for the modernist and globalist aspirations and lifestyle of the emergent urban middle and upper classes of Thailand. But is this a step forward or backward in creating sustainable cities in the context of climate change or when our planet is in peril. Bangkok agenda; however, has been announced to move Bangkok as a model city for sustainable development. The rise of gated communities should be realized otherwise Bangkok may move further away from serving sustainable development goal. It needs a pleading for a more socially responsible real estate development and business take into account the fundamental concerns of equity, and sustainability in the context of climate change.

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Appendix A

Questionnaire for the research on

“New Housing Consumption of Upper-Middle Class in Bangkok: Gated Communities and Implications on Housing Equity and Urban Form”

Part 1: General Information

1. Address.....
.....
2. Status in the household
☐ Head of the household ☐ Couple/spouse ☐ Child ☐ Other.....
3. Gender
☐ Male ☐ Female
4. Age.....
5. Marital status
☐ Single ☐ Married ☐ Divorce ☐ Widow
6. Education
☐ Under high school ☐ High school ☐ Diploma ☐ Undergraduate
☐ Graduate ☐ Others,specify.....
7. Occupation (Your original affiliation)
☐ Mid-level Government official High-level government official
☐ Mid-level State enterprise official High-level state enterprise official
☐ Mid-level Private Sector employee High-level Private Sector employee
☐ Business owner
☐ Freelance Professional ☐ Other, specify.....
8. Number of Members in the household ____
9. Estimated Current Average Household incomes per month.....Baht
10. Estimated Current Average Expenses per month.....Baht

Part 2: Characteristics of the residence

11. Residence Area ____ sq. wa.
12. Floor Space area.....square meters
13. How long have you been living in this house?.....years
14. How many space area of your old residence did your have?.....square meters

15. Price of the present housing.....Baht

16. Do you still amortize this house?

☐ Yes

☐ No

17. Amortization per month.....Baht

Part 3: Factors for decision making to buy the new house

18. To what extent did you consider each factor **in choosing** to buy your present house?

Factor	Level of consideration				
	High	—————>			Low
	5	4	3	2	1
Reasonableness Housing price (value for money)					
Prestige of the housing project					
Reputation of the developer company in real estate business					
Reliability of security					
Locational advantage (e.g. near CBD, near old residence)					
Overall physical layout of the community (ex. Street size, common public space size, landscaping etc.)					
Space area of residence					
Dominant architectural style (e.g. modern style, tropical style)					
Leisure Facilities in village (e.g. park, clubhouse, pool)					
Accessibility of Public facilities nearby (e.g. hospital, school)					
Dependability of Public utilities (e.g. road, electricity, water supply)					
Social interaction or neighborliness of the residents					
Accessibility Public transportation (e.g. bus, MRT)					

Part 4: Gated community association and community life

19. Are you a member of the community association?

☐ Yes

☐ No

20. The association is operated by whom?

☐ Project developer firm ☐ Property management firm ☐ Membership and
elected officers of the Association

How much do you pay for the member association? (please identify)

.....

21. How often does the association's membership meet?

22. Does the association officers' give you a regular report of their activities and expenses?

☐ Yes ☐ No

23. If yea, how does the association officers report their activities and expenses to the
members?

☐ Regular written report ☐ Oral presentation in membership meeting

24. How many times did you take part in the meeting of the association last year (2007)?

.....

25. How many times have you taken part this year (2008) ?

26. How hould you describe the community feeling in your development

☐ Neighborly and tight-knit

☐ Friendly

☐ Distant or private

27. How would you describe the level of involvement of residents in your association
management affairs (i.e. non-social)?

☐ Very active; ☐somewhat active; ☐ Not very active

28. How would you describe the level of involvement of residents in association-sponsored
activities other than management or governance (i.e. social or charitable event)?

☐ Very active; ☐ Somewhat active; ☐ Not very active.

Appendix B-1

In-depth Interview Form (1st round)



Faculty of Architecture
King Mongkut's Institute of
Technology Ladkrabang,
Ladkrabang Bangkok 10520

November 2007

Request for answering questionnaire

To

Attached document questionnaire 1 set

My name is Wanpen Charoentrakulpeeti, Lecturer at Department of Urban and Regional Planning, Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang. I am now doing a research funded by Thailand Research Fund and Commission on Higher Education. The research names "New Housing Consumption of Upper-middle Class in Bangkok: Gated Communities and Implications on Housing Equity and Urban Form". Presently, the research is in a duration of case study selection, the residence of upper and middle class, with applying Delphi interview technique. This technique has applied a questionnaire as a tool and needs to do 3 rounds and this is the first round. After finishing in each round you will get the sum up of the previous round before doing the next round. The benefit of question repeating is to set the criteria of the study areas selection. Therefore, I would like to request you to give your opinions for this questionnaire.

When you finish the questionnaire, please send back by post or by fax to 0 2739 2144. If you have any inquiry, please contact me via 0 2739 2145 or 086 543 2867.

On this occasion, I would like to express gratitude for your kind support and hopefully you will again cooperate for the next questionnaire.

Best regards,

(Wanpen Charoentrakulpeeti)

Project Leader

Fax 02 739 2145

Mobile 086 543 2867

Questionnaire for Real Estate Experts (1st round)

Objective: To find out the criteria in selecting residential areas of upper-middle Class in Bangkok

Par 1: Personal Information

1. Name.....
2. Company.....
3. Position.....
4. Address and Telephone.....
.....
5. Names of popular projects of your companies.....
.....
6. Types of residential units that are part of your company's product line (e.g detached single house, condominium etc.)

Part 2: Factors Related to upper-middle and high income groups' housing development.

7. What indices or factors do you apply to divide detached housing into classes/categories? And how many classes/categories of housing do you have? Please identify all the classes.....
.....
.....
8. What are the most important differences between the above housing categories?.....
.....
.....
9. Based on your housing classes or categories, which particular category/ies is particularly suited or targeting buyers from the upper-middle and high-income groups?.....
.....

10. In your opinion, what important facilities or amenities should be particularly provided for this housing category/ies? (excluding the regulation requirement)
.....
.....
11. What are the most important socio-economic characteristics of consumers for this housing category (i.e. age, profession, civil status, household size, income bracket?).....
.....
12. What is the usual price per unit of these categories of detached housing that are particularly targeting upper-middle income and high income clients?
.....
13. What are the most important reasons for you to invest and do business in this particular upper-middle and high-end categories of detached housing? Please rank your most important reasons (put#1, 2,3 by order of importance).....
.....
.....
14. What factors do you commonly consider to select project location for the upper-middle and high income groups?.....
.....
.....
15. In your opinion, where are these classes/categories of detached housing for the upper-middle and high income groups located in Bangkok?.....
.....
16. Please identify the first ten real estate development companies doing housing projects for upper-middle and high income groups.....
.....
17. Do you have any suggestions for the criteria to use in identifying the housing project locations of upper-middle and high income groups in Bangkok? Please list your important criteria.....
.....

Thank you very much for your kind cooperation

Conclusion of real estate developers: the 1st round

Company	Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
Position	Operating Deputy Director	Marketing Manager Assistant	Deputy Director Marketing	Senior Executive Vice President	Chief Operating Officer	Director and Chief Business Officer	Vice President
Housing types	Detached single house, Townhouse, condo	Detached single house, townhouse	Detached Single house	Detached single house, Townhouse, condo	Detached single house, townhouse, condo	Detached single house, Townhouse, condo	Detached single house, Townhouse, condo
Indices/factors applied to divide house into classes	Affordability of Customers	Household income	-Household income -Project location -Type & space -Materials of building - competition	Household income and housing price	Household income	-Location -housing types -Price -Lifestyle	-Housing Price -Customer Income
Housing classes	* 4-7 m. Baht * 7-10 m. Baht * >10-20 m. Baht (Low: 3-4 m. Baht)	* < 80,000 Baht/month * 80,000-150,000 Baht/month * >150,000 Baht/month	*2.5-3.5 m.Baht *3.5-5 m.Baht > 5 m.Baht	*2-3 m.Baht *4-5 m. Baht *5-6 m.Baht *>7 m.Baht	-3-5 m.Baht -5-7 m.Baht -7 m.Baht	*600,000-800,000 Baht *800,000-3,000,000 Baht *3-7 m. Baht *>7 m.Baht	*<5 m. Baht *5-10 m.Baht *>10 m.Baht
Locations for this housing category in Bangkok	-approx. far from CBD >25km. -Rajchapruk -Ramindra	-Kaset-Nawamin -Sukapibhan 3 -Nakorn Inn-Rajchapruk -Bhudda montol -Praram 2	-Ram Indra -Lad Prao -Putta montol -Rajchapruk -Sukumvit -Rama 9	-Rajchapruk -The beginning of Ring road (not far from Pin Klao)	Ekkamai-Ramindra Srinakarin		Ring road i.e. Ramindra, Ngamwongwaan , Rattanaibet

Company	Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
Providing facilities and amenities for this housing category (Excluding Regulatory)	*environment and security in housing project *Design master plan *Project management assistance in both before and after selling *one year warranty	*security and environmental and social in the project.	-Club house -Swimming pool. -Park -road width -security i.e. guard, gate or fence -flood protection system -light on main and local roads	-Club -Swimming pool		-Providing customer value i.e. price worth, housing quality, service during total process -Image	Club houses Security
Reasons to invest the project for this housing category	*Customer movement based on Job base and Education base) *customers demands and preferences	*Market trends (surveying and analyzing) *Customer lifestyles	-Near CBD -Infrastructures and Amenities	-Surveying and Analyzing based on old customer demands and behaviors	-Occupy land bank in cheap price which makes lower cost -Being in Public Company -Budget -Reputation -Demand survey -Security -Market competition -Customer behaviors	-Demand -Competition around the project areas	-Demand -Market trends

Company	Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
Factors considered in selecting project location	*Lifestyle *Customer preferences *Infrastructure (electricity, water supply, telephone lines) *environment (security, crime risk) *Customers demands (surveying)	*Location *Infrastructure (road) *Demand and Supply around the projects (10 km. radius) *Land use regulation *Spatial analysis *Population distribution *Types of housing relating to job location and transport types	-Location next to road -Near CBD -Infrastructures and Amenities i.e. BTS, MRT, ring road, near express ways, near airport/ education	-Customer Demand and Preferences -Value Added -Housing quality -Project environment	-Near Express ways -Infrastructure (existing and future) -concern in solid waste and air pollution -community building in the project -Value added -Environment	-Demand	-Transportation -Infrastructure
Top ten real estate developers for this housing category	Any company group registered in public company	-Land & House -San Siri -Property Perfect -Pruksa	-Land & House -Quality House -San Siri -Property Perfect -ManKong -Prin Siri -Nobel house -Asian Property -Pruksa -Supalai -Lalin property	-Land & House -San Siri -Quality House -Pruksa -Property Perfect	-Land & House -Property Perfect -San Siri -Quality house	-Land&House -Pruksa -Quality House -Asian Property -TCC -San Siri	-Land & House -San Siri -Property Perfect -Golden Land

Appendix B-2

In-depth Interview Form (2nd round)

Questionnaire for Real Estate Experts (2nd round)

Objective: To find out the criteria in selecting residential areas of upper-middle Class in Bangkok

1. What are factors or indicators you use for classify type of detach house?

- ☐ household income ☐ house price ☐ location

2. What is suitable range of household income for customer detach house in middle-high income and high income groups?

- ☐ 80,000 – 150,000 Baht/month for middle-high income and
> 200,000 Bath/month for high income
- ☐ 100,000 – 200,000 Bath/month for middle-high income and
> 200,000 Bath/month for high income

3. What is suitable range of house price for customer detach house in middle-high income and high income groups?

- ☐ 3-5 Mill. For middle-high income and over 7 Mill. for high income
- ☐ 3-6 Mill. For middle-high income and over 10 Mill. for high income
- ☐ 5-10 Mill. For middle-high income and over 10 Mill. for high income

4. What is most important dividing detach house category? (please rank 1,2,3,.....)

- | | |
|---|--|
| ☐ house price | ☐ household income |
| ☐ facilities | ☐ housing & Materials quality |
| ☐ Environment and social community | ☐ customer demand |
| ☐ location such as near school, work place | ☐ location such as near express way |

5. What are particular facilities providing for detach house in upper-middle or high-end group?

- | | | |
|---|--|-----------------------------------|
| ☐ club house | ☐ swimming pool | ☐ security |
| ☐ Public service area i.e. mini park | ☐ flood protection area | |

6. What is the most important for investment or business for middle –high or high price detach house?

- ☐ demand/ customer lifestyle
- ☐ location near CBD, work place, school
- ☐ Market competition
- ☐ capability in buying cheap land

7. What is factor considered in selecting project location for middle-high income detach house?

- ☐ Infrastructure and amenities i.e. road, electricity, water, telephone etc.
- ☐ Public transportation i.e. bus, MRT, BTS
- ☐ Good Environment i.e. air quality, security
- ☐ location i.e. near school, work place
- ☐ location i.e. near express way, main road
- ☐ customer demand/customer preference/customer lifestyle

8. What is location for middle-high detach house?

- ☐ Ratchaphruek
- ☐ Ekkamai Ram Inthra
- ☐ Lat prao
- ☐ Srinakarin
- ☐ Kaset-Nawamin
- ☐ Phuttha Monthon

9. What is location for high detach house ?

- ☐ Ratchaphruek
- ☐ Ekkamai Ram Inthra
- ☐ Lat prao
- ☐ Srinakarin
- ☐ Kaset-Nawamin
- ☐ Phuttha Monthon

10. What are top 3 real estate developers company for middle-high and high detach house?

- ☐ Land & House Public company limited
- ☐ Sansiri Public company limited
- ☐ Property perfect Public company limited
- ☐ Quality House Public company limited
- ☐ Noble Development Public company limited
- ☐ Preuksa Real Estate Public company limited

Conclusion of real estate developers: the 2nd round

Question	Answer	Real estate developers company						
		Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
1. What are factors or indicators you use for classify type of detached-single house?	household income							
	house price	•	•	•	•	•	•	•
	location							
2. What is suitable range of household income for customer detached-single house in upper-middle income and high income groups?	80,000-150,000 Baht/month and > 200,000 Baht/month	•		•	•		•	•
	100,000-200,000 Baht/month and > 200,000 Baht/month		•			•		
3. What is suitable range of house price for customer detach house in upper-middle income and high income groups?	3-5 MB. and > 7 MB.			•		•	•	•
	3-6 MB. and > 10 MB.	•						
	5-10 MB. and > 10 MB l.		•		•			
4. What is most important factor dividing detach house category? (please rank 1,2,3,.....)	house price	•	1		•	2	1	1
	household income		7	•		7	3	
	facilities		4			4	5	
	housing & Materials quality		3			5	6	
	environment and social community		5			3	4	2
	customer demand		6			6	8	
	location such as near school, work place		8			8	7	4
	location such as near express way, main road		2			1	2	3

Question	Answer	Real estate developers company						
		Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
5. What are particular facilities providing for upper-middle detached-single house?	club house	•			•			•
	swimming pool	•			•			
	security		•	•		•	•	
	public service area i.e. mini park							
	flood protection area							
6. What is the most important factor to invest upper-middle detached-single house project?	demand/ customer lifestyle				•			•
	professional and experience of company							
	market competition							
	capability in buying cheap land			•				
	location near CBD, work place, school	•	•			•	•	
7. What is factor considered in selecting project location for upper-middle detached-single house?	infrastructure and amenities i.e. road, electricity, water, telephone etc.		•				•	
	public transportation i.e. bus, MRT, BTS		•					
	good environment i.e. air quality, security		•		•		•	•
	location i.e. near express way, main road	•	•	•	•	•	•	•
	location i.e. near school, work place	•	•					
	customer demand/customer preference/customer lifestyle		•		•			•

Question	Answer	Real estate developers company						
		Real Estate 1	Real Estate 2	Real Estate 3	Real Estate 4	Real Estate 5	Real Estate 6	Real Estate 7
8. What is location for upper-middle detached-single house?	Ratchaphruek		•	•		•		•
	Ekkamai Ram Inthra		•			•	•	
	Lat prao		•			•		
	Srinakarin		•			•		•
	Kaset-Nawamin		•		•	•		•
	Phuttha Monthon	•	•			•		
9. What is location for high-end detach-single house?	Ratchaphruek	•	•			•	•	•
	Ekkamai Ram Inthra	•	•	•	•	•		
	Lat prao		•			•		
	Srinakarin		•			•		•
	Kaset-Nawamin	•	•			•		•
10. What are top 3 real estate developers companies for upper-middle detached-single house?	Land & House Co.,Ltd	•	•	•	•	•	•	•
	Sansiri Public Co.,Ltd	•	•	•	•	•	•	•
	Property Perfect Co.,Ltd			•	•			
	Quality House Co.,Ltd	•	•		•	•	•	•
	Noble Development Co.,Ltd.							
	Preuksa Real Estate Co.,Ltd				•			

Appendix C

Interview sheet for government official on public services to people by government or privatize to the gated community association

1. Level of office

- Community
- District
- Central

2. Administration

3. Management/tax & charge of the gated community on

- Security: Police
- Waste collection
- Public lightening i.e. street lightening and cleaning
- Community road construction and maintenance
- Park management and maintenance in the gated
- Club members
- Postal services

4. Basic services compare between the rich and the poor on

1. Incorporate/unwilling
2. Voluntary/mandatory
3. Real power/shadow power
4. Autonomy in what area of public decision making

5. Areas or Issues of tension between management group of gated community and local government administrative authority; Areas/issues of cooperation.