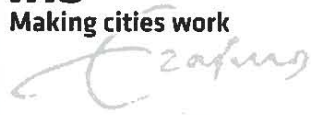


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Thesis

Title:

Inclusionary Housing in Indonesia: The Role of Balanced Residential
Ratio 1:3:6 in Makassar

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Inclusionary housing in Indonesia: The role of balanced residential ratio 1:3:6 in Makassar

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Proclaim! (or read!) In the name of thy Lord and Cherisher, Who created-
Created man, out of a (mere) clot of congealed blood
Proclaim! And thy Lord is Most Bountiful
He who taught (the use of) the pen
Taught man that which he knew not
(Qur'an, 96:1-5)

Summary

This research attempts to find out how inclusionary housing is implemented in Indonesia through the balanced residential ratio 1:3:6 regulation (*Lingkungan Hunian Berimbang – LHB*). The regulation was introduced by the national government in 1992 for implementation at local level by all municipalities and regencies.

There are two main objectives of the *LHB* 1:3:6 regulation: (1) to produce affordable housing, and (2) to encourage more socially integrated development via mixed-income residential areas and cross-subsidies. Henceforth, every new residential development by a private developer should reflect the 1:3:6 ratio (1 high-income, 3 middle-income and 6 low-income units).

Using the case of Makassar City, the capital city of South Sulawesi Province and the largest city in the eastern part of Indonesia, the author tries to assess the implementation of the balanced residential ratio 1:3:6 regulation from four dimensions - legal, economic, financial, and social - during period 1993 – 2003. Those dimensions are discussed in the context of provision for affordable housing through the application of land value capture. Thus other issues such as long-term affordability and social ethnic integration are not covered in this research.

The general finding for the balanced residential ratio, *LHB 1:3:6*, which was adopted by the Makassar Local Government in 1992, has been lack of implementation. The local government simply adopted it without formulating more detailed local regulations or adapting it to the city's ordinances. Although the procedures and sanctions are clearly stated, the absence of a dedicated institution or committee at national and local levels in coordinating, controlling, and monitoring the implementation of the regulation, results in non-compliance.

The legal basis provided by the national government, which is at ministerial level, and the absence of specific local regulations, means that the sanctions stated in the balanced residential ratio regulation were not applied by the local government. On the other hand, the incentives in the form of fast-track permit and reduction of retribution for building permit provided by local governments are not enough to motivate developers. This is because developers usually look for the highest possible profit.

However, it is economically feasible for developers to fulfill the inclusionary obligation. This is indicated by the relatively high increment of land value gained by developers compared to the value of the land at the time they purchased it. Factors that influenced that result are the chosen location at periphery areas and also in an adjacent municipality, as well as the initial land use which was vacant land. Meanwhile, economic impacts of the balanced residential ratio regulation on price and production of luxurious units were not clear because of lack of data and studies regarding those issues.

In addition, during the period 1993 – 2003 housing production by developers in Makassar was dominated by the medium type which reached 54% of total housing production in that period. The rest of production was shared almost equally between the basic houses and luxurious houses. The data shows that the percentage was 24% for the former and 21% for the latter. However, from the total amount of basic houses built in Makassar, 55% were produced from projects that implemented 1:3:6 regulation.

Concerning the extent that the balanced residential regulation addressed the spatial segregation issue, this research barely found housing development since 1993 that followed the requirement to build a mixed-residential development within one contiguous area. In the

case of the selected project in Makassar, Bukit Baruga Residential, the developer built the basic houses in an adjacent municipality where the land price was very cheap. This indicates that spatial integration through mix-residential area is hard to achieve.

Meanwhile, changing in policy has not given much significant improvements regarding spatial integration purpose. Similar with the former 1:3:6 regulation, the new balanced residential ratio introduced in 2011 still illustrates ambiguity. At one side it makes mix-residential in one contiguous area compulsory for large scale residential development. But on the other hand, the developing of basic houses is allowed at different area as long as the location is in the same municipality or regency. Although some disincentives are introduced, but spatial integration seems still negotiable. This ambiguity is contrary to the objective of the regulation itself that trying to develop spatially integrated communities by mixing different types of housing within one contiguous area.

Finally, this research admits that this policy could play an important role for local governments to address issues of affordable housing and spatial integration. It enables local government to recapture the increment of land value obtained by private developers to provide affordable housing for low income households. Lessons learnt from the past suggest that clear and detailed regulations, as well as strong political will of the local government, are needed to be able to mobilize the increment on land value obtained by developers. Although it is economically feasible for developers to set aside a certain portion of housing units and make it affordable for low income households, it will not be recaptured if local government does not fully understand the opportunities that this regulation offers in assisting them with provision of affordable housing.

Keywords:

Land value capture, inclusionary housing, affordable housing, spatial integration, mix-residential, Makassar, Indonesia, balanced residential ratio.

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Abbreviations

Bappeda	:	Local Development Planning Agency
BKP4N	:	National Board for Policy and Supervising of Housing and Settlements Development
BPS	:	Statistics Office (<i>Badan Pusat Statistik</i>)
IDR	:	Indonesian Rupiah
IMB	:	building permit (<i>Ijin Mendirikan Bangunan</i>)
Kepmenpera	:	Decree of Ministry of Housing (<i>Keputusan Menteri Perumahan Rakyat</i>)
LHB	:	balanced residential ratio (<i>Lingkungan Hunian Berimbang</i>)
Menpera	:	Housing Ministry (<i>Kementerian Perumahan Rakyat</i>)
Permenpera	:	Regulation of Housing Ministry (<i>Peraturan Menteri Perumahan Rakyat</i>)
PT. BAD	:	Bukit Baruga Asrinusa Corporation – one of big developers in Makassar that implementing the balanced residential ratio regulation
RBM	:	<i>Rumah Besar Menengah</i> (luxurious house)
REI	:	Real Estate Indonesia
Rp	:	Rupiah (Indonesian currency)
RS	:	<i>Rumah Sederhana</i> (basic house)
RSM	:	<i>Rumah Sedang Menengah</i> (luxurious house)
RSS	:	<i>Rumah Sangat Sederhana</i> (very basic house)
RTRW	:	Urban/Regional Spatial Plan
SKB	:	joint decree (<i>Surat Keputusan Bersama</i>)
US\$:	US Dollars

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Chapter 1: Introduction

1.1 Background

Inclusionary housing is an instrument in which government requires developers of private housing to set aside a certain portion of housing units or land and make it affordable for households who cannot buy it in the open market (Calavita and Mallach, 2009). This can be done because of the assumption that land value increases over time due to government intervention through zoning regulation and building permits given to developers to build commercial housing. Thus, inclusionary housing enables government to mobilize the incremental value of land and capture it to provide affordable housing.

In addition, government is not only concerned about producing affordable housing, but also about locating them together with other income levels. Meda (2009) explains that there are two main objectives of inclusionary housing: (1) to produce affordable housing, (2) to reduce or remove barriers resulting from exclusionary policies which prevent low income communities from accessing affordable housing. The latter was the case in the United States in the 1970s when inclusionary housing was established as an effort to fight against exclusionary practices and to promote racially and socioeconomically integrated communities (Calavita and Mallach, 2009). This objective was then given more priority in Western Europe countries where it was seen as a positive goal and an explicit feature of public policy (Mallach, 2010).

Indonesia has been implementing the inclusionary housing regulation since 1992. The regulation is based on a joint decree of the Minister of Internal Affairs, Minister of Public Works and Minister of Housing: number 648-384 of 1992, number 739/KPTS/1992, and number 09/KPTS/1992 respectively. The decree formulates the guidelines for development of residential settlement through balanced ratio 1:3:6.

The two main objectives of inclusionary housing were adopted in the law: (1) to produce affordable housing and (2) to encourage more socially integrated development via mixed-income residential areas and cross-subsidies. Henceforth, every new residential development by a private developer would reflect the 1:3:6 ratio (1 high-income, 3 middle-income and 6 low-income units).

The institution mandated for implementing this regulation is local government. They are encouraged to adapt it to their local ordinance, set more specific regulations and establish an institutional framework. The main control mechanism is that local government should not give principal permit, location permit and building permit to developers if they are not willing to implement the regulation.

However, developers tend to refuse the inclusionary housing law in Indonesia because it is an obstacle for them with regard to profit. The rule makes it compulsory to locate three different levels of housing units within one contiguous area, thus demanding a large parcel of land. In fact, because of scarcity of land, it is hard to find such large parcels, especially in an urban area where development is often more expensive and difficult (Calavita and Mallach, 2009). This situation becomes problematic for developers as they have to include affordable units in their projects without having to sacrifice their profit. Therefore, in reality, developers prefer to build the low-income cluster in a different area of the city instead of locating them in the contiguous location. This is then not supporting so much the integration objective of inclusionary housing.

Subsequently, in 2011, the national government introduced a new law which revised the previous law regarding inclusionary housing. This new law attempted to change two main things: (1) the ratio was changed to 1:2:3 and applied only to developments with a minimum 50 commercial housing units, and (2) the provision does not have to be within one contiguous area, although it has to be within the same regency or municipality. It appeared that the new law benefitted the developers and it was supposed to be easier to implement.

Since the implementation of this new rule is still being developed at the local level, its effects and results cannot be seen yet. Thus, this study will focus on analyzing the implementation of the 1:3:6 law, using the case study of Makassar City (Figure 1), and try to assess whether or not the regulation meets the theory of inclusionary housing.

Figure 1 Location of Makassar City

Source: Google Map

1.2 Problem Statement

The inclusionary housing law in Indonesia called the balanced residential ratio 1:3:6 regulation was established in order to fulfill housing as one of the basic human needs as it is referred to Indonesia's Constitution. As described earlier, the major aims of the inclusionary housing are to achieve an adequate residential area and to improve the distribution of welfare to citizens. Thus, as clearly stated in the balanced residential ratio 1:3:6 regulation, an integrated society - economically, socially, professionally - within a residential area is needed on the basis of tolerance, togetherness, mutual relationships, and to avoid segregation.

However, there are at least three main problems to the successful implementation of inclusionary housing in Indonesia (Hazaddin, 2011):

1. Lack of enforcement from local government

The 1:3:6 regulation was established by the national government to be implemented by local governments all over Indonesia. Unfortunately, most of the local governments have not fully

understood the objectives of this regulation. According to government regulation Number 38 of 2007, it is local government's obligation to provide affordable housing for low income households. Hence, the 1:3:6 regulation is supposed to be seen by local governments as an opportunity to fulfill their obligation to provide affordable housing. Nevertheless, most local governments do not establish a detailed and transparent regulation. This was worsened by the lack of political will to enforce the regulation. Consequently, it gives way to compromises between developers and the government for relaxation of the rules.

2. Developers' refusal

Many developers have criticized the regulation and tend to refuse to implement it especially in a contiguous area because it is not profitable for them. Due to the scarcity of land, land prices are increasing. Developers argue that increasing in land price makes their production costs increase, thus they will not be able to comply with the inclusionary regulation because it makes their profitability decrease. Thus, they strive for cost offsets and incentives from government. Their refusal shows that developers try to capture the maximum incremental value of land without feeling obliged to share it to society at large.

3. Tendency of not considering location

Since one of the main objectives of the 1:3:6 regulation is to encourage more socially integrated development via mixed-income residential areas, the location factor should be considered by developers when they distribute the affordable units. This is to avoid segregation within the project area itself. In fact, it is hard to find a residential area built since 1993 fulfilling the production of 1:3:6 in one contiguous area (Kuswartojo, 2011)¹. In addition, the new regulation, the 1:2:3, allows development of affordable units not within one contiguous area but in a different area within the same municipality or regency. Thus, there is a tendency for location of affordable units to be disregarded.

The issues explained above have made the 1:3:6 regulation difficult to apply, thus difficult to meet its main goals. Therefore, it is important to find out what prevents local governments from strongly enforcing the regulation and what makes developers unwilling to comply with the regulation.

1.3 Research Objectives

The main objective of this research is to assess how inclusionary housing regulation in Indonesia is being implemented in the metropolitan area where the land is scarce and to find out the extent to which it is meeting its main goals: to provide affordable housing for low- and middle-income households and to promote socio-economically and spatially integrated communities.

¹ Tjuk Kuswartojo is an expert on housing and settlement and a senior lecturer in Architecture Department, Bandung Institute of Technology (ITB), Indonesia

1.4 Research Question

This thesis is guided by the main question as seen in Box 1.

Box 1 Main Research Question

How is inclusionary housing policy implemented in Indonesia?

In order to understand and answer the main research question, there are sub questions formulated as follow:

- 1. Can local government impose the obligation of inclusionary housing to developers?**
 - a. Has the local government set an adequate institutional framework?
 - b. Has the local government established complementary instruments?
 - c. To what extent is local government willing and able to enforce the inclusionary housing regulation?
- 2. What are the economic impacts of inclusionary housing, in terms of housing price, production and residual land value, to developers?**
 - a. Is the production of commercial units being reduced?
 - b. Is the price of commercial units increasing?
 - c. Are developers able to have adequate residual land values that enable them to implement inclusionary housing?
- 3. How does the implementation of inclusionary housing policy affect the production of affordable units?**
 - a. What percentage of affordable units comes from inclusionary housing?
 - b. How does it contribute to the provision of total affordable housing?
 - c. How does it contribute to provision of housing at large?
- 4. Is inclusionary housing able to address the spatial segregation issue?**
 - a. What is the trend on the ground?
 - b. What is the trend in policy?

1.5 Significance of the Study

Indonesia is a highly populated country with very diverse people (cultural, ethnic groups, social-economic conditions, religions, etc) dispersed in five big islands and hundreds of small islands. Thus, integrated community is an important issue which the country tried to pursue through inclusionary housing. It is important to assess the implementation of 1:3:6 regulation in order to find out what worked and what did not work, which could contribute to better implementation of the new regulation and to future policy making processes, especially in the housing sector. Last but not least, this research will hopefully add more empirical evidence on the implementation of inclusionary housing throughout the world especially in developing countries.

1.6 Scope and Limitations

The research will only assess the previous regulation which is 1:3:6 regulation, since the new one, the 1:2:3 ratio is still developing at national and local level regulation. However, the new

regulation will be used as evidence regarding the trade-off between the two main objectives of inclusionary housing.

The assessment will cover four dimensions: economic, legal, financial and social, as implicitly covered in the research sub-questions. Other issues regarding affordable housing, such as the issue of long-term affordability, are not covered in this research.

The research focuses on the implementation of inclusionary housing regulation in Makassar City, a metropolitan city and a main growth pole in the eastern part of Indonesia. Makassar has advanced infrastructure and complete public facilities, which triggered urbanization as well as migration from other cities in eastern Indonesia. The population reached over 1.3 million in 2010, with population growth of 1.4% per annum. Thus, provision of housing is an important issue to be considered by the local government.

Chapter 2: Literature review

This chapter discusses theories, concepts, and empirical evidences provided by scholars and related institutions with regard to the implementation of inclusionary housing. Arguments and evidences that is in favour and against the concept of inclusionary housing is provided in order to give insight regarding what has been done or what has been known about topic of this research.

First of all, as the implementation of inclusionary housing can be connected to the concept of value capturing to provide affordable housing as merit goods, the concept will be explained in Section 2.1. Afterwards, in section 2.2., author provides arguments and evidences related with legal dimension in approaching inclusionary housing. This includes concepts of institutional framework, complementary instruments, and political will and capability of local government in applying inclusionary housing policy. Section 2.3 discusses about what has been studied about how developers respond the policy. In this case, several indicators such as commercial housing production, commercial housing price, and the value of land are explained in relation with developers' reactions to inclusionary policy. Section 2.4 seeks evidence from several countries regarding the extent of inclusionary program contribution to provision of affordable housing. Finally, section 2.5 addresses social dimension that tries to be pursued through inclusionary housing. In this case, issue of spatial integration among target groups of the project is described through evidence from several countries. At the end of this chapter, a conceptual framework is formulated in order to answer the research questions and to operationalize the research on the ground.

2.1 Value capture to finance affordable housing

2.1.1 Affordable housing as a merit good

Affordable housing for low income people is seen as a non competitive provision of goods where, based on neoclassical economic theory, it could cause inefficiency. According to (Batley, 1996) this is happen because the resources are not optimally used to produce maximum output which usually reflected by the below market price. Thus, market tends to get away from producing affordable housing.

Developers' behaviour is likely to put the highest and best uses of the land where in fact, are often result inefficiency (Lowell Harris, 1980). Thus, if it left to the market, the housing needs of the poor might not be addressed. For that reason, government should have responsibility to ensure accessibility of adequate housing for the poor. In general, (Batley, 1996) describes three circumstances that required government to provide:

1. The good which has to provide is pure public good
2. When private party fail to provide such a good efficiently because of market failures, for instances rise in monopoly, rate of return does not make sense, unbalance information to make choice in the market.
3. In the case of merit goods, a commodity which is judged to be a basic need of an individual or a community to certain extent where ability and willingness to pay do not take into account (Musgrave, 1957, Ver Eecke, 1998, Ver Eecke, 1999). Affordable or subsidized housing is one of the commodities that fall into this category.

On the other side, opponents argue that housing is private property. It is excludable because owner can exclude others from consuming the house and it is rivalry, that the owner's consumption of housing reduces the benefits available to others.

2.1.2 Value capturing

As the traditional instruments to finance urban development are stuck especially during economy crisis, land value capture instruments are increasingly important as an element in the search for regional solutions to urban problems (Youngman, 1996, Slack, 2013). Thus, it is socially acceptable for government to intervene through capturing value from the increment of land value in profitable projects and cross-subsidize it to house poor families, as far as wealth redistribution and efficient utilization of resources through generating revenue to provide public goods are the motives behind value capture (Furtado, 2000, Smolka and Furtado, 2003, Bertaud, 2010).

However, since opponents notice housing as a private property, they argue that value captured in land should not be reinvested for the benefit of individuals, but for the community at large. The opponents are also disagree about the idea of cross-subsidization as it will distort market and discourage potential investors. Thus, the city may not be competitive. Besides, it is also communist and authoritarian redistribution approach (Alterman, 2012).

Apart from the debates about value capturing by government, the change in housing development paradigm also gives significant influence in provision of affordable housing. As the neo-liberalism arose, it had put a pressure on reducing direct housing production by government² (Pugh, 2001). In this context, value capturing instruments, particularly inclusionary housing, can be seen as a new alternative way for government to provide affordable housing.

Another justification is that inclusionary housing can be seen as a way for government to recoup the increment in value due to government decision in land use regulation. Britain led the way on this idea by introducing the concepts of “shifting value”³. “Shifting value” gives explanation that land use restrictions in one part of a city may decrease the value of the land. However, at the same time the value of land in another part of the city may increase due to permit development produce by the regulation (Alterman, 2012). In the context of inclusionary housing, developers gain the benefit from the increment value of land as a result of development permit given by government to produce commercial housing (see section 2.3 for further explanation). Thus, it is possible for government to mobilize the land value increment by imposing exaction on developers to produce affordable units (Calavita and Mallach, 2010b).

In addition, provision of affordable housing through inclusionary housing can be seen as a public-private partnership approach. This is because inclusionary housing mechanism works as a mandatory requirement from governments to private sector, in this case developers, to

² Based on the experiences in many countries, large-scale public housing delivery is not a solution. It is too costly for the governments in most of developing and developed countries (UN-Habitat 2011).

³ Concept of “shifting value” was introduced in the Uthwatt Report that acknowledged plays important role in British recovery after World War II. This influential report was produced by The British Expert Committee on Compensation and Betterment and named based on the name of its chair. The other concept beside “shifting value” is “floating value”, which simply refers to speculative behaviour of land owners who tend to put the highest and best use upon their plot if only the land use regulation did not benefitting them. See Alterman (2012).

produce affordable housing. Public-private partnership approach is recently developing throughout the world and it has given a justification to include private sector in provision of public goods as extensively implemented in Malaysia, Uganda and Zimbabwe (Batley, 1996).

2.2 Approaching inclusionary housing

2.2.1 Institutional framework towards extensive recapture mechanism

The original approach of inclusionary housing is that government put the obligation to produce a portion of affordable housing units on development of private housing units by developers. According to (Ladd, 2009), this type of obligation can be categorized as a legal obligation: the form of obligation created and enforced by the law. Furthermore, Ladd (2009: 9-16) specifies six features of obligation, which is applicable for the context of inclusionary housing policy, to specify whether someone has an obligation or not:

1. Obligation can be created and can be terminated.
In the context of inclusionary housing, developers are attributed to an obligation when they agree to implement inclusionary housing as they are given building permit by the local government.
2. There should be a basis of obligation.
In inclusionary housing context, the promise to produce affordable housing units becomes the basis of developers' obligation.
3. Obligation is an interpersonal relation, thus the existence of the obligee on the other side of the rope can determine whether or not the obligors fulfil their obligation.
In the case of inclusionary housing policy, it is the local government who plays the role as the obligee and developers as the obligors.
4. Obligation authorized the existence of sanctions in the case of no-fulfilment. The term of sanctions is not only in the form of punishment, but also various form of social sanctions.
In the context of inclusionary housing, this might relate with level of trust. When developers do not fulfil their obligation to provide affordable units, they might be lost public trust which indirectly might affect their future business.
5. Obligations must not contradictive or conflicted with general moral principles (the positive laws). In other words, the basis of an obligation cannot be something that against morality.
In case of inclusionary housing, the developers' obligation is to produce affordable housing which obviously contains moral responsibility to the society at large.
6. If a person is under an obligation, he/she has to fulfil it without needed to question it for having the obligation itself is a sufficient reason to perform the obligation. The obligors should also do their obligations in totality.
In inclusionary housing context, this is justified by the concept of social equity and social justice which currently accepted by the vast majority countries around the world.

The idea of mobilizing land values to provide affordable housing through inclusionary housing, in fact is not easy. It needs strong legal framework. Otherwise, there will be room for differential application such as relaxations and corruption which at the end just benefiting developers (Alterman, 2012). Studies in several countries that done by Calavita and Mallach (2010c) found that inclusionary housing has been practised not only as an obligation, but in some countries it is a voluntary basis (see Box 2). Thus, institutional framework set-up then would vary between places. The conclusion achieved is that although inclusionary housing implemented in local level, it still needs higher level of government to enable them to perform, in the case where it is not actually mandated (Calavita and Mallach, 2010c).

Box 2 Legal framework of inclusionary housing in several countries

In Spain and Ireland, inclusionary housing is mandated in national level as a response to the housing crisis which affected the middle and lower income households. However, even though both countries have similarities in the origin of inclusionary housing, they have different foundation of legal framework.

Spain has a strong tradition of attributing social functions to property which also reinforce in the 1978 Constitution that stated housing is a right and that the changes in land value resulting from public decision should benefit public at large (Calavita and Mallach 2010b). While in Ireland, there is a weak planning tradition and a strong tradition of property right protection. The approach of inclusionary housing is adopted in Part V of the Planning and Development Act 2000 and its amendment in 2002. However, it was declared by the Supreme Court in light of the housing crisis at the time. It is seen as an option that developers rarely implement (Calavita and Mallach 2010a). Thus, it is understandably that inclusionary housing program in Irish is weaker than in Spain.

In the US, inclusionary housing policy takes place at the state or provincial level but delegates at the local level. In consequent, the localities formulated inclusionary housing legislation by themselves without much guidance from the states. Thus, it is not surprise if there are states responding in variety of ways while others have not responded at all. However, inclusionary housing that is done voluntarily generally is not very effective (Calavita and Mallach 2010b). In most cases, it can be found that they do not produce significant number of affordable houses or they are complemented by very generous incentives which at the end it is the public who bears the cost (see section 2.2.2.1).

2.2.2 Complementary instruments

2.2.2.1 Cost offsets and incentives

Developers see inclusionary housing as a constraint on private property development. They argue that without cost offsets and or incentives, they demotivated to do so. Mallach (2010) describe cost offsets as compensation for developers given by public sector for the costs associated with fulfilling inclusionary requirement, either in the form of reducing the cost or increasing the return to the developers. This approach has been widely practised by local governments in the United States as “the incidence controversy”, the issue of who pays the costs of those units which sold below market price, remains unsolved.

New Jersey is one of the states that approaching the inclusionary housing by giving density bonus to developers or land owners (see Box 3). Other form of incentive is subsidy taken from tax increment financing (TIF) which is established in California under the state law. It is earmarked the 20 percent of TIF revenue for provision of affordable housing (Calavita and Mallach, 2009). After density bonus and TIF funds, other common incentive is permit-related concessions, such as deferral, reduction or waiver of applicable permit and impact fees⁴. Some jurisdictions also offer fast-track permit, flexibility of design standards, and other regulatory concessions that afterwards reduce developers' cost.

⁴ The impact fees or also known as development exactions is a requirement to developers to pay the cost of public facilities and infrastructure made necessary by the development in order to obtain a development approval from local government. This is widely practice in the US in implementing land use and planning regulation.

Box 3 The practice of density bonus in New Jersey, USA

Density bonuses allow developers to build more number of commercial housing units as a “compensation” for constructing mandatory affordable units as required in their project (Rubin and Seneca 1991, Calavita and Mallach 2009). However, it depends on developers preferences, to take advantage by having permit to increase density or to produce and sell some units at below market prices.

Calavita and Mallach (2009) give evidence where a 2007 New Jersey court decision recognized the necessity to provide compensating benefit, in this case in the form of density bonuses, for developers to diminish the cost of producing affordable housing. Rubin and Seneca (1991) explain that developers and land owners have been very demanding on density bonuses to deal with some restrictions of existing zoning. Based on the result of their modeling, Rubin and Seneca (1991) indicate that developers’ willingness to participate in inclusionary housing project is sensitive to the price elasticity of demand for housing at the site and the size of the density bonus itself.

The empirical evidences above have shown that there is a possibility to combine imposing requirement to produce affordable housing with provision of density bonus as an incentive to increase willingness of developers to implement the regulation.

However, Borrero and Morales (2007) who conducted study in Bogota, Colombia argue that benefits given in the regulation should be combined with extra charges. If the regulation only increases the benefit, it is the land owner who will reap the gain from increasing land price. But if extra charges are added, it might be able to offset the increase.

Another argument comes from Calavita and Mallach (2009) who noted that those cost offsets and incentives approach, at the end, will put the burden to public to bear the cost. Financial incentives are using the money from taxpayers; density bonuses can be attractive for developers yet causes unanticipated impacts to the city at large, for instances level of services of public infrastructure and amenities in that area might decrease because of density increased; fast-track permit approval demanding more personnel to process it; and in the case of fee waivers, deferral, or reduction, it means that the project does not pay its full cost, so local government has less revenue to finance development of the city or let infrastructure or level of services to decline. Those impacts resulted by incentives and or cost-offsets are often forgotten by the government itself (Calavita and Mallach, 2009).

2.2.2.2 Rezoning

Rezoning approach is proposed based on possibilities to implement inclusionary housing as an integral part of land use planning and development process. Land use planning intends to increase the efficiency of land use and also promotes equity in that use. It works both ways, enables such allocation of land use, meanwhile it restricts other land uses. For example, when land is allocated for housing, other land uses are constrained from being able to develop for housing purpose. A good planning should be able to mobilize socially undesirable uses on a piece of land which then result on higher land values (Monk, 2010).

As in reality zoning changes constantly, there are potential profit can be made from upzoning an area to more profitable uses. Thus, inclusionary housing can become an instrument to mobilize land value increment related to government action of rezoning or land use changes (Calavita and Mallach, 2009).

2.2.3 Political will and capability of local government

Smolka and Amborski (2000) argue that to achieve desirable impacts or to manage the undesirable ones of value capture instruments, planners and urban policy makers need to have a good understanding about those instruments. Many cases were found that urban policies and regulations can be resulted in value capture. However, the policy makers do not aware that they are capturing value or to what extent they could capture it (Smolka and Amborski 2000).

Alterman (2012:79) elaborates pre-conditions for adoption of indirect value capture⁵ instruments such as inclusionary housing, which are listed below:

1. Government should have capable human resources such as well-trained planners and real estate experts in order to be able to negotiate with developers and predetermined formula of impact assessment. Those professionals should be able to analyze from the real estate economic point of view in establishing requirements for developers based on the limits which can be fulfil from developers without making a great loss to the project. This can be very adaptable in the inclusionary housing context since in formulating detail regulation, local government has to take into account any important elements that developers considered in counting their cash-flow. Thus, government can analyze to what extent the regulation is able to be implemented by developers and what kind of formulation, ratio or complementary instruments needed that is rational for developers to enable them to have adequate profit to finance affordable units.
2. Land price fluctuations should be monitor by local government, so it can debate developers' argument regarding the increasing cost of commercial housing production which may not necessarily happen in all market situations.
In inclusionary housing case, developers often argue that expensive land price is an obstacle for them to apply the regulation. However, developers could take speculative action regarding the fluctuation in land price which benefit them. Thus, if government monitors the fluctuation, it could debate the developers' argument regarding expensive land price. By the same reason, government should also monitor the housing price in the market.
3. Transparency is needed in negotiating the exactions in order to face legal challenges.
In the context where inclusionary housing is mandated, the exactions are applied strictly. However, many compromises are happening on the ground which makes the implementation lack of transparency. This is much more related with control mechanisms set by the government that should be run in a transparent way.
4. A good level of trust to government is important for a successful policy implementation.
Thus, a corrupt government or local authorities should cease.
In inclusionary housing case, government not only need trust from the people but also from developers in the context that government will enforce the regulation equally and transparently to all developers.

⁵ Alterman (2012) categorizes value capture instruments into three types: (1). Macro value capture instruments that embedded in some overarching land policy regimes. Instruments that fall into this category for instance nationalization of land, land banking, land readjustment, public leaseholds. (2). Direct value capture instruments that capturing all or some increment of real property value. Property tax and betterment charge are sample of instruments in this category. (3). Indirect value capture instruments that do not capture the increment value for its own sake, but in order to generate revenue for public services. This instrument is more pragmatic and less ideological than direct instruments. That is why; recently more and more local governments prefer to adopt this type of instruments. See Alterman (2012)

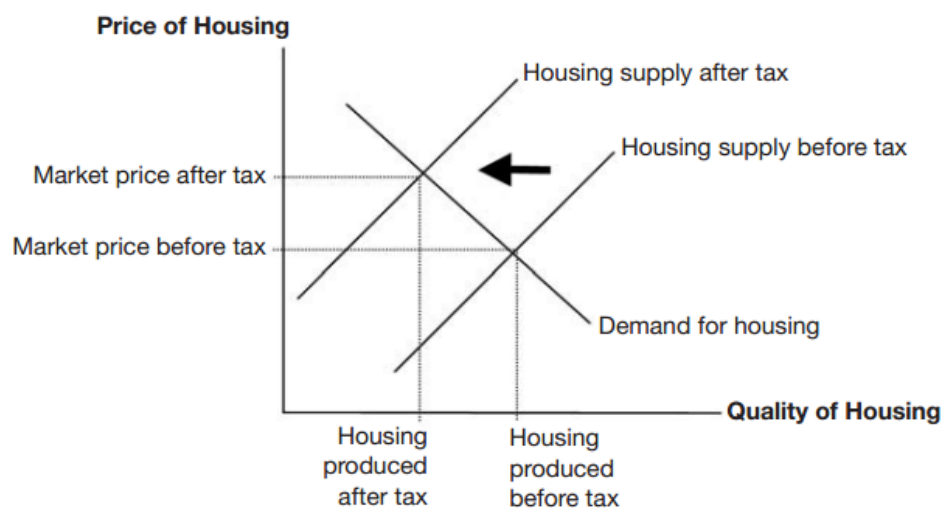
2.3 Economic impacts of inclusionary housing to developers

Inclusionary housing requires strong marketplace where there is must enough demand for high income residential (Mallach, 2010). This is to enable developers gain profits from selling high-income housing units in order to cross-subsidize producing of affordable units. In this case, developers should be able to design such projects that can meet the terms without materially reduce the economic viability of the projects. Calavita and Mallach (2010a) bring an experience in Ireland which shows developer's concern about profit which raises opposition to affordable housing. Developers argue that provision of affordable housing could reduce their supply of private housing as well as increase the production costs.

2.3.1 Effects of inclusionary programs on production and price commercial housing market

According to standard economic theory, inclusionary housing works in a similar way with a tax on housing construction. It passes the burden on to buyers, producers, and land owners. More specific, it decreases the supply of housing at every price; increase its price, and slow housing construction. The more units are sold at low price, the more cost of development increases. To compensate it, developers must raise the price on commercial units. As a result, the price of commercial housing rises and it leads to declining in the production of such housing (see Figure 2). However, not much exact studies have done regarding the effects of inclusionary housing on housing prices and starts (Bento, Lowe, et al., 2009).

Figure 2 The economic effects of inclusionary housing



Source : Bento, et al. 2009. Housing market effects of inclusionary zoning. *Cityscape: A journal of policy development and research*. Vol. 11, Number 2. U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Bento, Lowe, et al. (2009) conducted study in California, USA on the economic effect of inclusionary housing programs during the period from 1988-2005. Its main finding suggests that inclusionary housing programs had significant effects on housing market in California during that period of time. Commercial housing price in cities that implemented inclusionary housing increased faster than in cities that did not adopt the policy. The effects were greater in higher priced housing market than in lower priced market. This finding indicates that developers respond to inclusionary requirements by passing the increase in production costs on to housing buyers particularly buyers in higher priced housing markets.

In opposite, a study conducted by Borrero and Morales (2007) in Bogota, Colombia found that the implementation of *Participación en plusvalías* (charges on undeveloped land) in form of 20% of social housing obligation plus other obligations, create a tendency that the land price is going down which then pressure land owners to sell their land as quickly as possible. This is because the charges will be capitalized in the price of land, thus it is the land owner who will absorb it.

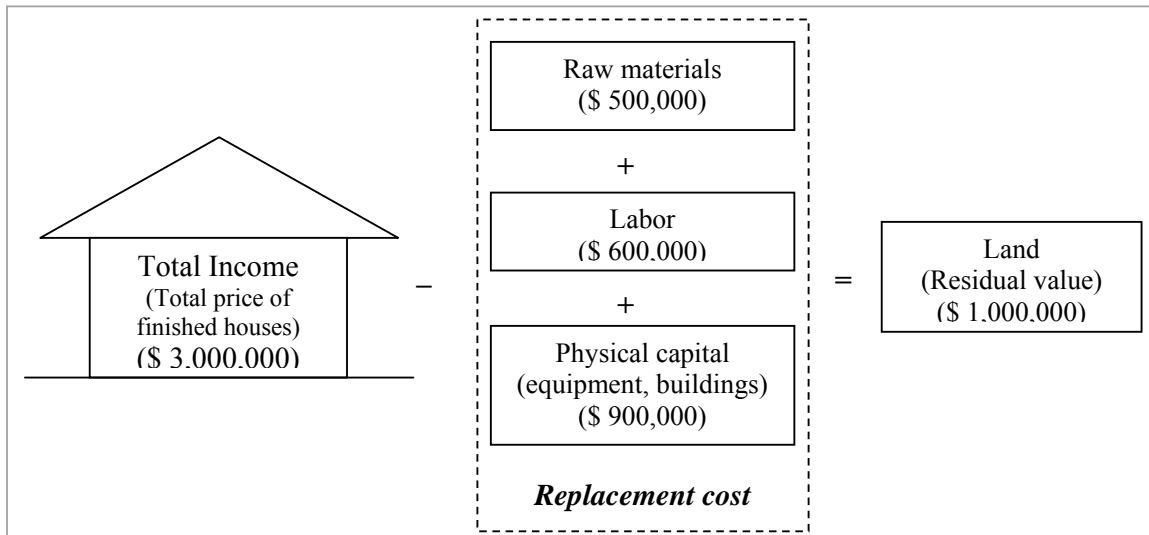
Other finding from Bento, Lowe, et al. (2009) research is on the size of commercial housing units. In cities that adopted the program, the housing size for commercial units increased more slowly than in the cities that did not implement inclusionary housing. The decreasing in units' size is likely to happen in less expensive commercial houses.

In addition, a study conducted by Schuetz, Meltzer, et al. (2011) in suburban Boston and San Francisco area in the U.S. suggests that in both areas, inclusionary housing programs contribute to the increasing of housing price during the period of regional price house appreciation, but in San Francisco area, the price decrease during cooler regional market.

2.3.2 Considering residual value of land

In every production process, four production factors have to be considered: land, labor, capital, and raw materials which should be paid to get finished product (Geltner and Miller, 2001). The last three factors are the mobile factors which have possibilities to substitute regarding the price. On the contrary, land is immobile and cannot be substituted. Thus, the incomes generated subtracted by the cost of three mobile factors will determine on what land price that developers are still able to gain profit. In this concept, the land price sees as the residual value of land. Developers understand that the obligation to produce affordable housing units may reduce their profit margins. Consequently, wherever possible they will seek a reduction in land costs (Calavita and Mallach 2009).

Figure 3 Illustration of residual land value



Source: Summarized by author

Calavita and Mallach (2010c) acknowledge that dependency of inclusionary housing on market in seeking a substantial surplus is ultimately important to be considered. Thus, in a weak market setting where land has less effective value, the cost of production might exceed its finished market value. This is the case of many older U.S. cities such as Cleveland and St. Louis. In the intermediate case, where the surplus is small, developers will build only where land costs remain low. On the contrary, inclusionary housing becomes most effective in strong market environment.

Considering findings and arguments by scholars regarding economic impacts of inclusionary housing regulation, it can be concluded that in order to comply with the inclusionary obligations, developers will react by passing the cost to the housing price and/or take it from the profit gained in residual value of land.

2.4 Contribution to the production of affordable housing

Calavita and Mallach (2010c) admit that a lot of evidence shows the significant contribution of inclusionary housing programs in provision of affordable housing. In England, Section 106 planning gain contributes for over half of the affordable housing production. In Ireland, Part V was counted fulfil nearly one-third of the social and affordable housing. In the United States, the data is less reliable. However, since inclusionary housing has been widely implementing over decades in this country, it can be assumed that the program contributes to greater share of affordable housing. Yet, in developing countries, for instance in Malaysia, inclusionary housing seems has not yet given a significant contribution to the provision of affordable housing (see Box 4).

Box 4 Production of affordable housing in Malaysia

The inclusionary housing concept in Malaysia adopted under the Fourth Plan (a series of five year economic plan) in 1981. It is imposed a minimum 30 percent of affordable units on all commercial housing developments done by private developers. This quota was intended to be only a supplement to the public low-cost housing program conducted by the government. In fact, private developers were able to produce a large and growing share of low-cost housing (Mallach 2010).

During 2001-2005, the Eight Malaysia Plan targeted private developers to build 17 percent of low-cost housing goal which responsibility to achieve at least 49 percent of the target. Impressively, they succeed to produce more than double the amount targeted, in contrast to public housing production by the public sector which achieved less than half of its target (Mallach 2010).

However, to be compared with total amount of housing produced by private developers, production of low-cost units through inclusionary housing is only represented 14 percent which still far from 30 percent minimum legal requirement. Mallach (2010) explains that this condition indicates developers' difficulties particularly in the areas where the demand is grown weak. The lack of demand is also a result of government's *bumiputra*-preferences policies which require developers to sell their affordable units to the indigenous Malay majority rather than to a non-Malay buyer.

Recognizing those issues, the quota system is being reviewed and modified partially to the production of a higher price and higher quality low- and middle- cost unit which according to will still be sold below market price.

Based on the evidence above, particularly in Malaysia case, it must be recognize that there seems to be significant constraints on inclusionary housing programs. Calavita and Mallach (2010c) indicate that those constraints often come from the inclusionary housing itself. The portion of mandatory requirement is sometimes too low and it sets as minimum requirement, while in practice it usually almost becomes the maximum. Size and types of the projects that subject to requirement is also affects the result. Few U.S. communities want to adopt the requirement to all new developments, while some others exempt small-scale projects and single-family subdivisions (Calavita and Mallach, 2010c).

The features of inclusionary housing programs also influence the economic impacts of the program. A voluntary-based inclusionary housing program, which very much depending on incentives might not have any economic impacts, while a mandatory-based inclusionary housing program might have significant undesirable economic effects since it requires many, deep, and long-term price reduction (Bento, Lowe, et al., 2009). Differences features of inclusionary housing programs which have been practising worldwide include:

1. Size and types of developments which are subject to inclusionary requirements
2. Percent of affordable units must be provided
3. Depth and duration of price reduction
4. Incentives or allowances offered in compensation

2.5 Addressing spatial segregation issue through inclusionary housing

Johnston et al. (1983) makes reference of spatial segregation to the residential separation of sub-groups within a wider population which mainly happen based on racial groups, ethnicity, religious beliefs or income status. Such area exists when there is imbalance numbers between one group members with another group members (van Kempen and Ozuckren 1998). This situation could exist at neighbourhood level, urban level, as well as between cities (van Kempen and Ozuckren 1998, Marcuse & van Kempen 2000).

Inclusionary housing has been seen as a means through which government try to address spatial segregation issues. One aspect considered to be important was the placement and integration of the affordable units on the site. From the experience of England in implementing Section 106, it is found that on-site provision of affordable units were able to promote mixed communities by integrating commercial and affordable units on one single site. The practice used there is by scattering affordable units among commercial units, a practice known in England as “pepper-potting” (Calavita and Mallach, 2010c). On the other hand, if affordable units are not provided on the same site as commercial units, developers might likely to deliver them in quite different areas. However, in general, study shows that general thought about Section S106 is that it was succeed to deliver affordable housing in more expensive area, an area that not normally associated with affordable housing (Monk, 2010). A similar success story can be found in the Netherlands experience (see Box 5).

Box 5 Social and tenure mix housing in the Netherlands

Housing policy in the Netherlands consider social and tenure mix as important characteristics in provision of affordable housing. It is commonly found a large-scale development contain significant percentage of social housing with combination of different forms of tenure and accommodation. A project of 75 units housing in Amsterdam built 14 private ownership units, 60 units of work units, social rental housing, commercial rental housing and one large unit for a dozen people living communally (Mallach, 2010).

This approach has been placed in 2008 with the enactment of a new spatial planning law which allows municipalities to require a percentage of land in new developments be set aside for social rental housing, housing for sale at below-market price, or both types. According to this law, the municipality can specify the number of affordable units required as well as their location within the development (Mallach 2010).

Conversely, it is not the case in Bogota, Colombia, one of city with high level of segregation. The weak legal framework creates trade-off between pursuing social integration and achieving the affordable housing production target (see Box 6). If the social integration is measure in terms of integrating commercial and affordable housing units on the same site and in the same areas, then it can be suggested that policy is making a significant contribution to this goal (Calavita and Mallach, 2010c).

Box 6 Social inclusion versus production of affordable housing: A trade-off in the Bogota, Colombia

Inclusionary housing in Colombia is established under the comprehensive national reform legislation for urban development known as Law 388 of 1997. Based on the law, the City of Bogota requires 20 percent of units built in the more developed and planned sectors of the city be social housing and larger percentage built in peripheral sectors be social housing (Calavita, et al. 2010, Mallach 2010). In 2007, the minimum requirement was raised to 25 percent by the national government.

However, the City of Bogota gives a relaxation for developers who have development particularly in expensive areas of the city, to pay in lieu by substituting land in less expensive areas (Mallach 2010). This shows a tendency of trade-off between the goals of social inclusion and affordable housing production. Bogota as one of highly segregated cities, have to sacrifice the social inclusion goal due to its housing crisis (Mallach 2010).

However, in an extreme case like in South Africa, the idea of integrating commercial and affordable housing units on the same site and in the same area might not work at all (see Box 7). Ideology and political history of this country still strongly influences the inclusionary housing practice in pursuing the social integration goal.

Box 7 Integrating the poor in South African cities

After the apartheid period in 1994, integrating the poor in the city becomes a main agenda of housing policy themes in South Africa. This also means integrating non-whites in former 'white' cities. The Housing White Paper (HWP) 1994 and Housing Act (1997) were established to address the problems of previous housing delivery system that ignored the location aspect for the poor (Adebayo 2010). However, according to the Housing Department (2004), this first policy failure in extending existing housing areas, often on the urban periphery, thereby achieving limited integration.

In 2004, the second policy, the Breaking New Ground (BNG) was established. One of the main programmes formulated was inclusionary housing policy which responds to the call of the new policy to address income integration objective in new housing development. This is done through the development of a certain portion lower income housing within or adjacent to higher income developments, for rental or ownership type of tenure (Adebayo 2010).

However, the private developers do not react to this policy. They argue that inclusion of low income housing in high-end developments would bring down the value of adjacent properties because of the historical barriers among social economical classes in South Africa (Adebayo 2010). Moreover, the Housing Department seems heavy-handed in its requirements which left the developers obey the policy. Thus, according to Adebayo (2010) the developments of mixed income housing only happens on government land, where developers have limited access to it depends on their commitment to deliver a proportion of low income housing.

2.6 Conceptual Framework

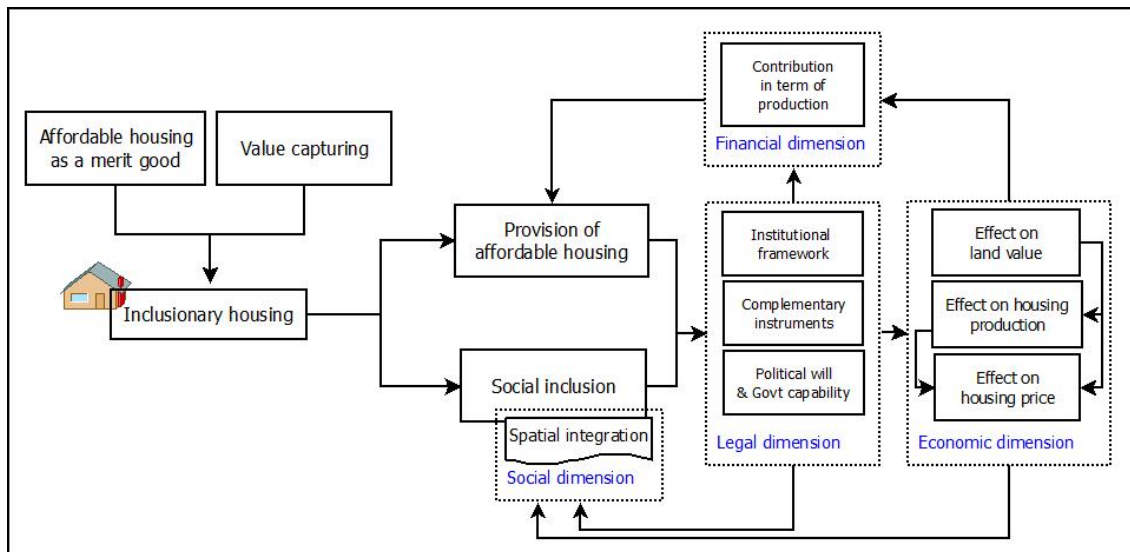
In this section, the concepts summarized from literatures are linked to give a clear causal relationship that is used in this research (see Figure 4). The concept of merit goods gives insight that affordable housing should be one of the commodities that fall into this category where its provision should be ensured by the government. However, many traditional financial instruments are stuck in financing affordable housing, especially during economy crisis. Therefore, concept of value capturing the increment of land value can be an alternative solution. One of land value capture instruments that are widely used is inclusionary housing where government imposes the obligation to produce affordable units on development of private housing by developers.

There are two main objectives tries to achieve through inclusionary housing: (1) Provision of affordable housing, and (2) Creation of social inclusion. The achievement of these two objectives is determined by establishment of legal basis which required institutional framework, complementary instruments as benefits for developers, and political will as well as government capability. The creation of legal basis and its features will enable government to recoup the increment of land value obtained by developers and to encourage the social inclusion through spatial integration. However, in order to be able to mobilize the increment for provision of inclusionary units, it is important to consider the economic effect of the

regulation on land value, housing production and housing price. Not only to address the economic feasibility for developers to include affordable housing in their private housing development, but also the feasibility to create a mix-residential in pursuing the social integration objective. In addition, the indicators from economic dimension influence the financial dimension particularly the contribution of the inclusionary regulation in production of affordable housing.

Those four dimensions explained above guide this research in answering the main research question as mention in Section 1.4.

Figure 4 Conceptual framework



Source: Summarized by author

Chapter 3: Research design and methods

This research is an explanatory study which tries to assess the implementation of inclusionary housing regulation in Indonesia. A qualitative approach is used in order to have richer understanding and more insights regarding the aim of the research.

This chapter starts with operationalisation of the conceptual framework into variables and indicators and how they are measured in Section 3.1. Data collection methods which consist of primary and secondary data are described in Section 3.2 as well as the selection of respondents. Section 3.3 explains the criteria used in the selection of inclusionary housing project in study area. The validity and reliability of data are clarified in Section 3.4 followed by Section 3.5 where author describes data analysis methods.

3.1 Operationalisation: Variables and indicators

In this section, the conceptual framework is translated into empirical measurable variables and indicators. They are derived from each specific research sub-questions and are linked to different instruments which will be used to collect the data on the ground (Table 1).

Table 1 Operationalisation Table

Dimension and Research sub-questions	Variables	Indicators	Analysis Method	Data source
<i>Legal dimension</i>				
1. Can local government impose the obligation to apply inclusionary housing to developers?	Features of obligation	<ol style="list-style-type: none"> 1. Creation and termination of obligation 2. Basis of obligation 3. Interpersonal relation 4. Existence of sanctions 5. In line with general moral principles 6. The fulfilment of the obligation 	<ul style="list-style-type: none"> • Descriptive analysis; describing the relevant legislation, policy specifications, and implementation procedures • Coding and memoing the interview transcripts 	<p>Primary data (interview):</p> <ol style="list-style-type: none"> 1. Official of Housing Ministry (Kementerian Perumahan Rakyat) 2. Official of Local Development Planning Agency (Bappeda) 3. Official of Spatial and Building Office (Dinas Tata Ruang dan Bangunan) 4. Housing and Planning experts 5. Developers <p>Secondary data:</p> <ol style="list-style-type: none"> 1. 1:3:6 Regulation 2. Local regulation on building permit procedure 3. Articles published by Housing Ministry
	Legal framework	<ol style="list-style-type: none"> 1. Hierarchy of the regulation 2. Institution in charge 3. Formulation of specific regulation at local level 		
	Complementary instruments	<ol style="list-style-type: none"> 1. Availability of cost offsets & incentives 2. Availability of rezoning regulation 		
	Political will and capability of local government	<ol style="list-style-type: none"> 1. Availability of capable human resources 2. Land value and housing price monitoring mechanism 3. Transparency 4. Level of trust 		
<i>Economic dimension</i>				
2. What are the economic impacts, in term of housing price and production as well as residual land value, of inclusionary housing to	Production of commercial housing	Changes in the amount of units produced	<ul style="list-style-type: none"> • Quantitative analysis • Coding and memoing the interview transcripts 	<p>Primary data (interview):</p> <ol style="list-style-type: none"> 1. Official of Housing Ministry (Kementerian Perumahan

Dimension and Research sub-questions	Variables	Indicators	Analysis Method	Data source
developers?	Price of commercial housing	Changes in the price of unit produced	<ul style="list-style-type: none"> Quantitative analysis Coding and memoing the interview transcripts 	Rakyat) 2. Official of Local Development Planning Agency (Bappeda) 3. Official of Spatial and Building Office 4. Housing and Planning experts 5. Developers Secondary data: 1. Housing production by type by developers association (REI) from 1992-2005 2. Cost and revenue data of housing project development by selected developer 3. Articles from newspapers and magazines 4. Land use map from Google Map
	Residual land value	Adequate residual land value	<ul style="list-style-type: none"> Residual land value analysis (calculating residual land value of selected case using the static model) Map analysis to show changing in land use at the selected case 	
Financial dimension				
3. How does the result of implementing inclusionary housing policy in production of affordable housing?	Contribution of affordable units from inclusionary housing	1. Proportion of housing production by category 2. Production and proportion of each housing category which came from inclusionary housing projects 3. Trend of basic housing production from inclusionary projects by year	<ul style="list-style-type: none"> Comparing housing production by developers between projects with inclusionary units and without inclusionary units Coding and memoing the interview transcripts 	Primary data (interview): 1. Official of Housing Ministry (Kementerian Perumahan Rakyat) 2. Official of Local Development Planning Agency (Bappeda) 3. Official of Spatial and Building Office 4. Housing and Planning experts 5. Developers Secondary data: 1. Housing production by developers association (REI) from 1992-2005 2. Articles from newspapers and magazines
Social dimension				
4. Is inclusionary housing able to address spatial segregation issue?	Trend on the ground	Mixed of different income level in one site on the same area (different income levels are spatially integrated)	<ul style="list-style-type: none"> Coding and memoing the interview transcripts Site plan analysis from selected case Observation 	Primary data (interview): 1. Official of Housing Ministry (Kementerian Perumahan Rakyat) 2. Official of Local

Dimension and Research sub-questions	Variables	Indicators	Analysis Method	Data source
			<ul style="list-style-type: none"> Analysing articles, interviews, news from newspapers and magazines 	Development Planning Agency (Bappeda) 3. Official of Spatial and Building Office 4. Housing and Planning experts 5. Developers Secondary data <ul style="list-style-type: none"> Site plan of selected project Articles in newspapers and magazines
	Trend in the policy	Trade-off between production and location	<ul style="list-style-type: none"> Coding and memoing the interview transcripts Policy analysis (comparing the 1:3:6 law with 1:2:3 law) Analysing articles, news, interviews from newspapers, magazines 	Primary data (interview): <ol style="list-style-type: none"> Official of Housing Ministry (Kementerian Perumahan Rakyat) Official of Local Development Planning Agency (Bappeda) Official of Spatial and Building Office Housing and Planning experts Secondary data <ul style="list-style-type: none"> The 1:3:6 law The 1:2:3 law Other related legislations Newspapers/magazines

Source: Author

3.2 Data collection methods

The approach used in this research is the qualitative approach using combination of data collection methods depend on type of data that will be collected.

3.2.1 Primary data collection

Primary data is raw data from the original research that is has not been analysed or processed. Normally, primary data comes from transcripts of interviews and surveys, observations or empirical testing. In this research, author uses primary data collected from interviews and observations.

The research attempt to generate in-depth information from key informants based on their knowledge, opinions, perceptions and experiences. Thus, this study uses semi-structured interview⁶ as a qualitative research technique to explore perspectives of key informants

⁶ There are three common types of interviews used by field researchers: (1). Unstructured or informal interview that often similar to conversations, (2). Structured interview where interviewer asks questions in a specific order precisely and keeps the respondent on track, (3). Semi-structured interview which is more flexible than the structured one. The interviewer uses an interview guide with specific questions organized by topics, but not necessarily asked in a specific order.

regarding implementation of inclusionary housing regulation (details of interview guidance are shown in Annex 2 and 3). The selection criteria were defined based on expertise, capacity, capability and responsibilities in the implementation of inclusionary housing program. List of key informants is shown in Annex 4. The interview conducted in *Bahasa Indonesia* in order to enable interviewer to develop the questions and to dig more in-depth information from key informants. However, a few terms in English are difficult to translate which makes the interviewee sometimes misunderstood the question.

For observations, the author acted as a nonparticipant observer⁷ who simply observed the site of inclusionary projects. This type of observation was chosen because its objective was to triangulate the data from developers with the fact on the ground regarding the integration of commercial and affordable housing units on site. The limitation of time is also the reason for choosing this type of observation.

3.2.2 Secondary data collection

In this research, the secondary data is needed to develop interview guideline and to complement the analysis of primary data. This type of data was obtained from:

- Statistics office (BPS Kota Makassar)
- Local Development Planning Agency (*Badan Perencanaan Pembangunan Daerah - Bappeda*)
- Spatial Planning and Building Agency (*Dinas Tata Ruang dan Bangunan*)
- Administration and Permit Services Office (*Kantor Pelayanan Administrasi Perizinan*)
- Indonesian Real Estate Association (REI)
- The selected developer: PT. Baruga Asrinusa Development
- People in the neighbourhood area of the selected inclusionary housing project
- District office (*Kantor Camat*) of the selected inclusionary housing project's location
- Magazine/newspapers

Both primary and secondary data was collected through a four weeks fieldwork as part of the whole thesis schedule (see Annex 1).

3.4 Selection of inclusionary housing project and study location

For answering economic and financial issues of the research, author selected a project which meets the criteria below:

1. Medium to large developers
2. Specialized on middle- and high-income residential
3. Preferably implementing inclusionary housing 1:3:6 ratio on-site
4. Doing development close to periphery area
5. Small projects but not less than 100 housing units
6. Build and sell the units within short time (maximum two years)
7. Not including development close to changes in the law

⁷ Bailey (2006) defines the terms *participant* and *nonparticipant* observations to indicate to what degree the observer actively participate in the field setting. The *participant observer* takes part in daily events while observing; the *nonparticipant* is simply observes.

The study location which is Makassar City is chosen because its property sector is growing due to the stable economic growth. During last five years, the economic growth of Makassar is above the national economic growth. Purchasing power of the people for housing has increased. According to a survey conducted in 2012 by a research institute, AC Nielsen, Makassar gets the second place for attracting property investments after Jakarta (Tribun Timur, 2013). Therefore, more and more national developers invest and develop big scale housing projects in Makassar. As the property sector grows, the higher the increment of land value could be mobilized by the local government, especially for provision of affordable housing.

3.5 Validity and reliability

The validity of data collected in this research is ensured by applying the triangulation method where researcher interviewed different category of key informants: local government officials, developers and experts (see Annex 4), to measure the same variables and indicators. Researcher also uses both primary and secondary data (see Section 3.2) in order to complementing and supporting each other findings. Alternative interpretations were sought in literatures, local newspapers, and magazines in order to gain insights about the findings. The researcher also re-checked the preliminary findings and interpretations of data with the key informants.

Moreover, the reliability of the data is ensured by following particular procedural in selection of key informants. Government officials were reached through official procedure established by Makassar Local Government for doing research in Makassar area. They are assigned as representative of their head office. However, the whole procedural process took almost two weeks before the appointments were able to set up.

To reach the developers, the researcher contacted the Chairman of the biggest developer association in Indonesia, REI (Real Estate Indonesia) for South Sulawesi Province and using snowball sampling system, the researcher was able to find the representative project to study further. Yet, due to limitation of fieldwork schedule, the researcher was only able to interview two developers.

In selecting the experts, the researcher contacted a related program in Faculty of Technique of Hasanuddin University, in this case Architecture Program, and had recommendation to interview the senior lecturers in the program who also have experiences in conceptualizing the urban planning of Makassar.

The interviews were done using interview guidelines (see Annex 2 and 3) which were pre-tested before the fieldwork conducted in order to ensure the relevancy of the questions. A recorder device was used complemented with notes taking by the interviewee. At the beginning of interview session, the interviewee asked permission to record and to quote the result for academic purpose. During the interview, the interviewee kept the interview neutral and balance.

3.6 Data analysis methods

3.6.1 Qualitative data analysis

Data collected from semi-structured interviews with key informants are analysed through these following steps:

1. Transcribing and translation

In this phase, the interview results are transcribed and translated into English.

2. Coding

During this phase the researcher repeatedly reads the data and codes as much as possible (grouping of data). Similar questions that were asked to different key informants were grouped together to recognize the pattern. Meanwhile, the specific questions regarding specific responsibilities of key informants were labelled separately.

3. Memoing

The patterns recognized through coding were analysed by writing memos in order to get insights that reflected by the data. Researcher starts asking questions, posing hypotheses and seeking answers grounded in the data.

Data collected from secondary sources that include legislations documents, statistics, reports, articles from newspapers and magazines and academic literatures are analyzed through archival research technique which then written down descriptively. While data in form of map to identify the spatial distribution of houses in inclusionary projects are analyzed by overlaying using mapping and CAD software.

3.6.2 Quantitative data analysis

The economic feasibility of inclusionary project is analysed using static land residual value analyses. The data used in this calculation is collected from PT. Baruga Asrinusa Development as one of developers that implemented the balanced residential regulation. The calculation is done for the first four phases of the project which was done in 1997, 2000, 2005, and 2007. All values are transformed to current values then converted to international currency, US Dollars (USD). The residual land value calculation indicates the extent of developer's profitability to comply with the provision of inclusionary units.

Quantitative data of housing production by developers during period 1993-2003 is analyzed using simple mathematical model. First of all, it is grouped based on housing types then the figures were sum up for each category in order to get the proportion of housing production per category. For each category, the projects are grouped between ones with inclusionary units and ones without inclusionary units. This is resulted in composition of units produced by inclusionary projects and non-inclusionary projects. Furthermore, housing production through inclusionary projects is broken down into production per year to show the production trend year by year.

Chapter 4: Presentation of data and analysis

This chapter presents the findings from the fieldwork that was done by the author based on research design and method that explains in Chapter 3. Section 4.1 introduces the balanced residential ratio 1:3:6 regulation (*Lingkungan Hunian Berimbang – LHB*) with all the features of obligation described comprehensively. Section 4.2 gives a brief overview about Makassar city in order to give a context to this research. The role of Makassar Local Government (*Pemerintah Kota Makassar*) in imposing the obligation also presented in this section. Section 4.3. provides analysis of the economic impacts of *LHB 1:3:6* on production and price of commercial unit housing in Makassar and also presents the calculation of residual land value from selected inclusionary housing project. In Section 4.4. the author analyses the extent of the 1:3:6 law in the production of very basic houses in Makassar. The last section 4.5 provides findings and analysis of the fact on the ground and the tendency in policy regarding how the 1:3:6 law pursued the spatially integrated society.

4.1 Balanced Residential Ratio 1:3:6 regulation (*LHB 1:3:6*)

Housing regulation in Indonesia is dominated by the central government. Issues of housing regulation are closely related to providing homes for people with low incomes as opposed to the construction of luxury housing and apartments. Large scale development should be built basic-, medium-, and luxurious houses in balance. This was firstly regulated in 1992 through a joint decree of Minister of Intern Affairs, Minister of Public Works and Minister of Housing (*Surat Keputusan Bersama 3 Menteri*) number 648-384 of 1992, number 739/KPTS/1992, and number 09/KPTS/1992 respectively. This regulation set up a ratio of 1:3:6, means that every new residential development by a private developer has to reflect the 1:3:6 ratio (1 high-income, 3 middle-income and 6 low-income units). Then in 1995, a more detailed regulation was set up through the Housing Ministry Decree number 04/KPTS/BKP4N/1995.

Actually the balanced residential principal had been implementing far before the 1:3:6 regulation introduced. In the early 1980s to early 1990s, housing developments built by government or by private developers for civil servants had reflected a mix-society where officials from the highest structural level are placed together with the civil servants from the lower level based on certain housing composition (Yuniarto, 2011). However, the development trend embedded the social prestige on a residential site which then became one of people preference of buying a house. This trend boosted the housing price and disregard affordable housing for low income households.

“Big developers tend to build luxurious housing which then creates exclusivity. Thus, in essentials, this regulation was introduced in order to alleviate the gap between the haves and the poor by imposing the obligation to developers to build luxurious, middle, and basic houses in a balanced ratio.” (Ringgy Masuin - Head of Infrastructure Compatibility Sub Division (ad interim), Deputy Assistant of Regional Infrastructure Provision, Ministry of Housing of Republic of Indonesia)

As emphasized by Hazaddin (2011), the balanced residential regulation intent on creating healthy, secured, harmonious and well-ordered residential and settlement consisting of

various people with various professions, economy class, and social status based on togetherness and solidarity values and to avoid exclusivity which could lead to social conflict. Those purposes are expected to be achieved through a mix- and balanced residential development following the 1:3:6 ratio. Furthermore, this regulation also introduced the opportunity to persuade a cross-subsidy scheme between the haves and the have not.

4.1.1 The types of housing and the criteria

Article 1 of the 1992' join decree mentioned that the development of residential and settlement are directed to create a balanced environment through a balanced ratio of three different housing types as shown in Table 2.

Table 2 Housing type and criteria in the join decree 1992

Type	Criteria
a. Basic House (Rumah Sederhana)	<ul style="list-style-type: none"> Parcel size 54 – 200 m² Maximum construction cost is equal with construction cost per m² that is applied to government housing class C⁸
b. Medium house (Rumah Menengah)	<ul style="list-style-type: none"> Parcel size 200 – 600 m² Maximum construction cost is within the range of construction cost per m² that is applied to government housing class C to A
c. Luxurious house (Rumah Mewah)	<ul style="list-style-type: none"> Parcel size 600 – 2,000 m² Maximum construction cost is above the construction cost per m² that is applied to government housing class A

Source: Summarized by author

The criteria of the three housing types above were formulated more detail in the decree of Housing Minister Number 04/KPTS/BKP4N/1995, year 1995 as summarized in Table 3 below.

Table 3 Housing types and criteria in the decree of Housing Minister 1995

Construction cost per m ²	Parcel size (m ²)		
	54 - 200	200 - 600	600 – 2000
≤ government housing class C	Basic house	Medium house	Luxurious house
within the range of government housing class C to A	Medium house	Medium house	Luxurious house
□ government housing class A	Luxurious house	Luxurious house	Luxurious house

Source: The decree of Housing Minister Number 04/KPTS/BKP4N/1995

⁸ Standard of construction cost of government housing is regulated in a construction cost guidelines for development of government buildings/offices and government housing which is periodically published by Housing Directorate of Public Works Ministry.

4.1.2 The obligors and the obligee

The obligation of building the balanced residential is imposed to a housing corporation (developer) or in a corporate form with other developers (consortium) or with the National Housing and Urban Development Corporation (PERUMNAS). Thus, this provision actually can solve developers' complain about the possibility of inclusionary units influencing the brand image of a residential (Hazaddin 2011, Kuswartojo 2011, Yuniarto 2011).

“If big developers insist to maintain their brand image or prestige, they could hand over the development of inclusionary units to smaller developers by creating a consortium. The thing is that they have to clearly state on their site plan that the project is a consortium project.”(Ringgy Masuin – Head of Infrastructure Compatibility Sub Division (ad interim), Deputy Assistant of Regional Infrastructure Provision, Ministry of Housing of Republic of Indonesia)

Regarding the obligee, Article 5 of the 1992' join decree points out that operational provision at local level will be further regulated by Governors and/or Mayors or Regents as needed. In addition, Article 3 Clausal 2 implicitly stated that this regulation is held by the head of the local government which could embed with the process of issuing location permit.

The 1995' decree regulates more detail regarding the implementation of balanced residential regulation. All required permits⁹ to establish a residential project have to declare the developer willingness to comply the balanced residential ratio requirements. In other words, before legalize the project site plan; the Mayor or the Regent has to check whether or not the site plan has adapted the balanced residential regulation. If it has not adapted the regulation yet, the site plan has to be modified.

Unfortunately, those articles are not fully understood by local governments so they do not reformulate or adapt it into local regulations. Hazaddin (2011) argued that this is probably because the local governments do not realized about the aim of the regulation in assisting local governments to provide affordable housing (see Section 4.2.2 for further explanation regarding the fact on the ground).

4.1.2 Composition

In principal, every housing development project or settlement project is obliged to fulfil the composition of luxurious houses: medium houses: basic houses by 1:3:6 ratio. Nevertheless, a housing project that only builds medium houses is obliged to build the basic houses for minimum twice amount of medium units built.

4.1.3 Location

Regarding the location of the balanced residential development, explicit requirements are regulated in the 1995 decree where in principal; all housing developments have to build the

⁹ There are three main permits that should be applied by developers: (1) Principal permit which allows developers to do a residential project, (2) Location permit which allows developers to build in a particular location, (3) Building permit which allows developers to start the construction inconformity with local building regulation. These three permits are signed by the Mayor or related institutions on behalf of the Mayor.

three types of houses in one continuous area inconformity with local spatial plan. Yet, there are some circumstances considered regarding scarcity of land in a municipality or regency as follow:

- a. If the project area ≥ 200 ha, to build in one continuous area is compulsory. However, if according to local spatial plan it is not feasible to do so, the development of basic houses can be done on different location but within the same municipality or regency;
- b. For the municipality with population more than 500,000 people and according to local spatial plan it is not feasible to build in one continuous area, the development of basic houses can be done at adjacent municipality or regency;

4.1.4 Incentives and sanctions

Implicitly, incentives are already mentioned in the 1992' join decree of three ministers. Article 2, Clausal 3 enables the obligors to get support for construction loan and to create cooperation with *Bank Tabungan Negara* (State Saving Bank) or other financial institutions.

In the other article which is Article 3 Clausal 2, statement regarding sanction is also mentioned implicitly. As mention earlier, the implementation of the regulation by local government could be embedded with the process of issuing location permit. In other words, local government is entitled to hold or to revoke a location permit if developers do not fulfill their obligation to build inclusionary units.

In the 1995' decree, the sanctions became explicitly stated. Developers who disobey the obligation or who do not modify their site plan as ordered will not guarantee new permits both for the same or new location. Furthermore, they can be prosecuted with imprisonment or pay a fine as well as revoke to the operational permit and have to comply provisions mentioned in Clause 36, 38, and 39 of Residential and Housing Legislation Number 4, Year 1992.¹⁰

However, sanctions that are mentioned above are considered has a weak legal basis because it was only produced at ministerial level. It needs a higher level of regulation in order to encourage implementation at the local level.

“Indeed, sanctions should be regulated in legislation or a local ordinance so it can be forced.”(Ringgy Masuin - Head of Infrastructure Compatibility Sub Division (ad interim), Deputy Assistant of Regional Infrastructure Provision, Ministry of Housing of Republic of Indonesia)

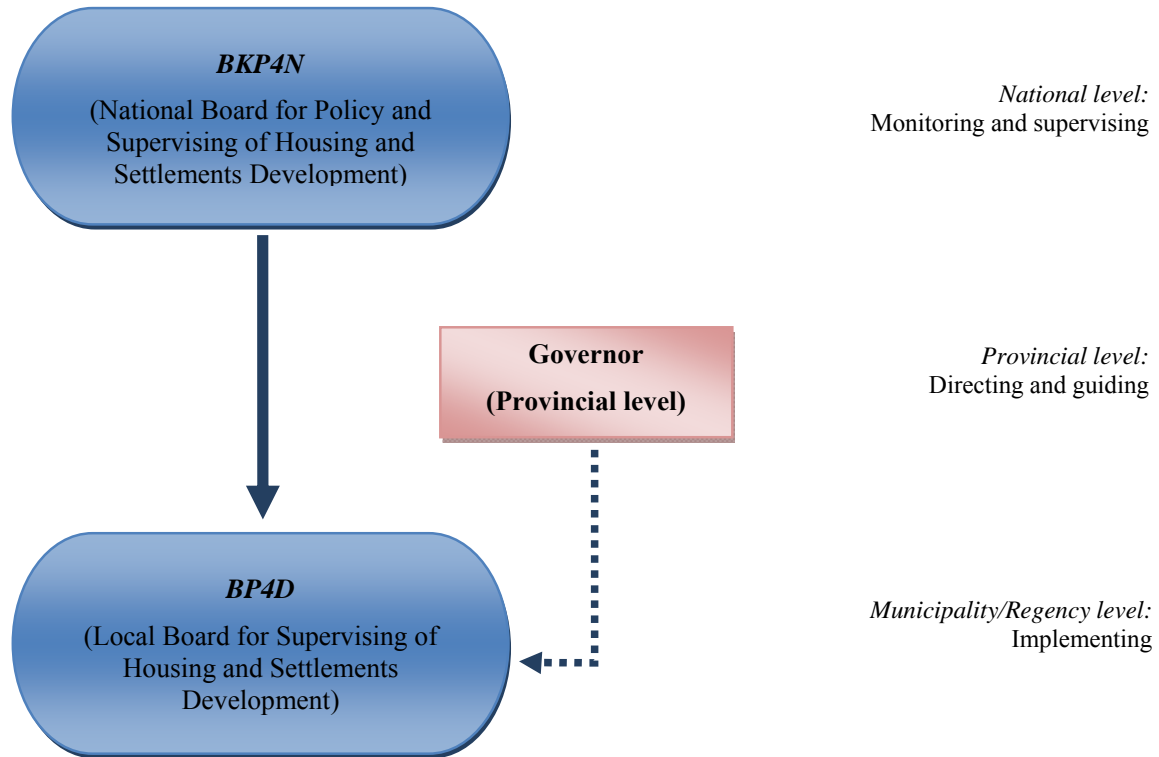
4.1.5 Monitoring and supervising

In the 1995' decree, monitoring and supervising mechanism of *LHB* 1:3:6 from national to local level are mentioned in Clausal 13. It says that at the national level, monitoring and supervising of balanced residential regulation is done by National Board for Policy and Supervising of Housing and Settlements Development (*Badan Kebijakan dan*

¹⁰ Legislation Number 4, year 1992 aimed to structure the development of residential and settlement area to fulfill housing as a basic need for people and to provide proper settlement based on principles of benefit, equity, equality, togetherness and tolerance as well as self-confidence, affordability and environment sustainability. Thus, every private or corporations who develop house or residential are obliged to comply with particular criteria. Clause 36, 38, and 39 explain sanctions regarding those who do not obey the law (see Republic of Indonesia Legislation Number 4 Year 1992 – *UU No. 4 tahun 1992*).

Pengendalian Pembangunan Perumahan dan Permukiman Nasional – BKP4N) on behalf of Ministry of Housing.¹¹ At the provincial level, the Governor is responsible for directing and guiding the Mayor or the Regents who also act as the Head of *BP4D* and responsible for implementing the balanced residential regulation (Figure 5).

Figure 5 Monitoring and supervising scheme of *LHB* 1:3:6



Source: Summarized by author

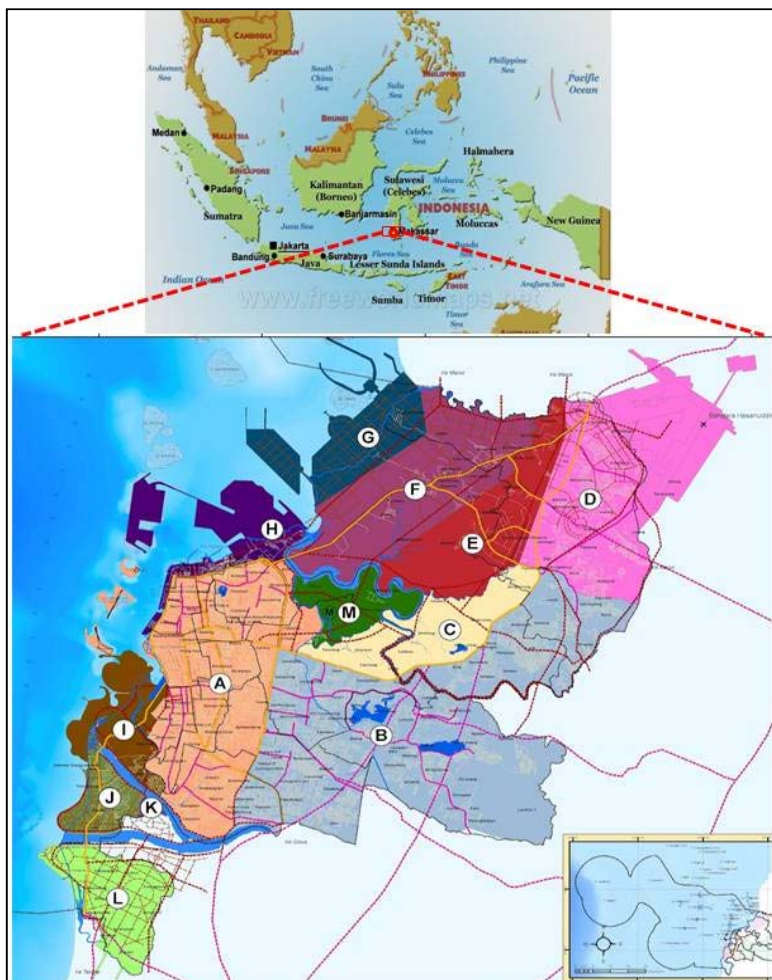
¹¹ *BKP4N* was established in 1994 based on Presidential Decree Number 37, Year 1994 (*Keppres No. 37 Tahun 1994*) to improve the responsibilities of the previous board, National Board for Housing Policy (*BKPN*) which was only limited in formulating policy and solving housing and settlement development problems. The decree added monitoring and supervising as new responsibilities of this board and changed its name to *BKP4N*. Its organisational structure was equipped with *BP4D* (Local Board for Supervising of Housing and Settlements Development) at the municipality/regency level which was expected to be able to identify all possibilities of developers' actions that could bring disadvantage to the public.

4.2 Imposing the balanced residential regulation: Lessons learnt from Makassar

4.2.1 Overview of Makassar Municipality

This research was conducted in Makassar, the capital of South Sulawesi Province and the largest city in Sulawesi Island (Figure 6). Established on 9 November 1607, Makassar is one of the oldest cities in Indonesia. Being strategically located at Makassar Strait, this city has been one of a main growth pole in Indonesia for decades especially for the eastern area. Its primary port, with regular domestic and international shipping connections, plays an important role for the growth of the city. Nowadays, more and more people come to invest and to expand their business, to continue their higher education, or to live there to earn a living.

Figure 6 Spatial Pattern of Makassar



Labels:

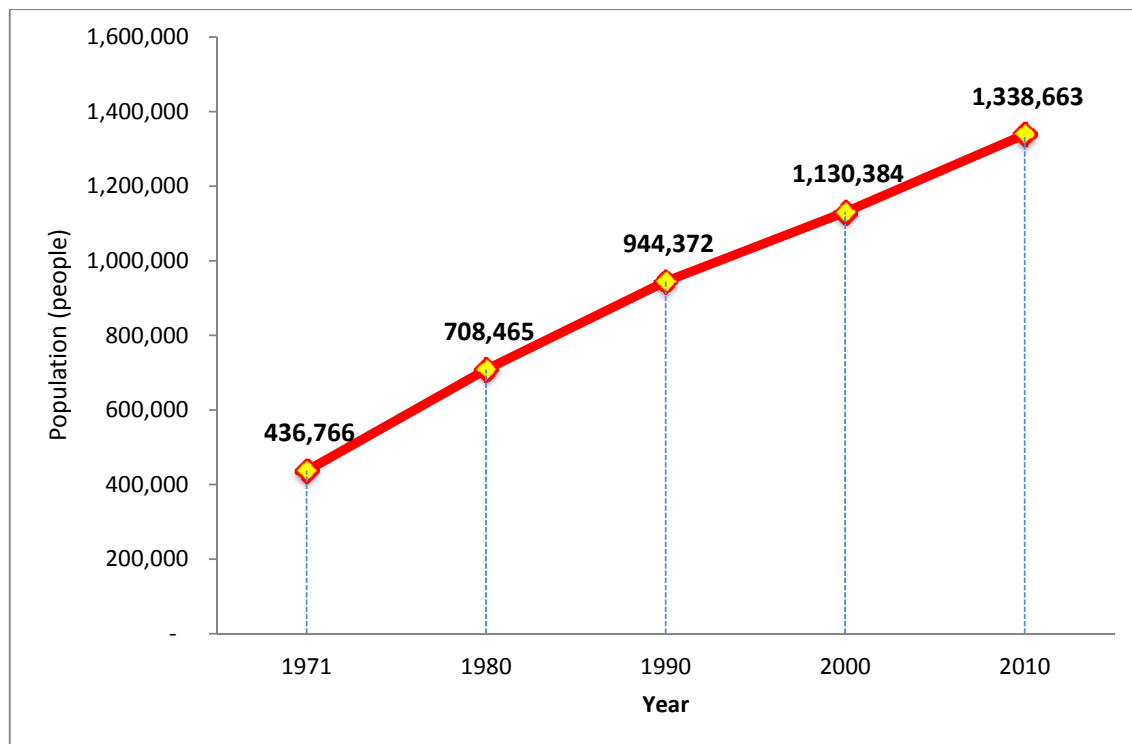
- A. City centre area
- B. Residential area
- C. University area
- D. Airport area
- E. Industrial area
- F. Warehouse area
- G. Maritime area
- H. Port area
- I. Global business area
- J. Tourism business area
- K. Cultural area
- L. Sport business area

Source: Makassar Urban Spatial Plan (*RTRW*) 2006

Based on Gross Regional Domestic Product (GRDP) accounting in year 2010, value of GRDP was 37,007 billion rupiahs (Makassar in Figures, 2012) or equal with 3.4 billion US Dollars at current price with GRDP per capita reached US\$ 1,063. Its economic growth is relatively high: 9.8% in 2010 which surpassed the national economic growth: 6.2%. The service sectors highly dominate Makassar's economy with approximately covers 50 per cent of GRDP (Makassar in Figures, 2012).

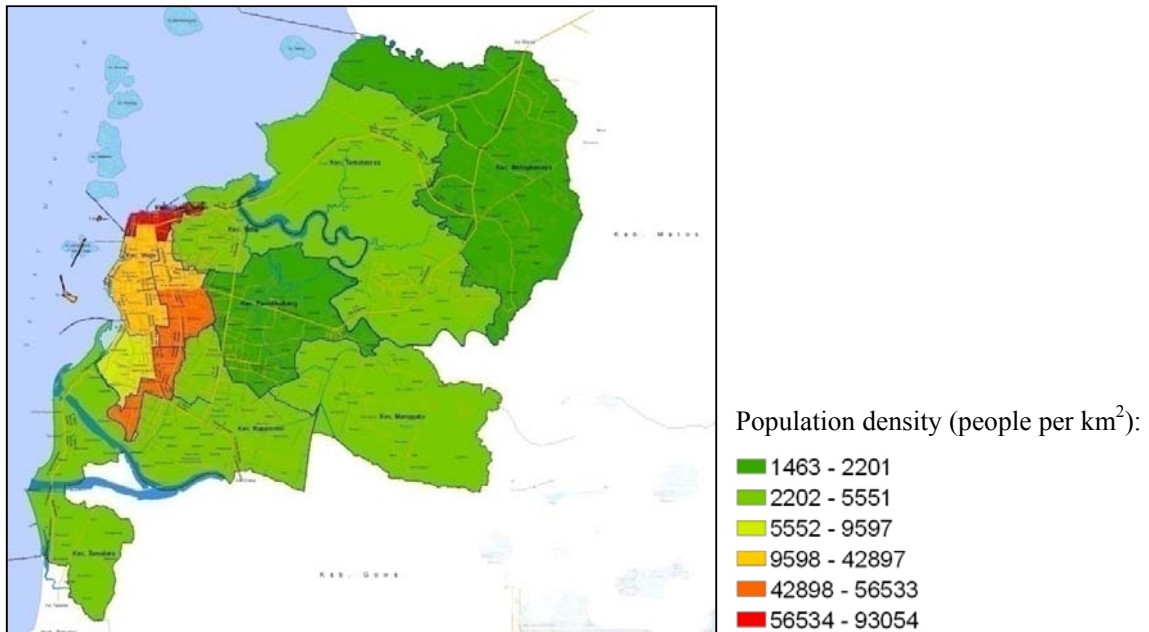
As the economic grows, the infrastructure and public services are developed further. Urbanisation then cannot be avoided. Within five decades, the population of Makassar has been grown from 436,777 people in 1971 to over 1.3 million people in 2010 (Figure 7). In 2011 the population density reached 7,620 people per square kilometre (*RTRW Kota Makassar 2006*, Makassar in Figures, 2012). The map of population distribution of Makassar (Figure 8) shows that the city centres area is the densest area which land uses are dominated by settlements (Figure 9).

Figure 7 Population of Makassar within five decades - 1971-2010



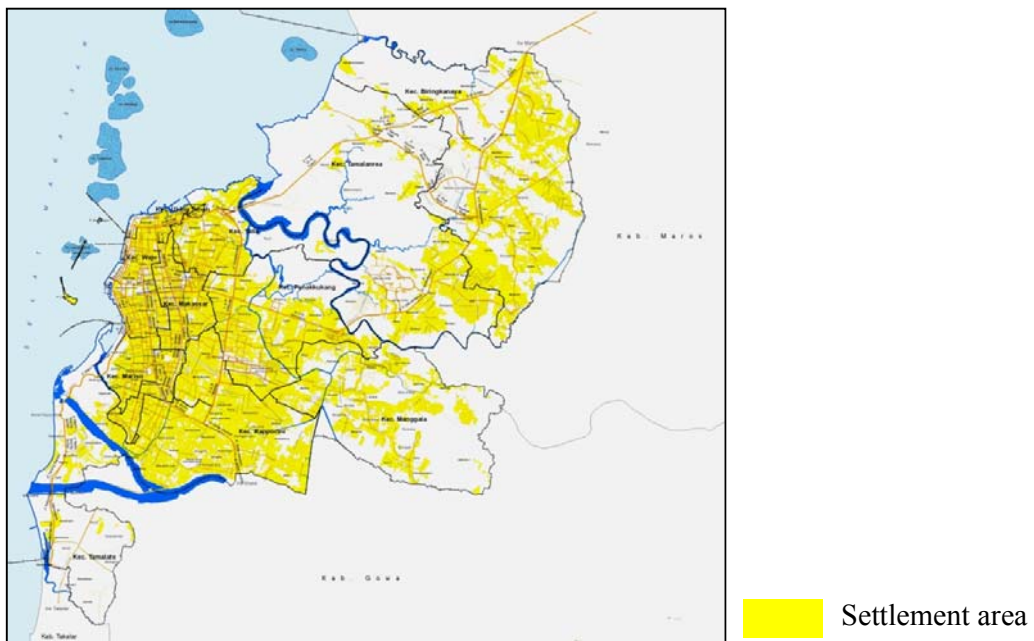
Source: Statistics Indonesia

Figure 8 Map of population density of Makassar



Source: Makassar Urban Spatial Plan (*RTRW*) 2006

Figure 9 Map of settlement area in Makassar



Source: Makassar Urban Spatial Plan (*RTRW*) 2006

4.2.2 Implementation of *LHB* 1:3:6 in Makassar

The decision-making at the national level mainly concerns on long-term and standing policy. At the regional and local levels, decision-making on human settlement development is made for location and site selection in relation with regional and urban development. The balanced residential regulation thus directed to be embedded by the local governments in the application process of housing and residential development permits as explained earlier in Section 4.1.2.

4.2.2.1 Legal basis and institutional framework

The joint decree of three ministers in 1992 regarding balanced residential ratio 1:3:6 regulation was established to be implemented at all municipalities and regencies in Indonesia. Makassar as one of municipality adopted the regulation directly. There were no specific regulations or Mayor decree or local ordinances created to give detail guidelines for developers to implement it.

“In 1990a there was Housing Office. But then it was merged with Public Works office. There was also Spatial and Building Office, but they do not responsible for implementation LHB 1:3:6. Now there is no specific institution that taking care about the regulation” (Ir. Darwis – Section Head of Infrastructure, Local Development Planning Agency, Makassar)

“Makassar directly adopted the LHB regulation with a consideration that it should be adjusted with local economic conditions. The implementation cannot be generalized.” (Ir. H.A. Ahmad Husain, M.Si. – Head of Urban Spatial Division, Spatial Planning and Building Agency, Makassar)

At the beginning it was embedded into the procedure and requirement for applying principal permit, location permit and building permit for developers. However, during period 1993 – 2003 the institutional framework at the local level was changed several times. It made the responsibility to enforce the regulation was ignored.

“In the 1992 decree, the obligation to build based on 1:3:6 ratio was included in the requirements to obtain development permits. It needs good cooperation and consistency among related institutions. Nonetheless, since the organisational structure was re-arranged, the responsibilities were difficult to trace” (Ir. Darwis – Section Head of Infrastructure, Local Development Planning Agency, Makassar)

On the opposite, developers and experts assess that in the local government does not enforce the regulation well.

“It is not implemented in Makassar because the local government and even Ministry of Housing do not pay attention on it. I criticized the Housing Ministry so they do not create regulations that do not consider facts on the ground. The biggest weakness of Kemenpera is that they do not have a database. If we asked,

how many houses in Makassar, how many housing production, they do not have the data. Nowadays, Menpera create regulations without good database, just arbitrary.” (Raymond Arfandy - Chairman of Real Estate Indonesia for South Sulawesi Province)

There are no analyses from local government, how many residents need public housing. If they have the data, local government should be able to project housing needs in Makassar and provide it according the projection. But it never happens. Housing provision is likely at people’s elbow who builds the houses by themselves and to developers. Local government seems off their responsibility.” (Prof. Dr. Ir. Ananto Yudono, M.Eng., Urban Planning Expert and Senior Lecturer at Hasanuddin University, Makassar)

In general, Makassar Local Government does not have political will to enforce the balanced residential regulation. Whereas it has been stated in 1992 decree and 1995 decree, that local government is the main implementer of the regulation thus they could adapt the regulation into their local ordinances.

4.2.2.2 Incentives and sanctions

Makassar Local Government does not establish an official regulations regarding balanced residential regulation. Thus, incentives and sanctions from local governments to developers do not standardize. The most common incentives given are fast-track permit and reduction on the amount of retribution that developers have to pay when they apply building permit. However, these incentives are not attractive enough for developers to comply the regulation.

In fact, local developers expect local government to create a specific regulation that encourage national scale or big developers which specialized in building luxurious houses to create a consortium with them and pass in the obligation to build basic houses to small or local developers. This kind of regulation can be good incentives to push production of affordable houses in Makassar.

“I have told Menpera that REI does not refuse the 1:3:6 regulation. But I do not agree if the executor is only one player which is the big developer. Let say if big developer is given permit to build 1000 units luxurious houses, it means that they are permitted to build 3000 medium units and 6000 basic units. This can make small developers collapse. Big developers have a good brand image already so they can easily sell their houses. Local government supposes to control it. If a big developer is given permit to build 1,000 luxurious houses, the 3000 medium units and 6000 basic units should be given to small developers. Local government can provide incentives such as fast-track permit, provision of basic infrastructure, etc. Local government should concern about it. They should create the role of the game.”(Raymond Arfandy, Chairman of Real Estate Indonesia for South Sulawesi Province)

Regarding the sanctions which have been explicitly stated in the 1992 and 1995 decree, until now there are no cases that developers who do not comply with their obligation are given the sanctions.

4.2.2.3 Monitoring and supervising mechanism (tambahin)

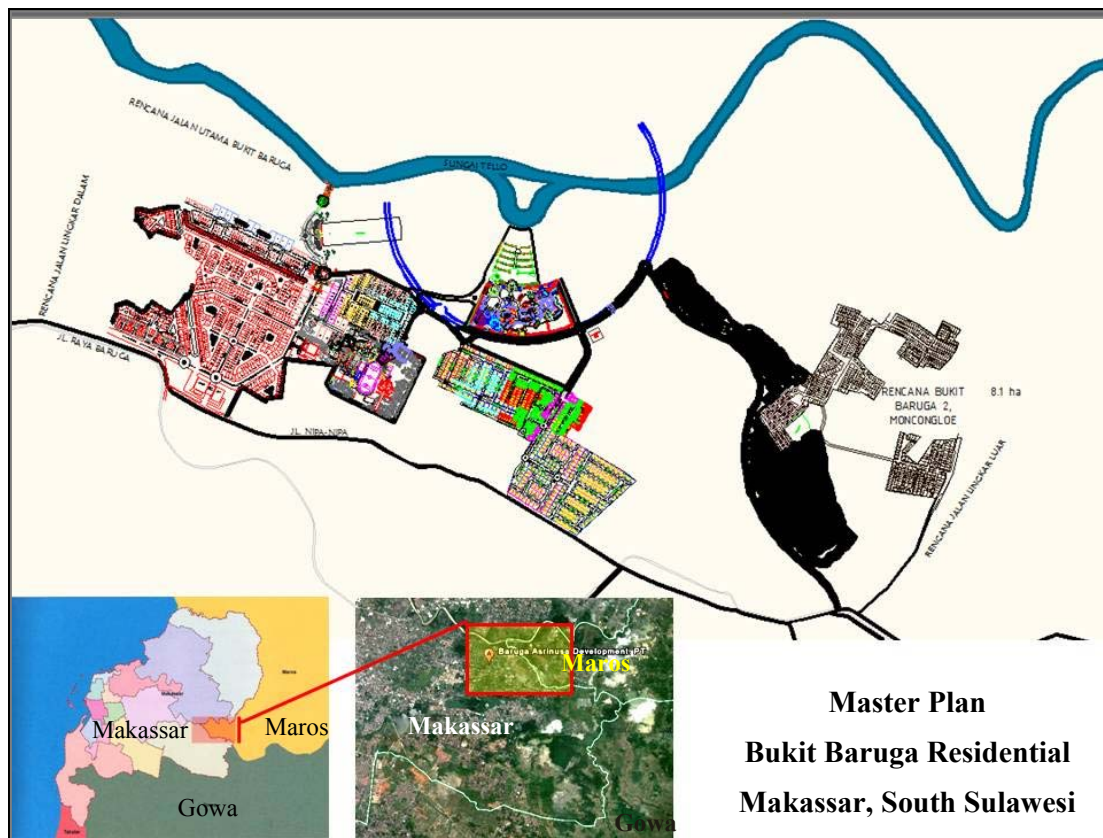
The monitoring and supervising mechanism as explained earlier in Section 4.1.6 existed at the early stage when the balanced residential ratio introduced in Makassar. However, after decentralization, the BP4D did not exist anymore and the *LHB* regulation was not prioritizing by the local government.

4.3 The economic feasibility of *LHB* 1:3:6 in Makassar

A common reaction of inclusionary policy among developers is that the policy makes projects economically unfeasible. Some argue that the costs to build inclusionary units would reduce the returns on investment to the point that the developer would rather forego the overall project. To appraise this argument, this section attempts to analyse the economic feasibility of *LHB* 1:3:6 regulation implementation in Makassar by analysing the compliance of the selected project and calculating its residual land value.

The project selected by the author is Bukit Baruga Residential, constructed by PT. Baruga Asrinusa Development (PT. BAD) and located at Manggala Sub district, east part of Makassar (Figure 10). Based on the principal permit that the developer obtains, total area for the whole project is 300 hectares which is administratively located on two adjacent municipalities: Makassar (200 hectares) and Maros (100 hectares).

Figure 10 Bukit Baruga Residential Project and study area (petanya perlu diperbaiki)



Source: PT. Baruga Asrinusa Development

Fattah (2013) explained that initially the location was swamp, thicket and forest and none of developers interested to develop that area. Infrastructure provided by local government was also very limited, for instance the road existed was non-asphalt where difficult for cars to pass through.

“We started from zero. This area was dark, unsafe, many robbers lived here. But we owned the land already. Location was not the absolute thing. We tried to create a residential with a good concept. If the concept is well-planned, we will be able to attract people. That is what we call location can be created. It was not easy. We gave many discounts and bonuses for people to buy our houses.” (H.M. Pulu Niode – Director of PT. Baruga Asrinusa Development)

The area is built gradually, divided into some phases. The phases that analysed in this study are the first four phases which were constructed in the period of 1997, 2000, 2005 and 2007 respectively (Table 4). As required by the law, developers have to build medium and/or basic houses first. Thus, in the first three phases, PT. BAD built medium-, basic-, and medium houses respectively. Then in the fourth phases, the luxurious units were built.

“At that time, housing projects on area of 300 hectares has to comply the 1:3:6 regulation in order to be able to obtain the permits. That is why we built medium houses first followed by basic houses.” (H.M. Pulu Niode – Director of PT. Baruga Asrinusa Development)

The first phase started in 1997 on the area of 300,000 m² in Antang Sub District, Makassar Municipality. The category of houses built in this phase were medium houses consists of five types with total 451 units¹². The second phase developed three years later on the area of 110,000 m² situated in the adjacent municipality, Maros Regency. In this phase, PT. BAD built 212 units basic houses consists of two types. In the third phase, PT. BAD constructed medium houses in the same area with the first one. There were 141 units consists of three types, constructed on the area of 45,000 m². Then in 2007, PT. BAD started built 468 units luxurious houses consists of four types, on the area of 155,000 m². Location of the fourth development is in the same area with the medium houses that built previously. Looking at the pattern, PT. BAD prefer to build medium- and luxurious houses in Makassar while the basic houses built in the adjacent regency, Maros Regency.

¹² In this study, 1 unit of house refers to the building and the parcel size.

Table 4 The first four phases of Bukit Baruga Residential Project

Project Name	Bukit Baruga 1		
Location	Antang, Makassar Municipality		
Construction Year	1997	Area (m2)	300,000
Type of House	Medium	Total units	451
Type of houses	Floor area (m2)	Parcel area (m2)	Number of unit
37/105	37	105	56
40/105	40	105	167
50/120	50	120	95
75/135	75	135	48
100/150	100	150	85
Project Name			
Bukit Baruga 2			
Location	Moncongloe, Maros Regency		
Construction Year	2000	Total units	212
Type of House	Basic	Area (m2)	110,000
Type of houses	Floor area (m2)	Parcel area (m2)	Number of unit
29/72	29	72	137
36/72	36	72	75
Project Name			
Bukit Baruga Borneo (3)			
Location	Antang, Makassar Municipality		
Construction Year	2005	Total units	141
Type of House	Medium	Area (m2)	45,000
Type of houses	Floor area (m2)	Parcel area (m2)	Number of unit
37/105	37	105	76
40/105	40	105	19
65/135	65	135	46
Project Name			
Bukit Baruga Andalas (4)			
Location	Antang, Makassar Municipality		
Construction Year	2007	Total units	468
Type of House	Luxurious	Area (m2)	155,000
Type of houses	Floor area (m2)	Parcel area (m2)	Number of unit
65/135	65	135	266
100/225	100	225	30
120/180	120	180	115
160/250	160	250	57

Source : PT. Baruga Asrinusa Development; Summarized by author

4.3.1 The compliance of 1:3:6 ratio

To assess whether or not PT. BAD comply with the 1:3:6 ratio, each housing type is grouped into three categories: basic, medium, and luxurious houses. This grouping is done based on two criteria: (1) parcel area, and (2) cost of construction as regulated in the law (see Section 4.1.1). Number of units for each type that fall into the same category is sum up. As a result, the amount for each housing category can be calculated thus can be compared to see the ratio (Table 5).

Table 5 Housing units by category built by PT. BAD

Housing Type	Number of Units	Housing Category	Total Units	Ratio
29/72	137	Basic Houses	212	0.5
36/72	75			
37/105	132	Medium Houses	592	1.3
40/105	186			
50/120	95			
65/135*	46			
75/135	48			
100/150	85			
65/135*	266	Luxurious Houses	468	1.0
100/225	30			
120/180	115			
160/250	57			

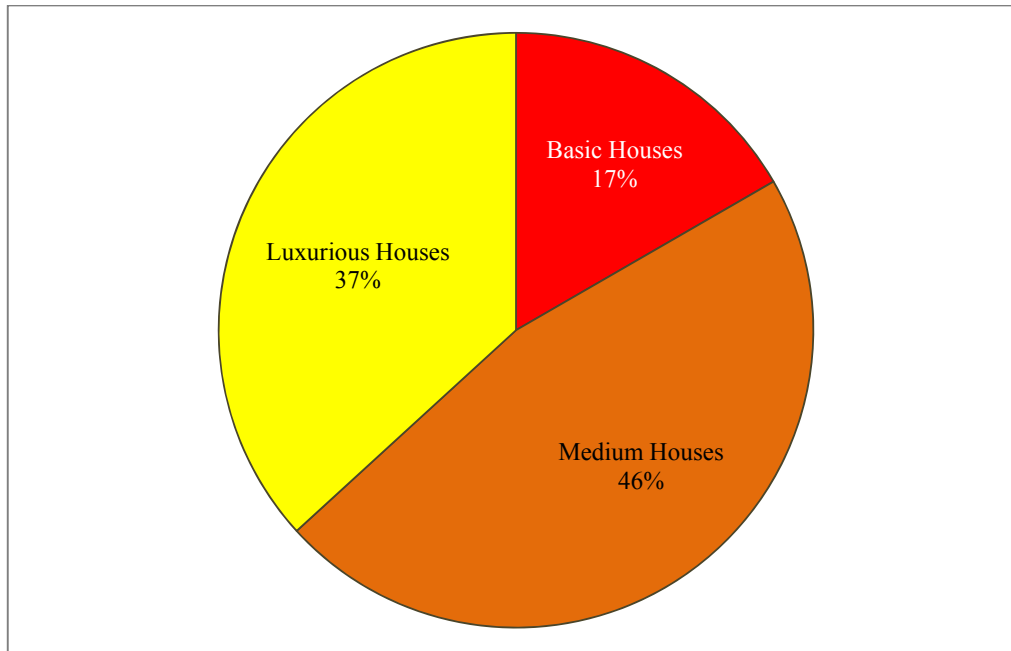
Source: Author analysis

* The 65/135 type falls into different category (medium and luxurious houses) because of the difference in the construction cost (See section 4.1.1).

Figure 11 shows that during the four phases, the biggest amount of houses that produced by PT. BAD is medium units that reached 592 units or 46% of total housing constructed in Bukit Baruga Residential. There were six types which included in this category with two types that produced the most: 37/150 and 40/105. The second highest number that produced is luxurious houses with total 468 units or 37% of total houses produced. The smallest production was basic houses which only 212 units or 17% of total project production. Thus, the ratio of these three housing categories is 1 luxurious house: 1.3 medium houses: 0.5 basic houses or 1 : 1.3 : 0.5 (Table 5). This data shows that Bukit Baruga Residential project did not comply with the 1:3:6 ratio as required in the balanced residential regulation.

Based on author observation during the fieldwork, currently PT. BAD prefers to produce medium and luxurious houses rather than to provide basic houses. This fact indicates that the project is far from pursuing the 1:3:6 ratio. Unfortunately, this situation is worsened by the absence of monitoring mechanism from Makassar Local Government.

Figure 11 Proportion of housing units built by PT. BAD



Source: Author analysis

4.3.2 Land residual value analysis

To examine the economic feasibility of Bukit Baruga Residential project in complying with the balanced residential regulation, this research adopts the static land residual value analysis based on following set of assumptions¹³. First, the four phases of the project are counted as one single project which is possible to do because the time limit for developers to comply with the balanced residential ratio was not set in the regulation. Second, the value of incomes and expenses are adjusted to current value using the Consumer Price Index (CPI) of related year (published by Statistics Office of Indonesia) and converted to US Dollar based on exchange rate published by Bank of Indonesia (see Box 8).

Box 8 Assumptions

CPI 1997	: 180.20
CPI 2000	: 210.12
CPI 2005	: 120.99
CPI 2007	: 145.68
CPI 2013 (July)	: 142.33
Exchange rate (September 2013)	: \$ 1 = Rp 10,763

¹³ The author acknowledges that this calculation is oversimplifying the real situation where the land residual value of the project could be higher or less. However, the purposes of this analysis are to give insight and empirical evidence regarding the economic feasibility of the inclusionary housing. Thus, the result is able enough to answer the research question.

Table 6 Summary of residual land value calculation for Bukit Baruga Residential

INCOME					
Type	Number of units	Price per Unit		Total Income	
		(Million)	(Thousand)	(Million)	(Thousand)
29/72	137	Rp 47	\$ 4.4	Rp 6,472	\$ 601
36/72	75	Rp 59	\$ 5.5	Rp 4,429	\$ 411
37/105	56	Rp 37	\$ 3.4	Rp 2,056	\$ 191
37/105	76	Rp 87	\$ 8.1	Rp 6,590	\$ 612
40/105	167	Rp 44	\$ 4.1	Rp 7,400	\$ 688
40/105	19	Rp 98	\$ 9.1	Rp 1,857	\$ 173
50/120	95	Rp 63	\$ 5.9	Rp 6,014	\$ 559
65/135	46	Rp 153	\$ 14.2	Rp 7,039	\$ 654
65/135	266	Rp 563	\$ 52.3	Rp 149,743	\$ 13,913
75/135	48	Rp 96	\$ 8.9	Rp 4,619	\$ 429
100/150	85	Rp 133	\$ 12.4	Rp 11,300	\$ 1,050
100/225	30	Rp 665	\$ 61.8	Rp 19,959	\$ 1,854
120/180	115	Rp 870	\$ 80.8	Rp 100,050	\$ 9,296
160/250	57	Rp 1,535	\$ 142.6	Rp 87,512	\$ 8,131
Total Income (A)				Rp 415,038	\$ 38,562
EXPENSES					
Type	Number of units	Construction Cost per Unit		Total Construction Cost	
		(Million)	(Thousand)	(Million)	(Thousand)
29/72	137	Rp 14.8	\$ 1.4	Rp 2,022	\$ 188
36/72	75	Rp 17.7	\$ 1.6	Rp 1,329	\$ 123
37/105	56	Rp 16.5	\$ 1.5	Rp 922	\$ 86
37/105	76	Rp 47.6	\$ 4.4	Rp 3,618	\$ 336
40/105	167	Rp 17.7	\$ 1.6	Rp 2,960	\$ 275
40/105	19	Rp 51.0	\$ 4.7	Rp 969	\$ 90
50/120	95	Rp 22.2	\$ 2.1	Rp 2,105	\$ 196
65/135	46	Rp 84.2	\$ 7.8	Rp 3,871	\$ 360
65/135	266	Rp 181.2	\$ 16.8	Rp 48,190	\$ 4,477
75/135	48	Rp 33.5	\$ 3.1	Rp 1,610	\$ 150
100/150	85	Rp 44.3	\$ 4.1	Rp 3,767	\$ 350
100/225	30	Rp 282.5	\$ 26.2	Rp 8,475	\$ 787
120/180	115	Rp 303.9	\$ 28.2	Rp 34,959	\$ 3,248
160/250	57	Rp 427.8	\$ 39.7	Rp 24,387	\$ 2,266
Infrastructure, amenities, loan, interests, taxes, marketing, administration				Rp 153,029	\$ 14,218
Total Cost (B)				Rp 292,212	\$ 27,150
Residual Land Value (A-B)				Rp 122,826	\$ 11,412
Initial Land Value				Rp 15,676	\$ 1,456
Increment value				Rp 107,150	\$ 9,956

Source: Author analysis

Table 6 provides a summary of residual land value calculation with the four phases are counted as one single project (see Annex 4 for detailed calculation per phase). The total income of the project is calculated from total selling price with result of US\$ 38,562 thousands. This amount could be higher since the calculation does not count the income generated from selling of commercial units, for instance shops or store houses (*rumah toko – ruko*) or from services provide to public (school, sports centre, recreation facilities, etc). Meanwhile, the total expenses of US\$ 27,150 thousands counted from total construction cost of houses added to cost of infrastructure, amenities, loan, interests, taxes, marketing and administration costs (came in one package).

The residual land value resulted from total income less total cost is \$11,412,000. If this residual value deducted with the initial land value, it will resulted the land value increment which reaches almost US\$ 10 million. This large amount of increment shows that the developer was benefitted from the initial value of the land which was very low, only US\$ 1,456 or 12% from the residual land value. This initial land value makes sense because the developer was benefitted by the location of the project which is at the periphery area and the condition of the area where the infrastructure was not adequately provided yet and the initial condition of the land - swamp, thicket, forests – that enable the developer purchase it at the agricultural value. Moreover, PT. BAD had owned some part of the land and acquired another parts far before the project started.

“Most of developers have acquired land since the very beginning, far before the project started. They bought it on a very cheap price.” (Ir. H.A. Ahmad Husain, M.Si. – Head of Urban Spatial Division, Spatial Planning and Building Agency, Makassar)

The initial investment on land at the early phase of the project resulted in loss at the first three phases. The type that PT. BAD built on that phases did not generate enough income to cover the cost of purchasing land. Table 7 shows the residual land value and land value increment of each phase. At phase 1 where PT. BAD built medium houses, the residual value is positive but the increment is negative US\$ 102 thousands. The similar conditions happened in Phase 2 and Phase 3 where the land value increments are negative US\$ 80 thousands and negative US\$ 778 thousands respectively. Thus, in Phase 1, 2, and 3, PT. BAD experienced loss.

Table 7 Residual land value and land value increment per phase

Land Value	Phase 1		Phase 2		Phase 3		Phase 4	
	Million	Thousand	Million	Thousand	Million	Thousand	Million	Thousand
Residual Land Value	Rp 957	\$ 89	Rp -603	-\$ 56	Rp -7,342	-\$ 682	Rp 129,814	\$ 12,061
Initial land value	Rp 2,053	\$ 191	Rp 676	\$ 63	Rp 1,032	\$ 96	Rp 11,915	\$ 1,107
Increment	Rp -1,096	-\$ 102	Rp -865	-\$ 80	Rp -8,374	-\$ 778	Rp 117,899	\$ 10,954

Source: Author analysis

PT. BAD was able to gain profit after the completion of Phase 4 where the houses built are luxurious houses. The increment reached almost US\$ 11 million which was able to cover the

losses of the first three phases. The high amount of land value increment in this project also indicates that, to some degree, the inclusion of basic houses in the project development was economically feasible. In fact, the value of the increment enabled the developer to construct more basic houses (see Table 8).

Table 8 Construction cost per m² by housing category

Type of houses	Number of unit	Total area (m ²)	Total Construction Cost		Housing Category	Construction Cost per m ² (Thousand)	Construction Cost per m ²
			(Million)	(Thousand)			
29/72	137	9,864	Rp 2,022	\$ 188	Basic	Rp 220	\$ 20.4
36/72	75	5,400	Rp 1,329	\$ 123			
37/105	56	5,880	Rp 922	\$ 86			
37/105	76	7,980	Rp 3,618	\$ 336	Medium	Rp 915	\$ 85.0
40/105	167	17,535	Rp 2,960	\$ 275			
40/105	19	1,995	Rp 969	\$ 90			
50/120	95	11,400	Rp 2,105	\$ 196			
65/135*	46	6,210	Rp 3,871	\$ 360			
75/135	48	6,480	Rp 48,190	\$ 4,477			
100/150	85	12,750	Rp 1,610	\$ 150	Luxurious	Rp 922	\$ 85.7
65/135*	266	35,910	Rp 3,767	\$ 350			
100/225	30	6,750	Rp 8,475	\$ 787			
120/180	115	20,700	Rp 34,959	\$ 3,248			
160/250	57	14,250	Rp 24,387	\$ 2,266			

Source : Author analysis

*The 65/135 type falls into different category (medium and luxurious houses) because of the difference in the construction cost (See section 4.1.1).

Table 8 illustrates calculation of average construction cost per m² for each housing category. This calculation is done using weighted average which sum up the total area consumed divided by total construction cost of housing types that including in a particular housing category. The result shows that average construction cost per m² of basic, medium and luxurious houses are US\$ 20.4, US\$ 85.0 and US\$ 85.7 respectively. An interesting finding is that the average construction cost of luxurious houses per m² is more or less the same with medium house. It means that the developer would be able to get higher profit from selling of luxurious houses which price per unit mostly doubled than the price of medium houses (see table 6).

Meanwhile, the construction cost of basic houses is US\$ 20.4 per m² or four times lower than luxurious houses. Assumed that one unit of basic house is 72m², so construction cost of one unit basic house equals with US\$ 1,469. If total increment of the whole project, which reached almost US\$ 10 million, is allocated to build basic houses, PT.BAD should be able to produce at least 6,800 units more. This simplified calculation gives idea that to a certain extent, this particular project is economically feasible to fulfil the 1:3:6 ratio.

4.3.3 Effects of LHB 1:3:6 on price and production of luxurious units

In the case of Bukit Baruga Residential, the developer said that the inclusionary obligation did not significantly influence the price of luxurious units. Nevertheless, PT. BAD admit that there is cross-subsidy for provision of infrastructure and amenities for the basic housing area. However, this research cannot state that the increasing is caused by the inclusionary policy.

“Luxurious units and basic units have their own cost. It has different target market. Yet, the location between those types is different. So it will not influence each other price. Well, maybe there is because of the subsidy for infrastructure and clean water in the basic housing area” (H.M. Pulu Niode – Director of PT. Baruga Asrinusa Development)

There are many factors that influenced selling price of commercial units. Thus, this findings needs to be studied further. The challenge is that it is difficult to obtain the data to proof the correlation because of lack of database of developers and government.

For the meantime, the developer does not recognize the effects of LHB regulation on production of luxurious units.

“I do not think that the 1:3:6 regulation affected our production for commercial units. We just follow demands from the market.” (H.M. Pulu Niode – Director of PT. Baruga Asrinusa Development)

“Developers are doing business. They seek for the highest possible profit. Thus they will build types of housing that generate higher income.” (Ir. H.A. Ahmad Husain, M.Si. – Head of Urban Spatial Division, Spatial Planning and Building Agency, Makassar)

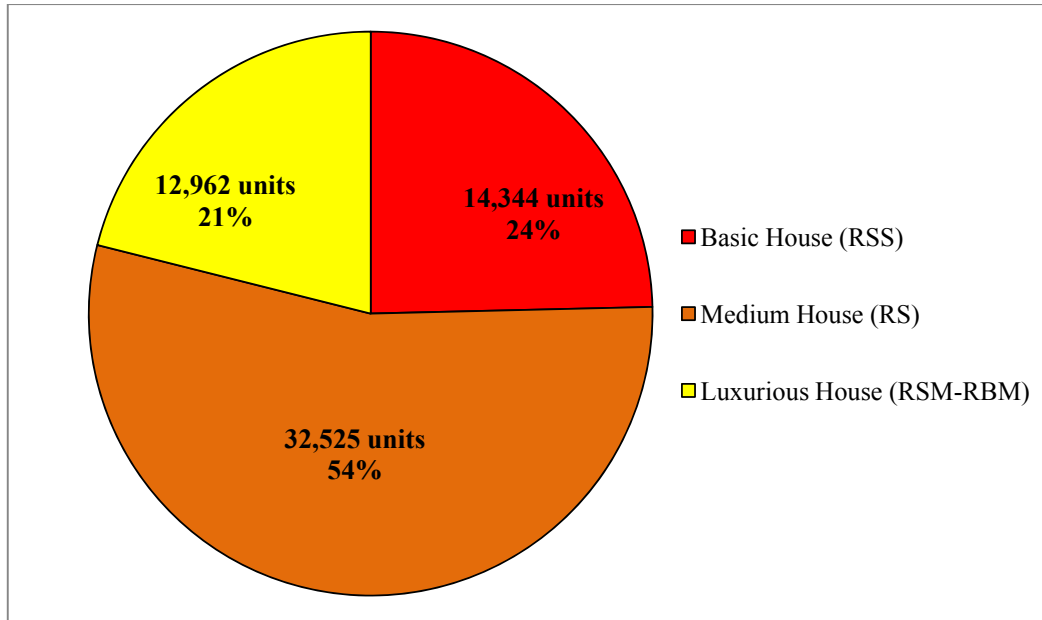
4.4 Production of inclusionary units in Makassar

In general, housing production in Makassar that was produced by developers during period 1993 – 2003 is dominated by medium houses (*Rumah Sederhana – RS*) that reached 54 per cent of total housing production. This is followed by basic house (*Rumah Sangat Sederhana – RSS*) or low income unit which covered 25 per cent of housing production. The least is luxurious house (*Rumah Mewah*) or high income unit with coverage of 21 per cent of total housing production. Overall, the ratio of total housing production for these three types is 1:2.5:1.2 or 1:3:1. This means that balanced residential ratio 1:3:6 requirement is not achieved here (Figure 13).

“70% of REI’s members build medium houses, type 36 to maximal 45. For basic houses are not feasible in Makassar because of the land price is high so we cannot cover our cost.” (Raymond Arfandy - Chairman of Real Estate Indonesia for South Sulawesi Province)

“If we count the amount of luxurious houses, medium houses, basic houses, I am not sure that the number is following the 1:3:6 ratio. For Makassar, it is still dominated by production of medium houses.” (Prof. Dr. Ir. Ananto Yudono, M.Eng., Urban Planning Expert and Senior Lecturer at Hasanuddin University, Makassar)

Figure 12 Percentage of housing production by type in Makassar during 1993-2003

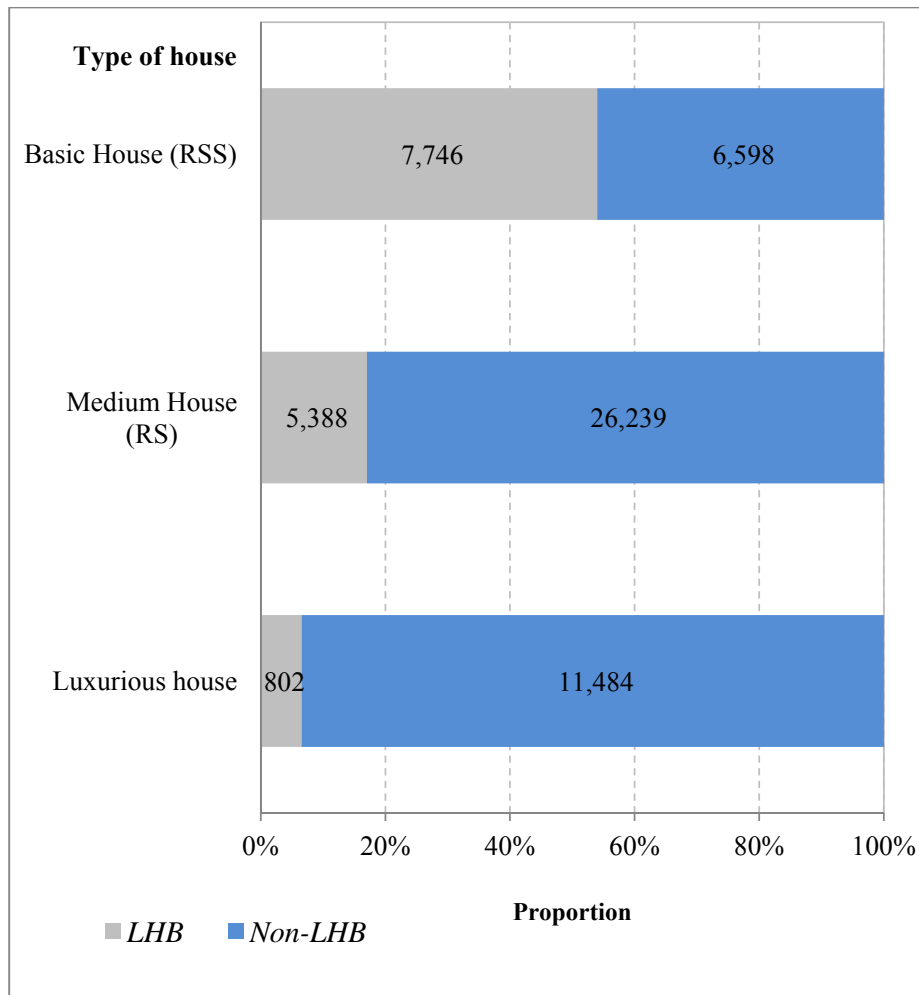


Source: Data analysis

When the figures above are breakdown into comparison between number of units that produced in compliance with *LHB* law and units that are produced without comply the law, it shows that production of basic houses and luxurious houses of the former is less than production of the latter (Figure 14). Basic houses produced from the *LHB* projects are only 5,388 units or one fifth (1/5) of units produced from non-*LHB* projects which are reached 26,239 units. Similar situation is shown in production of luxurious house. Units produced from *LHB* projects are only one fourteenth (1/14) of the total units produced from non-*LHB* projects.

On the other hand, the production of very basic house type shows the opposite situation from the two former types. During period of 1993 – 2003, very basic houses produced from *LHB* projects are higher than units produced from non-*LHB* projects. The figure shows 7,746 units for the former and 6,598 units for the latter or 1.2 times higher. It means that during research period, the *LHB* law has given a significant contribution to the provision of very basic houses type or low income houses in Makassar.

Figure 13 Makassar's housing production summary by type, 1993 - 2003



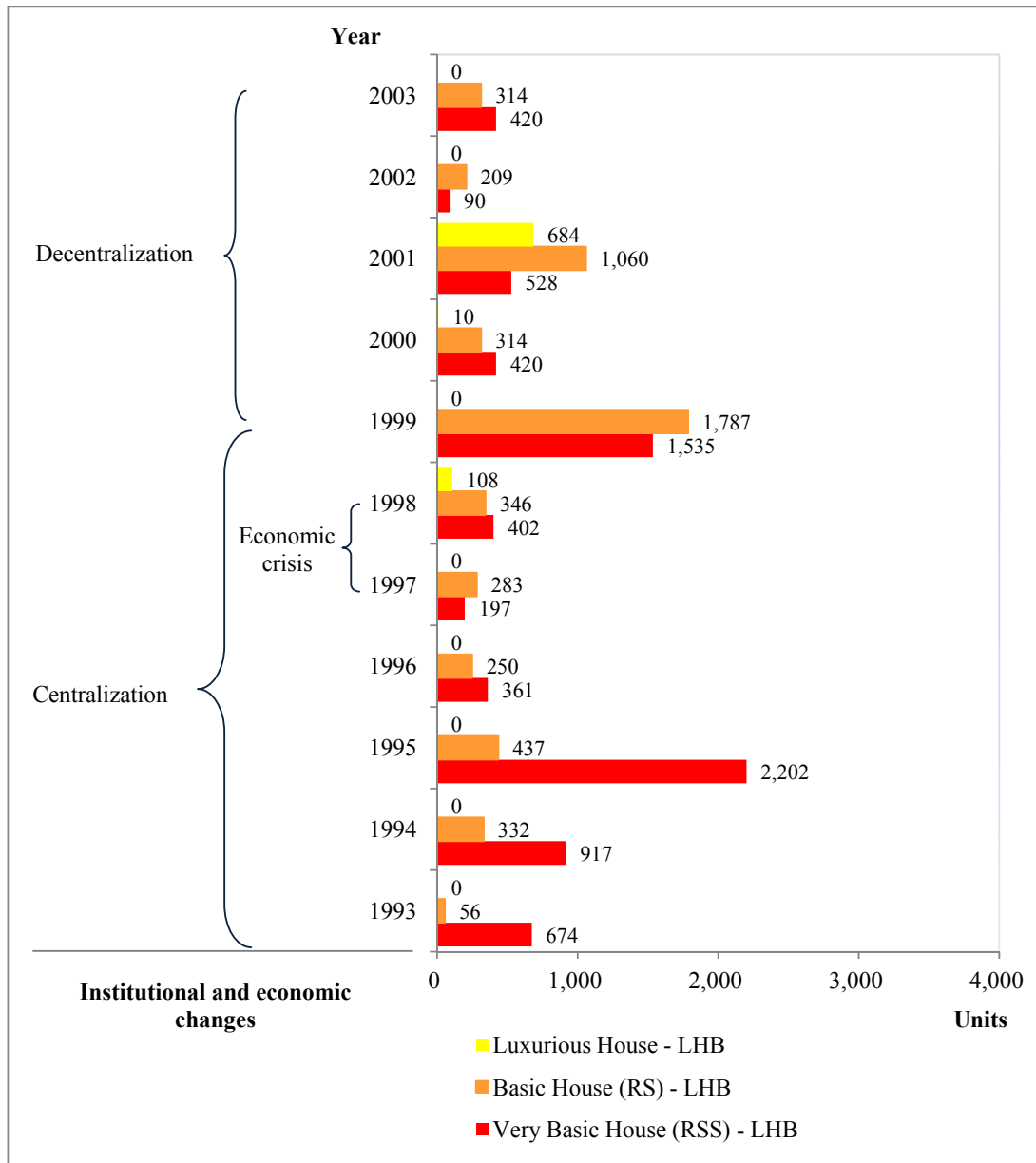
Source: Data Analysis

Nonetheless, if the aggregate number as shown above is extracted more detail to yearly bases, the result shows that the production of very basic houses from *LHB* projects fluctuated in each year from 1993 to 2003 (Figure 15). During period of 1993 to 1995, there is a significant increasing in production of very basic houses, which are 674 units, 917 units, and 2,202 units respectively. Unfortunately, in 1997, the figure drops dramatically to only 361 units. This decreasing continued to year 1997 where the production of very basis houses only reached 197 units. A little increasing happened in 1998 with 402 units of very basic houses were produced. A year later, the increasing continued steeply to 1,535 units. Yet, in year 2000, the figure declined to 420 units and kept fluctuated until 2003 with the highest amount of production was only 528 units in 2001.

In addition, production of basic house type was relatively low during period of 1993 to 1998. The amount averagely was only 287 units. The highest production was 437 units in 1995 and the lowest was 56 units in 1993. In 1999 the amount increased steeply to 1,787 units which also became the highest one during research period. However, the production was reduced dramatically to 314 units or almost six times lower in year 2000. A year later, the figure

increased three times higher or reached 1,060 units yet it reduced 5 times in year 2002 (209 units) and only increased a little in year 2003 (314 units).

Figure 14 Makassar inclusionary housing production summary by year (1993 – 2003)



Source: Data analysis

Overall, these findings suggest that production of basic houses likely happened more before year 2000, especially during period of 1993-1995 where the balanced residential ratio had introduced. At that time, the institutional system in Indonesia was still under centralized government where there was dedicated national board (*BKP4N*) and local board (*BP4D*) that responsible for monitoring and supervising the implementation of the balanced residential regulation (see Section 4.1.6). However, during national economic crisis 1997 – 1998, productions of basic houses were significantly influenced. Although in 1999 the figure was

again increase sufficiently, but it dropped again the next year and only reached the highest amount in 2001 which was less than 550 units. The institutional changes from centralized to decentralized system that started in 1999 influences the institutional framework and organisational structures at local level.¹⁴ Local governments were given authority to set up their own organisational structures and to form institutions based on the needs of their region. Unfortunately, at this early stage of decentralization, *BP4D* in Makassar was dismissed without clear transfer of responsibilities to other institution regarding the implementation of the balanced residential ratio regulation at local level.

“We just follow the law about organisational restructuring of local governments according guidelines from central government which is adjusted to the needs of our organisations. If we order to establish a particular section, then we establish it. If not, we do not establish it.” (Ir. Darwis – Section Head of Infrastructure, Local Development Planning Agency, Makassar)

However, further study is needed to proof the feasibility of 1:3:6 ratio. This is because the ratio was established without considerable study. Therefore, in the new balanced residential regulation introduced in 2011, the ratio is adjusted.

“After studying furthermore and considering facts on the ground, we admit that ratio 1:3:6 burdened developers. In the new regulation, the ratio 1:2:3 was calculated based on Fibonacci sequence. Still the proportion for basic houses is the biggest because we want to lessen backlogs. If the ratio is 1:1:1, it means that no backlog is reduced.” (Ringgy Masuin - Head of Infrastructure Compatibility Sub Division (ad interim), Deputy Assistant of Regional Infrastructure Provision, Ministry of Housing of Republic of Indonesia)

4.5 Was *LHB* 1:3:6 able to address spatial segregation issues?

4.5.1 Trend on the ground

Behind the composition 1:3:6 that seems simple, there is a noble goal that tried to achieve through the balanced residential regulation. Housing development is exercised as an instrument to create a harmonious social entity consists of multi levels of people in which they can share social values as well as facilitate the cross-subsidy scheme. However, Kuswantojo (2011) argue that this goal is impossible to achieve. In reality, the rich tends to create exclusivity. An article by Leisch (2002) regarding Gated Community in Indonesia acknowledges that the growth of upper middle classes, prestige and lifestyle become more

¹⁴ Based on a World Bank working paper 2003 titled *Cities in Transition: Urban Sector Review in An Era of Decentralization in Indonesia*, it says that during the transition from centralized to decentralized system, many jurisdictions lack the skills and knowledge needed to exercise their new authority. Regarding housing issues, local governments have mandate to support housing development, but they do not have the resources to handle their new responsibilities. There are tendency that housing, especially for low-income households, is not a priority for local governments. (See: *Cities in Transition: Urban Sector Review in An Era of Decentralization in Indonesia*, East Asia Urban Working Paper Series, The World Bank, 2003)

significant and used for housing marketing strategy. In Indonesia, this tendency is growing without interference from the government. In fact, the author observations recognize this trend is happening in Makassar.

“In Makassar, mix-residential has been formed at a sub district or neighborhood level because to apply it per project probably will be difficult because of limitation in land acquisition due to scarcity of land and limited budget. Developers tend to build small scale residential area located adjacent each other, developed by different developers, which then intentionally form a large settlement area.” (Prof. Dr. Ir. Shirley Wunas, DEA. – Urban Housing Experts and Senior Lecturer at Hasanuddin University, Makassar)

“The trend in residential development now is what known as “cluster system” where big houses are built together with another big house. They want exclusivity. There are no mix-housing types. Although it is in the same project but it is segregated” (Ir. Darwis - Section Head of Infrastructure, Local Development Planning Agency, Makassar)

“In their site plan, developers have designed the composition and the placement based on their rationale. Usually it is also related with technical considerations. They use professional architect. We just give supervision.” (Ir. H.A. Ahmad Husain, M.Si. – Head of Urban Spatial Division, Spatial Planning and Building Agency, Makassar)

The selected project in this research, Bukit Baruga Residential, provides the fact that currently their site plan development is following the trend as explained above.

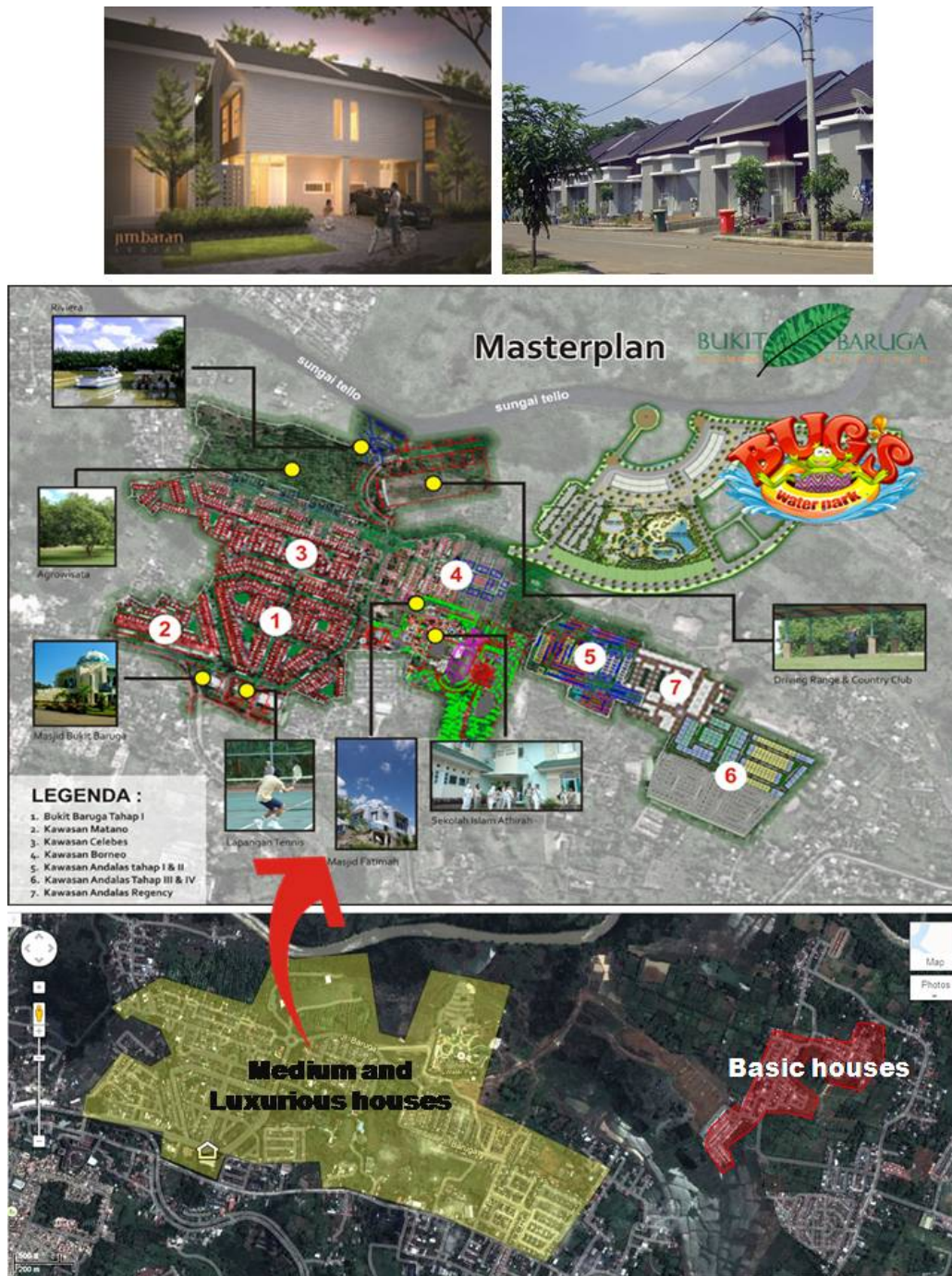
“Averagely, we build 5-7 hectares per year, consists of 2-3 clusters. That is the trend now. People are more individualist. The rich does not want to be neighbour with house type 65. The rich who is willing to pay 5-6 billion rupiahs¹⁵ wants exclusivity. As a business corporation, we build it as long as there are demands.” (H.M. Pulu Niode – Director of PT. Baruga Asrinusa Development)

As explained earlier in Section 4.3. the basic houses resident and the medium-luxurious houses in Bukit Baruga Residential are built in two adjacent municipalities where there have been segregation in which the upper middle class occupy a part of the area which is exclusively designed to the highest comfortable and prestigious possible, while the area occupy by lower class is less developed (Figure 15).

Although it is adjacent and only one kilometer separated, the natural barrier that exists and the absence of direct internal accessibility, for instance neighborhood road to connect the two areas reflect the spatial segregation within the residential. Figure 16 shows the two segregated area with the absence of direct access that could connects the two locations. This is indicated by the white lines that show that the existing road only available outside the project area.

¹⁵ Rp 5 – 6 billions equals with US\$ 465 - 557 thousands (assuming that US\$ 1 = Rp 10,763)

Figure 15 Exclusive site plan design for upper-middle class in Bukit Baruga Residential



Source: Map analysis; www.bukitbaruga.com; <http://bukitbaruga.wordpress.com>

Figure 16 Spatial segregation of medium-luxurious houses and basic houses within Bukit Baruga Residential



The lack of interference from local government regarding the spatial segregation issue within residential area, consequently trigger social-ethnic conflict as often find in Makassar.

“At the old town area of Makassar, conflict among residents rather frequently happen because people from lower social level are grouped there without insufficient residential environment. How do they can express themselves? There is no place to do so. This condition triggers conflict among them. Sometimes it happens in the afternoon, they could shoot at with bow and arrow or throw molotov bombs. That because imbalanced residential regarding social level, open spaces, amenities, etcetera.” (Prof. Dr. Ir. Shirly Wunas, DEA. – Urban Housing Experts and Senior Lecturer at Hasanuddin University, Makassar)

Those facts on the ground indicate that balanced residential regulation could plays important role to create spatial integration. Unfortunately, this research barely found housing development since 1993 that followed the requirement to build a mixed-residential development within one contiguous area in Makassar.

4.5.2 Trend in policy

Since 2011, a new regulation of balanced residential ratio has been introduced. The regulation is called LHB 1:2:3 where the composition of production luxurious, medium, and basic houses changed from 1:3:6 to 1:2:3. Not only on composition, has the new regulation also initiated the location criteria for allocating those three types of houses (see Table 9).

In general, changing in policy shows not much significant improvements regarding spatial integration purpose. *LHB* 1:3:6, under particular circumstances, allowed development of basic houses not in a contiguous area with medium and luxurious houses. It also allowed building the basic houses in an adjacent municipality, particularly if population of the municipality or the regency is more than 500,000 people.

Table 9 Comparison of location criteria in 1:3:6 and 1:2:3 regulation

Location	Criteria	
	1:3:6 regulation	1:2:3 regulation
Compulsory in one contiguous area	<ul style="list-style-type: none"> ❖ Total project area ≥ 200 hectares ❖ Total project area < 200 hectares, if the Urban Spatial Development Plan (RTRW) is feasible. 	Applied to all projects which build minimum 1,000 houses
Different area	<ul style="list-style-type: none"> ❖ Allowed if it is not feasible according to RTRW ❖ Allowed if the population is $> 500,000$ people. Basic housing can be built in an adjacent municipality or regency 	<ul style="list-style-type: none"> ❖ Allowed for projects which build minimum 50 houses ❖ Allowed only in the same municipality or regency ❖ Provide access to central services area and workplaces ❖ Disincentives: <ul style="list-style-type: none"> a) Build extra 20% of basic houses b) Add extra area of 15% total area for basic houses other than the compulsory one.

Source: *Kepmenpera No. 04/KPTS/BKP4N/1995; Permenpera No.10 Tahun 2012*; Summarized by author

In the new regulation, *LHB* 1:2:3, principally encourage the development of large scale residential in contiguous area. However, the same with the former regulation, it also allows developer to build basic housing at different area, but have to be within the same municipality or regency. Some disincentives are set for developers who build in different area: (a) they have to build extra 20% of basic houses in addition to the compulsory ones; (b) they have to provide extra 15% of total project area other than the compulsory one. Moreover, developers have to provide access to central services area and workplaces. These set of disincentives are expected to discourage developers from excluding basic houses from their site plan.

Lessons learnt from the past, the national government acknowledges the important roles of mix-residential policy to avoid social segregation which could lead to social conflict as happen in Jakarta, the capital city of Indonesia, in 1998¹⁶.

“One causal of Jakarta riots 1998 was segregated residential between luxurious residential and middle-lower residential where the luxurious houses were attacked by the mobs” (Ringgy Masuin - Head of Infrastructure Compatibility Sub Division (ad interim), Deputy Assistant of Regional Infrastructure Provision, Ministry of Housing of Republic of Indonesia)

According to an article by Firman (2004) spatial segregation also appears within the residential itself where the middle and upper class households occupy part of the area that is exclusively designed by the developer to the highest security and comfortably possible. Unfortunately, none of the former and the latter regulation mention about the criteria to allocate the luxurious, medium and basic houses within the residential in order to create mix-and balanced residential. It implies that the issue of spatial segregation tend to continue inevitably.

¹⁶ The 1998 Jakarta riots was a result of impoverished socio-economic conditions of the poor in the city. This was reflected by highly segregated residential where a number of richer family live in many new residential areas (and created a gated community who then became a target of the mobs (see Firman 2004). This spatial segregation was worsened by some political and racial issues that involved in it.

Chapter 5: Conclusions and Reflections

This research about inclusionary housing policy in Indonesia tries to assess, to some degrees, the implementation of balanced residential ratio 1:3:6 that officially established in 1992. Based on fieldwork findings and data analysis that has been carried out, research's sub-questions as raised in this research are answering as follow:

1. Can local government impose the obligation of inclusionary housing to developers?

The legal basis for inclusionary housing policy in Indonesia was introduced in 1992 by the national government based on a joint decree of three ministers: Minister of Intern Affairs, Minister of Public Works and Minister of Housing number 648-384 of 1992, number 739/KPTS/1992, and number 09/KPTS/1992. This regulation was put into more detail in the Decree of Housing Minister number 04/KPTS/BKP4N/1995 which had provided comprehensive features that enable local governments to implement it at local level. Features such as the composition and criteria of housing that should be provided, the incentives and sanctions, the procedures to implement it as well as monitoring and supervising system are stated explicitly. Local government also allowed adjusting the regulation according to the specific conditions of the city. However, findings in Makassar show that Makassar Local Government did not establish specific local regulations or ordinances regarding the balanced residential policy. At the beginning, the regulation was embedded into the procedure for applying principal permit, location permit, and building permit for developers. The implementation of the regulation was monitored by a local board, *BP4D* which supervised directly by a national board, *BKP4N*. However, it is found that the changing from centralized to decentralized government in 1999 gave significant impact particularly on monitoring and supervising mechanism. As decentralization applied, Makassar local government restructured their institutional organization and *BP4D* was dispersed and their function and duties were not clearly mandated to a new institution.

It can be conclude that the existence of particular board or institution with responsibilities to implement the balanced residential regulation becomes an important factor in enforcing the law. Recently, there is no specific assigned institution or board in the Makassar Local Government's organizational structure which carries out the responsibility as well as in the national level. Alterman (2012) argues the implementation of inclusionary policy as a value capture instrument needs strong legal and institutional framework. Although the inclusionary policy implemented in local level, it still needs higher level of government to enable them to perform (Calavita and Mallach 2010c)

Regarding the complementary instruments as incentives for developers, local government of Makassar provides fast-track permit and reduction in permit retribution to encourage developers to implement inclusionary policy. In fact, developers expect more than that. They strive for provision of infrastructure, free permit, and the most important thing is increasing in land supply but with cheap price. However, according to Borrero and Morales (2007), incentives will result in increasing of land price. Thus, extra charges should be regulated to outweigh the benefits coming from incentives, and then it might offset the increase.

2. What are the economic impacts of inclusionary housing, in terms of housing price, production and residual land value, to developers?

The finding on economic impact of the balanced residential regulation on price and production of commercial units indicates that there were no significant relations between those variables. The developer acknowledges that the price of commercial units is increase,

but there were many causal factors that influence it. Yet, it needs further study to isolate the effects of inclusionary policy on price and production of houses by controlling other external variables.

Considering the economic feasibility for developers to finance the inclusionary units, the residual land value done to the selected project, Bukit Baruga Residential, shows that the increment value gained by the developer was relatively high. It reaches almost US\$ 10 million that is assumed could enable the developer to build 6,800 extra basic houses. From the analysis of the first four phases of the project, the developer build luxurious, medium and basic houses with the ratio of 1:1.3:0.5 or in other words, the developer did not comply the 1:3:6 ratio. Considering their gain in the land value increment, the developer should be able to comply with the regulation.

However, in this case some factors should be noted. For instance, the location chosen by developer is at periphery area and the area at the adjacent municipality. The land was also a vacant land where not much development happened at that time and the existing infrastructure was insufficient. Therefore, the developer could acquire a large area (300 hectares) on agricultural value that makes them able to have a fair profit even with compliance of inclusionary units. The time limit to do development was not limited, thus there was opportunity for developer to speculate the provision of housing types.

3. How does the implementation of inclusionary housing policy affect the production of affordable units?

To some extent, this research proves that the 1:3:6 regulation could give contribution to the production of basic houses in Makassar during period 1993 – 2003. At least 55% of basic houses produced by developers came from projects that implemented balanced residential regulation. The highest contribution was achieved particularly during period 1993 – 1995 when a special board was established at national (*BKP4N*) and local level (*BP4D*). Those boards played the most important role in assuring the implementation of balanced residential regulation in their administrative area.

4. Is inclusionary housing able to address the spatial segregation issue?

Concerning the extent of balanced residential regulation in addressing spatial segregation issue, this research barely find housing development since 1993 in Makassar that follow the requirement to build a mix-residential within one contiguous area. The trend shows that residential developments tend to locate the luxurious units far from the basic units or even build it at different location. The growth of upper middle classes, prestige and lifestyle become more significant which then used by developers for housing marketing strategy. This tendency is growing without interference from the government.

Meanwhile, changing in policy has not given much significant improvements regarding spatial integration purpose. Similar with the former 1:3:6 regulation, the new balanced residential ratio introduced in 2011 still illustrates ambiguity. At one side it makes mix-residential in one contiguous area compulsory for large scale residential development. But on the other hand, the developing of basic houses is allowed at different area as long as the location is in the same municipality or regency. Although some disincentives are introduced, but spatial integration seems still negotiable. This ambiguity is contrary to the objective of the regulation itself that trying to develop spatially integrated communities by mixing different types of housing within one contiguous area.

Finally, the answer to the main research question is that inclusionary housing policy in Indonesia that was introduced through the balanced residential ratio 1:3:6 was lack of enforcement. The weak legal and institutional framework as well as political will and capability of local government give significant influences to the production of inclusionary units and to the achievement of spatial integration communities.

The findings in this research give insights that this policy could play an important role for local governments to address issues of affordable housing and spatial integration. This policy enables local government to recapture the increment of land value obtained by private developers to provide affordable housing for low income households. There are still opportunities to enforce inclusionary housing policy in Indonesia. Lessons learnt from the past is that a clear and detail regulations as well as strong political will of local government are needed to be able to mobilize the increment on land value obtained by developers. Although it is economically feasible for developers to set aside a certain portion of housing units and make it affordable for low income households, it will not be recaptured if local government does not fully understood the opportunities that this regulation offer to assist them in provision of affordable housing. Regardless the fact that inclusionary policy has not give many evidences in integrating community through mix-residential, the noble goal behind it still worth to follow.

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Annex 1 Interview guideline for government officials and housing experts

Interview Form for Local Government and Housing Experts		
Double Degree Program		
Magister Perencanaan Kota dan Daerah (MPKD), Gadjah Mada University (UGM), Indonesia and The Institute for Housing and Urban Development (IHS), Erasmus University, Rotterdam		
Researcher	:	Vera Yuniati
Research Topic	:	Inclusionary housing to promote affordable and spatially integrated housing, Case of Makassar, Indonesia
Contact	:	+6281315717797 (mobile phone); vera.yuniati@gmail.com (email)

All information will be used for academic purposes only




Interviewee	:	
Institution	:	
Position	:	
Date and time	:	

Legal Dimension

1.	When did Makassar municipality adopt the balanced residential ratio 1:3:6 regulation?
2.	What did local government do to be able to implement the regulation at local level?  Formulation of local regulations  Features of local regulations  Hierarchy of obligations  Institution in charge
3.	Does local government provide cost offsets and/or incentives for developers? If yes, what are they? What is the reason?  Cost offsets / incentives  Rezoning  Others
4.	How does local government implement the regulation? a. What is your opinion about local government capability? (in term of human resources) b. Does local government create monitoring mechanism on: - Land price - Housing price - Building permit - Location of the projects - Building size and quality of the affordable units c. How does the monitoring scheme work? d. What does local government do to ensure the transparency of implemented regulation? e. What is your opinion about level of trust from developers in implementing the regulation?
5.	What do you think the obstacles faced by local government in implementing the regulation? What kind of improvements that should be done?

Economic Dimension

6.	How do developers respond in the housing markets when the 1:3:6 regulation implemented? a. How is the effect on commercial housing production before and after regulation implemented? b. How is the effect on commercial housing price in the projects with inclusionary housing and in the projects without inclusionary housing? c. How is the effect on size of commercial housing in the projects with inclusionary housing and in the
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	projects without inclusionary housing? d. Others
7.	What is the effect of the regulation on land value?
8.	In your opinion, what are the most important pre-conditions for developers to be able to implement the regulation?
<i>Financial Dimension</i>	
9.	What do you think about contribution of inclusionary housing projects to the provision of affordable housing units in Makassar? Please explain the reason of your opinion!  to be compared with total production of affordable housing in Makassar  to be compared with housing production by developers  to be compared with total housing production in Makassar, by both developers and local government
10.	In your opinion, are there possibilities to increase the contribution of affordable housing from inclusionary housing regulation? How? What are the pre-conditions needed?
<i>Social Dimension</i>	
11.	One of main objectives of 1:3:6 regulation is to encourage more socially integrated development via mixed-income residential. a. In your opinion, has government achieved it? What are the indicators? b. What is the trend on the ground? c. What are the pre-conditions needed?
12.	In the 1:2:3 regulation, the affordable units can be built at different site in the same municipality. What are the considerations behind it? What is your opinion about it regarding the integration issue?






Annex 2 Interview guideline for developer

Interview Form for Developers		
Double Degree Program		
Magister Perencanaan Kota dan Daerah (MPKD), Gadjah Mada University (UGM), Indonesia and The Institute for Housing and Urban Development (IHS), Erasmus University, Rotterdam		
Researcher	:	Vera Yuniati
Research Topic	:	Inclusionary housing to promote affordable and spatially integrated housing, Case of Makassar, Indonesia
Contact	:	+6281315717797 (mobile phone); vera.yuniati@gmail.com (email)

All information will be used for academic purposes only

Interviewee	:	
Institution	:	
Position	:	
Date and time	:	

Legal Dimension

1.	What is your opinion about the features of obligation in the 1:3:6 regulation? Is the regulation understandable?  Do you recognize the existence of sanctions in it?  What institution applies the sanction?
2.	What is your opinion about legal framework set by the local government?  Hierarchy of the regulation  Institution in charge  Technical details of the regulation
3.	Do you receive cost offsets or incentives from local government? What are they? Who initiate it?
4.	From your experience, how does local government implement the regulation? a. What is your opinion about local government capability? (in term of human resources) b. Do you know whether local government has monitoring mechanism on: - Land price - Housing price - Building permit - Location of the projects - Building size and quality of the affordable units c. From your experience, how does the monitoring scheme work? d. What is your opinion about local government transparency in implementing the regulation? e. Do you trust the government in enforcing the regulation?
5.	What kind of improvements that should be done by the government?

Economic Dimension

6.	When the regulation 1:3:6 was imposed, what is your reaction?
7.	From your experience, what are the impacts of that regulation?
8.	Do you able to fulfil the mandatory requirements? If yes, how do you manage to fulfil it? If not, why?
9.	What is the effect of the regulation on land value?
10.	In your opinion, what are the most important pre-conditions for developers to be able to implement the regulation?

<i>Financial Dimension</i>	
11.	What do you think about contribution of inclusionary housing projects to the provision of affordable housing units in Makassar? Please explain the reason of your opinion!
12.	In your opinion, are there possibilities to increase the contribution of affordable housing from inclusionary housing regulation? How? What are the pre-conditions needed?
<i>Social Dimension</i>	
13.	One of main objectives of 1:3:6 regulation is to encourage more socially integrated development via mixed-income residential. <ul style="list-style-type: none"> a. What is your opinion about the goal? Is it applicable? b. How do you fulfil it? c. What are the pre-conditions needed?
14.	In the 1:2:3 regulation, the affordable units can be built at different site in the same municipality. What is your opinion about it regarding the integration issue?

Annex 3 List of key informants

Key informant	Institution	Issues addressed
Ringgy Masuin, ST	Official of Ministry of Housing (<i>Kementrian Perumahan Rakyat</i>)	Legal dimension Economic dimension Financial dimension Social dimension
Ir. Darwis	Official of Local Development Planning Agency (<i>Badan Perencanaan Pembangunan Daerah - Bappeda</i>)	Legal dimension Social dimension Financial dimension Economic dimension
Ir. H.A. Ahmad Husain, M.Si.	Official of Spatial Planning and Building Agency (<i>Dinas Tata Ruang dan Bangunan</i>)	Legal dimension Economic dimension Social dimension
Asfianti	Official of Administration and Permit Services (<i>Kantor Pelayanan Administrasi Perizinan</i>)	Legal dimension
Raymond Arfandy	- Head of Real Estate Indonesia (REI) for South Sulawesi Province - Developer	Legal dimension Economic dimension Financial dimension Social dimension
H.M. Pulu Niode	- Director of PT. Baruga Asrinusa Development - Developer	Legal dimension Economic dimension Financial dimension Social dimension
Prof. Dr. Ir. Ananto Yudono, M.Eng.	- Urban planning expert - Senior Lecturer at Hasanuddin University, Makassar	Legal dimension Economic dimension Financial dimension Social dimension
Prof. Dr. Ir. Shirly Wunas, DEA.	- Urban housing expert - Senior Lecturer at Hasanuddin University, Makassar	Legal dimension Economic dimension Financial dimension Social dimension

Annex 4 Residual land value calculation

Project Name Bukit Baruga 1 Location Antang, Makassar Construction Year 1937 Type of House Medium Area (m ²) 300,000 Price of raw land (Million) Rp 9,000				Project Name Bukit Baruga 2 Location Moncongloe, Maros Construction Year 2000 Type of House Basic Area (m ²) 110,000 Price of raw land (Million) Rp 3,300				Project Name Bukit Baruga Borneo (3) Location Antang, Makassar Construction Year 2005 Type of House Medium Area (m ²) 45,000 Price of raw land (Million) Rp 3,375				Project Name Bukit Baruga Andalas (4) Location Antang, Makassar Construction Year 2007 Type of House Medium and Luxurious Area (m ²) 155,000 Price of raw land (Million) Rp 23,250							
INCOME				INCOME				INCOME				INCOME							
Selling Price	Per unit (Million)	Total (Million)	Current Value (Million)	Selling Price	Per unit (Million)	Total (Million)	Current Value (Million)	Selling Price	Per unit (Million)	Total (Million)	Current Value (Million)	Selling Price	Per unit (Million)	Total (Million)	Current Value (Million)				
37/105	Rp 29	Rp 1,624	Rp 2,056	\$ 0.19	29/72	Rp 32	Rp 4,384	Rp 6,472	\$ 0.60	37/105	Rp 102	Rp 7,752	Rp 6,590	\$ 0.61	65/135	Rp 550	Rp 146,300	Rp 149,743	\$ 13.91
40/105	Rp 35	Rp 5,845	Rp 7,400	\$ 0.63	36/72	Rp 40	Rp 3,000	Rp 4,429	\$ 0.41	40/105	Rp 115	Rp 2,185	Rp 1,857	\$ 0.17	100/225	Rp 650	Rp 19,500	Rp 19,953	\$ 1.85
50/120	Rp 50	Rp 4,750	Rp 6,014	\$ 0.56						65/135	Rp 180	Rp 8,280	Rp 7,039	\$ 0.65	120/180	Rp 850	Rp 97,750	Rp 100,050	\$ 9.30
75/135	Rp 76	Rp 3,648	Rp 4,619	\$ 0.43						160/250	Rp 1,500	Rp 85,500	Rp 87,512	\$ 8.13					
100/160	Rp 105	Rp 8,325	Rp 11,300	\$ 1.05															
Total Income (A)		Rp 24,792	Rp 31,388	\$ 2.92	Total Income (A)		Rp 7,384	Rp 10,901	\$ 1.01	Total Income (A)		IDR 18,217	IDR 15,486	####	Total Income (A)		Rp 349,050	Rp 357,263	\$ 33.19
EXPENSES				EXPENSES				EXPENSES				EXPENSES							
Construction Cost	Per unit (Million)	Total (Million)	Current Value (Million)	Construction Cost	Per unit (Million)	Total (Million)	Current Value (Million)	Construction Cost	Per unit (Million)	Total (Million)	Current Value (Million)	Construction Cost	Per unit (Million)	Total (Million)	Current Value (Million)				
37/105	Rp 13	Rp 728	Rp 922	\$ 0.09	29/72	Rp 10	Rp 1,370	Rp 2,022	\$ 0.19	37/105	Rp 56	Rp 4,256	Rp 3,618	\$ 0.34	65/135	Rp 177	Rp 47,082	Rp 48,190	\$ 4.48
40/105	Rp 14	Rp 2,338	Rp 2,960	\$ 0.28	36/72	Rp 12	Rp 900	Rp 1,329	\$ 0.12	40/105	Rp 60	Rp 1,140	Rp 969	\$ 0.09	100/225	Rp 276	Rp 3,280	Rp 3,476	\$ 0.79
50/120	Rp 18	Rp 1,663	Rp 2,105	\$ 0.20						65/135	Rp 99	Rp 4,554	Rp 3,871	\$ 0.36	120/180	Rp 297	Rp 34,165	Rp 34,959	\$ 3.25
75/135	Rp 27	Rp 1,272	Rp 1,610	\$ 0.15						160/250	Rp 418	Rp 23,826	Rp 24,387	\$ 2.27					
100/160	Rp 35	Rp 2,975	Rp 3,767	\$ 0.35															
Infrastructure, amenities, loan, interests, taxes, marketing, administration		Rp 15,061	Rp 19,068	\$ 1.77	Infrastructure, amenities, loan, interests, taxes, marketing, administration		Rp 5,522	Rp 8,152	\$ 0.76	Infrastructure, amenities, loan, interests, taxes, marketing, administration		Rp 16,904	Rp 14,370	\$ 1.34	Infrastructure, amenities, loan, interests, taxes, marketing, administration		Rp 108,877	Rp 111,439	\$ 10.35
Total Cost (B)		Rp 24,036	Rp 30,431	\$ 2.83	Total Cost (B)		Rp 7,792	Rp 11,503	\$ 1.07	Total Cost (B)		Rp 26,854	Rp 22,828	\$ 2.12	Total Cost (B)		Rp 222,220	Rp 227,449	\$ 21.13
Residual Land Value (A-B)		Rp 755.90	Rp 957	\$ 0.09	Residual Land Value (A-B)		Rp -408	Rp -603	-\$ 0.06	Residual Land Value (A-B)		Rp -8,637	Rp -7,342	-\$ 0.68	Residual Land Value (A-B)		Rp 126,830	Rp 129,814	\$ 12.06
Initial land value (Million Rupiah)	Rp 1,621.35	Rp 2,053	\$ 0.19	Initial land value (Million Rupiah)	Rp 458	Rp 676	\$ 0.06	Initial land value (Million Rupiah)	Rp 1,214	Rp 1,032	\$ 0.10	Initial land value (Million Rupiah)	Rp 11,642	Rp 11,915	\$ 1.11				
Increment (Million Rupiah)	Rp -865.45	Rp -1,096	-\$ 0.10	Increment (Million Rupiah)	Rp -866	Rp -865	-\$ 0.08	Increment (Million Rupiah)	Rp -9,851	Rp -8,374	-\$ 0.78	Increment (Million Rupiah)	Rp 115,189	Rp 117,899	\$ 10.95				
Assumptions: *Area for houses is 60% of total area **Area for infrastructure and amenities is 40% of total area \$ 1= Rp 10,763								Assumptions: *Area for houses is 60% of total area **Area for infrastructure and amenities is 40% of total area \$ 1= Rp 10,763											