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# Quality of affordable housing projects by public and private developers in Indonesia: The case of Sarbagita Metropolitan Bali

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Housing refers to both the physical product and the process of its attainment. Housing is perceived according to its performance and its usefulness varies with the level of comfort and hygiene it provides. The importance of people in housing is recognised not when housing complies with municipality by laws, but when people live in it and is acceptable in a community. Housing also means privacy and is an expression of ways of life, aspirations and social cultural relationships. Therefore, housing is the provision of comfortable shelter with available infrastructure, services and facilities that address people's needs. Sarbagita metropolitan, Indonesia has large affordable housing provided by both public and private developers. In fact, the fast growing affordable housing projects have not assured the delivery of better quality of physical, infrastructure and public facilities. This paper will try to investigate the role of households as consumers and the role of developers in providing better quality low-cost housing projects in Sarbagita. By using some indicators, the various modes of affordable housing projects provision in Sarbagita Metropolitan Bali will be examined, including public and private housing projects. The data were gathered using observations, interviews, questionnaires and documentation techniques from project sites, stakeholders, developers and dwellers. Data collected were then analyzed qualitatively to make findings and draw conclusions and recommendations. The result shows that the low-quality affordable housing provision is often unsuitable for dwellers because of developer constraints, and the lack of power or means of households to direct or influence the inception or delivery of the projects. Some recommendations will be proposed in this paper in order to improve the quality of affordable housing projects provision for dwellers in Sarbagita metropolitan.

**Key words:** Quality, affordable housing provision project, human needs, Indonesia, low-income groups.

## INTRODUCTION

### Housing meaning

Architects, planners and builders involved in housing provision need to understand that the value of a house is not merely a place to live, but should have a variety of functions for people. Good quality housing design must be able to respond to a range of human needs (Heywood, 2004; Imrie, 2004a). The meaning of a house

needs should be taken into account by policymakers in housing provision.

Housing has also a diversity of meanings to reflect human needs. Blauw (1994) identified the meaning of a house as having five functions. First, shelter is considered to be the most basic function of a home and neighborhood. Second, the utilitarian function is identified – the facilities that the dwelling and the neighborhood

carry out (activities such as cooking and washing) and third, the domain functions - the home as one's own territory, a place that guarantees the dweller's privacy. Fourth is the social function - the facility to communicate from the home base with the outside world. And, fifth is the symbolic or cultural function of a house (Blauw, 1994).

The meaning of housing is more complex than merely people's way of sheltering themselves from weather and coming to terms with the environment. It is also an expression of their culture and way of life, of who they are as individuals, as a social group or community. It is also an indicator of people's fears and prejudices. For some, it is a symbol of pride; for others, a symbol of inferior social status and poverty. It seems that a house and neighborhood present possibilities for preferences or design choices as a living symbol of a way of life and the subsequent values that the residents want to be associated with (Blauw, 1994; Bhatti and Church, 2004).

Housing as shelter reflects levels of living, welfare, safety, personality and culture (Silas, 2001). Housing cannot be seen merely as being a living and infrastructure-facilities function, for it also involves a settlement process and functions as a way for people to communicate with the environment (neighborhood, society, natural surroundings). Therefore, housing is a means for both self-actualization of the individual and for integration with the environment.

A house is like the heart of people's life (Hanson, 1998; Heywood, 2004). A house is a place of retreat, privacy, safety, relaxation and support for work and leisure activities. It provides autonomy and independence. It is an expression of ourselves and shows our social status. Indeed, a house is the means to meet various needs, such as shelter, aspirations, status, cultural value, etc.

### **Housing quality**

Housing is becoming a global issue in urban development, particularly housing shortages for the urban poor in Third World Countries. Housing in urban areas has become a worldwide problem, but most particularly in the Third World (Wakely et al., 1996). These problems include the gap between supply and demand, lack of quality housing and settlement, issues of affordability, socio-economic and cultural appropriateness problems, etc. These issues will increase in the future because of migration and the numbers of people in urban areas increasing rapidly requiring an increase in housing supply.

Tipple (1996) argued that, since the 1960s, most international agencies and other actors, such as planners, architects, builders, universities, NGOs, and CBOs, have been greatly concerned about housing provision for the urban poor in Third World Countries. All the main urban services in developing countries, such as health, education, waste disposal, water supply and electricity,

have been largely dominated, either completely or partially, by direct public provision (Bennet et al., 1995; Batley, 1996; Nickson, 1996).

Over the last decade, the provision of affordable housing has been largely dominated by the non-public sector, which includes formal and informal housing, and co-operatives. However, Keivani and Werna (2001) and Brown and Badanes (2004) claimed that the heartless underdevelopment of institutional capacities - human and material capital together with complicated and complex social, political, cultural and economic interactions between various providers and mechanisms of housing provision - generated major barriers to the efficiency of housing development in developing countries to being more affordable and enabling a better quality of housing stock.

In most cases, such constraints are likely to encumber the developers in scaling up housing production to meet the needs of large sections of the urban poor (Adams, 1995; Keivani and Werna, 2001). Even worse, the huge production of affordable housing projects has never fulfilled the needs of people and cultural appropriateness. Mostly houses have been provided with small plot size, lack of quality design, and services not being available for people to settle (Tunmer, 1976; Gelebet, 1998). Moreover, Lewin (2003) noted that houses are built and given directly to urban dwellers merely as boxes, unable to cater for housing as an expression of a way of life and as a cultural process of people. It seems that housing is becoming far beyond the reach of urban poor households confronted by issues of affordability and housing provision that does not fulfill people's needs in terms of cultural appropriateness and housing quality.

Housing quality is subjective. Quality is a dimension of housing that relates to implications for human beings (Heywood, 2004; Garcia Mira, 2005; Apparicio et al., 2008). Quality on its own does not mean being good or poor, but is more about providing minimum standards of houses that people will find acceptable to live in (Duncan, 1971; Feijten and Mulder, 2005).

It seems that housing quality has been differently defined by different attributes or the extent of the housing problem in a given community (Landaeta, 1994; Blauw, 1994; Hayashi, 2002; Cousins, 2009). Attempts to measure housing quality are complicated by the social, economic and political characteristics of communities. Yet, all the different measurements used consider the physical structure of dwellings and the facilities offered by the house, including amenities like water, electricity, size, number of rooms, availability of kitchen, toilet and bath facilities; as well as the physical environment, including the location.

There has been extensive study of affordable housing provision in developing countries. The research shows that lack of standard meaning in housing has a correlation with the provision of quality housing (Batley, 1996; Godish, 2001; Heywood, 2004; Karsten, 2007).

Such a narrow understanding of housing tends to result in the production of housing that is not useful, sub-standard, and harmful. The builders must realize that housing is a reflection of human needs, so they also need to focus more sharply on specific needs and the direct implications of housing design. Some constraints on housing provision, of course, cannot be avoided, but good quality, that embraces human need, is fundamental to fostering the well-being of people.

Good quality housing must be able to respond to the variety of human needs and the shifting needs of individuals. Qualitative research has used “*cultural probes*” to help understand the unique values and lifestyles of people (Adams, 1997; Heywood, 2004; Njoh, 2006). Therefore, house quality is not just the end product, but correctly belongs to the start of design and ensures the autonomy and power for the end user in the design steps (Wentling, 1995; Harrison, 2004).

Urban authorities in the developing world would find housing quality unsatisfactory if it did not meet official housing standards and regulations (Hanson, 1998; Godish, 2001; Firman, 2002). Thus, housing provision would be seen as satisfactory if built of permanent building materials with all the required infrastructure and facilities. Any attempt to measure housing quality should be related to the physical qualities of the product (house) and the uses (use-value) to the community. Waterson (1990) argued that the value of a house is when houses are suitable for people, satisfying their way of life and cultural values as well.

### **Case study: Affordable housing projects provision in Sarbagita Metropolitan, Bali, Indonesia**

The Metropolitan Region of Sarbagita (Denpasar, Badung, Gianyar, Tabanan) is one of the fastest growing urban populations in Indonesia, which consists of 4 big cities and 15 districts, and 168 sub districts. It is a large area (72,399 Ha, 65% urbanized) with 1,327,737 inhabitants in 2007 (53.7% of Bali), and a growth rate of 2.13% (BPS, 2008b). It has an important role to play as the centre of commercial, tourism, industrial and urban housing development. The economic growth is 3.11%, GDP per capita is 7,166,142 rupiahs (USD 700), the labor force participation rate is 80.79% and the unemployment rate is just 2.57% (BPS, 2008b). Rapid population growth and rural-urban migration in the Sarbagita Metropolitan area have produced a very high demand for land, housing and infrastructure.

There has been a significant input by government agencies in providing affordable housing in Sarbagita Metropolitan Region. It has increased affordable housing projects provision, including formal and informal housing projects that are provided by public, co-operative, private developers and individual owners. They aim at addressing the housing needs of low-income groups by implementing 60% simple houses, and the housing ratio

is 1 luxury house (high income), 3 simple houses (middle income) and 6 very simple houses (low income). This target is part of co-operation between institutions to provide development costs (public, private, co-operative, National Saving Bank (BTN) and community as beneficiaries). Therefore, low-income groups can borrow long-term loans at subsidized interest rates from the BTN. Low-income groups benefit from the programs having access to housing loans (mortgage finance) to purchase shelters with soft interest.

However, the fast growth of affordable housing projects in Sarbagita is not guaranteed addressing the living conditions of low-income group. In fact, according to public opinion as admitted by the government, most housing projects, which are built both by private developers and public, lack physical quality, infrastructure and public facilities (Figures 1 and 2). This condition becomes worse because of the incapability of low-income groups to repay credit obtained for the house and to maintain and repair their house.

Most housing projects in Sarbagita Metropolitan are considered affordable especially by public developers. Yet, most of them still do not fulfil the norms and standard of a housing and human settlement, which is issued by Public Works Department. This seems that housing as means of comfortable shelter with available infrastructure and urban amenities becomes far below in satisfying the needs of the poor.

Referring to the condition discussed earlier, the problem is lack of quality of affordable housing projects, which are provided by Public (National Urban Housing Co-operation) and Private Developers. The problems mentioned are caused by lack of instruments to force developers and public to provide better quality.

Based on the aforementioned premise, the following research questions were explored:

1. What is the current quality of public and private affordable housing projects in Sarbagita Metropolitan, in terms of housing quality and access to, infrastructure and public facilities?
2. What are the constraints faced especially by developers in providing better quality of affordable housing projects?
3. Do low-income groups have means or instruments for influencing the quality of affordable housing projects?
4. What are the respective strengths and weaknesses of public and private affordable housing and settlement projects?

## **RESEARCH METHODS**

### **Study area**

Four affordable housing and settlement projects, two by public developers and two by private developers, were selected purposively from among the suite of affordable housing and settlement projects provided to low-income groups in Sarbagita



**Figure 1.** Dalung Permai – private housing project.  
Source: Acwin (2009).



**Figure 2.** Road condition in Dalung Permai – private housing project.  
Source: Acwin (2009).

Metropolitan.

### Data collection

Data were collected from both primary and secondary sources using various techniques, such as questionnaires, interviews and observations. The primary data were collected from the affordable housing projects selected, and the secondary data were gathered from national and local government institutions, developers companies, universities, NGOs, CBOs, and dwellers. The data are pictures, drawings, sketches, data and statistics, law, regulations, decrees, norms, standards, mapping, etc. Secondary data were used to support the observations (visual surveys) and interviews.

Questionnaires were given to low-income groups using probability sampling to make a sample of the population representative, in particular stratified random sampling, to define the proportional numbers of the project selected. The questionnaire consists of closed and open-ended questions using multiple choices, a checklist and rating scale. The design of questionnaire consists of some variables and indicators such as: demographic characteristics, house conditions, low-income groups roles and perceptions in the projects.

To get information about the constraints in providing better quality affordable housing projects for the low income groups in Sarbagita Metropolitan, the representatives of the government, as well as public and private developers used semi-structured and face-to-face interviews.

Observation is used to examine the involvement of low-income groups in the projects and the quality of the projects. The quality of projects is investigated in terms of the quality of housing, infrastructure, service delivery and facilities by using a checklist and rating scale.

### Data analysis

Data collected by survey were analyzed by quantitative analysis, while data collected by observation, documents, and interviews were analyzed by qualitative analysis. To analyse housing projects quality and the influential factor of the project quality in study areas (Fig 3), we used a set of indicators, which were based on the theoretical framework and our empirical information collected during fieldwork, documentation revision, and the interviews.

Indicators of housing project quality were:

1. Housing quality is analysed in terms of size of building and plot, number and size of rooms, and building material of house in that areas.
2. Infrastructure and service delivery are analysed in terms of availability, size and the material of roads, capacity, system and accessibility of water supply, solid waste management and disposal, drainage and sanitation in that areas.
3. Public and social facilities are analysed in terms of the availability, the accessibility and maintenance of those facilities in areas like education, health, commercial area, government and public service, space for praying, recreation, culture, sport and other facilities.

Indicators of influential factors on the quality of housing were:

(1) *Selling prices of house*: the selling price of house is the important components to determine the quality of projects. The high price of house will reflect better quality of housing and the completeness of infrastructure and facilities available. Because these costs will be calculated in the selling prices of house. Less house prices could influence less quality projects. Measuring house prices to quality of projects is based on measuring the spending on land prices, building material cost, infrastructures and facilities cost, administration fees and economic crisis. In this case, the administration fee is a permit fee and marketing cost. Obviously, these costs influence the house prices more than 15% of total development cost. The permit fee that is written in standards and permission regulation is low; however, the developers often have to pay more as extra cost for the permits. Moreover, the selling prices of house in study cases will be compared to the ceiling prices of house, which are set up by government. The ability of developers to adjust the ceiling prices of house will influence the quality of projects. Higher selling prices of house than ceiling prices will lead to better quality projects in those areas.

(2) *Incentive prepared by government*: incentives and support from government could determine the quality of projects. The support could be infrastructures provision and facilities, subsidy programs for customers, the ease of obtaining the funding source and administration process like permission and land acquisition process. Logically, the sufficiency of incentives for developers will tend to provide better quality of projects than inadequate of it.

(3) *Enforcement of building standards and regulations*: the building standards and regulations, which are issued by public works department, are ideal rather than realities sometimes viewed as being cumbersome. These are related to the local government's role in controlling and monitoring the projects. The enforcement of these rules will determine the quality of housing projects. It could be measured through the presence of institutions responsible for evaluating the project proposals and supervising their implementation. Moreover, the corporation among the controller institution to verify the projects in those areas will lead to better quality of projects. Otherwise, less enforcement of these rules will create low quality projects.

(4) *Means and efforts undertaken by households*: the influences of household, as customers are the most important factors for determining the quality of projects in those areas. This means that residents have means to participate actively or not in pre-construction, construction and post construction phase of the

project. The adequacy of means and efforts undertaken by household in projects will provide better quality of housing projects.

(5) *Human resources capability of developers*: the capability of developers particularly human resources has an influence on the quality of projects. Although this factor determines indirectly the quality of projects, the prudence of developers with the adequacy of professional human resources will provide better quality projects in those areas.

## RESULTS AND DISCUSSION

### Quality and influential factors of affordable housing provision projects

The result of the analysis is presented in Table 1. It shows the quality of projects by both public and private developers in the study areas and also the factors influencing the quality of projects. Also, Table 2 shows how strength of the factors influencing the projects in different schemes of housing and settlement in the study areas.

In comparison to private housing, the quality of public projects is generally low due to the building materials used, particularly that used for walls and flooring as well as the poor number and small size of rooms.

With regards to infrastructure and service delivery, public developers provided better infrastructure and service delivery like road conditions, water supply provision, drainage and sanitation. Yet, the weakness is the low level of garbage disposal management. The private provided apparently lower infrastructure. These are poor road condition, low level water supply provision and also poor solid waste management.

In terms of public facilities, both public and private developments lack accessibility to public facilities, and public projects are in low level in terms of maintenance of public facilities.

Selling price of house is considered as indicator for determining the quality of projects. The high house price results from quality housing and good infrastructure and facilities. These costs will be included in the selling prices of the house. The lower the house prices the lower the quality of projects. The selling prices of houses in public projects are considered affordable and much lower than in private projects. The use of affordable building material, low land prices, low administration fees are the factors reflecting the prices of public houses. The findings showed that public projects did not apply the building standard cost, which is issued by Public Works Department. As a result, the housing in public projects lacks quality mainly due to low level building materials. On the other hand, private projects used building standard cost even higher than standard, leading to better quality housing. The high prices of land and extra cost for accessing the legal permit are considered as the constraint of developers in providing better quality projects, for instance, complete infrastructure and public facilities. Moreover, the economic problems hinder in Indonesia

are also factors contributing to the constraints of developers in providing affordable and better quality housing, especially for private developers who used the commercial bank with high interest rate and short maturity loans to finance their projects.

Incentives provided by the government could act as a catalyst in improving the quality of projects. The findings of our analysis showed that public projects have more support in infrastructure provision, administration process and even in financial support compared to private developers. Public developers easily acquire land and obtain financial support and legal permits. During construction, they have better access to roads and water supply by connection to the main piped clean water. As a result, the infrastructure and services provided by the public have better quality than that of the private.

Enforcement of building standards and regulations determines significant quality of projects. The findings show that the weakness of the public project is related to the low enforcement of regulations particularly building standard. While the private developers have implemented better building standard, they were unsatisfied with having no strong control and monitoring and accountability of the appraised team to verify and supervise the projects since they were only involved in the phase of approving the project proposal. As a result, this leads to unclear responsibility for project upkeep and maintenance. These are the important factors directly influencing the low quality of projects in those areas.

Means and effort undertaken by households, the influences of households, and customers are the most important factors to determine the quality of projects in those areas. It is clear that either public or private projects lack means and efforts to intervene fully to control the quality of project. 73% of households in public projects have no instrument to complain about the quality of projects, while in case of private developers, it is 69%. This leads to opportunities for developers to lie about the quality of projects in those areas.

Human resources capability of developers will influence the quality of projects. The findings show that the public has quite enough staff to manage the projects, but they lack skills and capability to professionally manage projects. While, private developers have the sufficient staff that have skills and capability and also are professional in management of project. It is clear that the factor determines indirectly the quality of projects. This influences generally project management and eventually influences the quality of the projects.

### Strength and weakness of projects

Many efforts and approach have been fully conducted and many programs have been attempted in order to provide greatly a better housing and settlement that is affordable, environmentally safe, better standard of housing, better infrastructure provision and better public

**Table 1.** Analysis of projects quality and influential factors in study areas.

<b>Indicators</b>	<b>Public projects</b>	<b>Private projects</b>
<b>Projects quality</b>		
1. Housing	<ul style="list-style-type: none"> <li>- Poor building material especially wall and floor</li> <li>- Poor number and size of room especially too small size of room and inadequate bed room</li> </ul>	<ul style="list-style-type: none"> <li>- Better on the size of building and plot</li> <li>- Poor building material especially floor and ceiling material</li> </ul>
2. Infrastructure and service delivery	<ul style="list-style-type: none"> <li>- Poor solid waste management and disposal especially garbage disposal</li> <li>- Poor drainage and sanitation system</li> <li>- Good road condition</li> <li>- Good water supply provision</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- Poor road condition</li> <li>- Poor water supply provision especially the use of wells as drinking water</li> <li>- Good water supply provision</li> </ul>
3. Public facilities	<ul style="list-style-type: none"> <li>- Lack of availability and accessibility of public facilities</li> <li>- Low level of maintenance of facilities</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- Better availability and accessibility of public facilities</li> </ul>
<b>Influential factors</b>		
1. Selling prices of house	<ul style="list-style-type: none"> <li>- More affordable</li> <li>- Approximately to ceiling prices</li> <li>- Lower land prices</li> <li>- Lower building material cost</li> <li>- Lower administration fees</li> <li>- Lower influence economic problem</li> </ul>	<ul style="list-style-type: none"> <li>- Less affordable</li> <li>- Higher than government ceiling prices</li> <li>- Higher land prices</li> <li>- Higher building material cost</li> <li>- Higher administration fees</li> <li>- Higher influence economic problem</li> </ul>
2. Incentives prepared by government	<ul style="list-style-type: none"> <li>- Good access to water supply provision</li> <li>- Good access to road provision</li> <li>- Good access to legal permit</li> <li>- Good access in obtaining financial support</li> <li>- Adequate subsidy for low-income groups</li> <li>- Support in land acquisition</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- Good access to legal permit</li> <li>- Adequate subsidy for low-income groups</li> </ul>
3. Building standard and regulation enforcement	<ul style="list-style-type: none"> <li>- Low building standard of houses</li> <li>- Better standard in infrastructure provision</li> <li>- Low standard in public facilities</li> <li>- Lack corporation of appraised team to verify quality project</li> <li>- Clear government responsibility in project upkeep and maintenance</li> </ul>	<ul style="list-style-type: none"> <li>- Good building standard of houses</li> <li>- Lower standard in infrastructure provision</li> <li>- Better standard in public facilities</li> <li>- Inadequate strongly control and accountability of the appraised team to verify quality project</li> <li>- Unclear responsibility in project upkeep and maintenance</li> </ul>
4. Means and efforts undertaken by households	<ul style="list-style-type: none"> <li>- Almost 73% households have no means to influence</li> </ul>	<ul style="list-style-type: none"> <li>- Almost 69% households have no means to influence</li> </ul>
5. Human resources capability	<ul style="list-style-type: none"> <li>- More human resources</li> <li>- Lack of human resources capability</li> <li>- Low skills in project management</li> </ul>	<ul style="list-style-type: none"> <li>- Good human resources capability</li> <li>- Better skills in project management</li> </ul>

facilities in terms of availability and accessibility. However, perfect housing and settlement development, mainly for low-income groups do not exist. Some constraints cannot

be overcome immediately without strong efforts from all actors involved in the projects to ease the problem. Based on the final results represented, the strengths and

**Table 2.** The influential factors on projects quality in study areas.

Influential factors		Public projects	Private projects
1.	Selling prices of house		
a.	Ceiling prices	XX	XXX
b.	Land prices	XX	XXX
c.	Building material cost	X	XXX
d.	Administration fees (legal permit and marketing fees)	XXX	X
e.	Economic problem	XX	XXX
2.	Incentives prepared by government		
a.	Infrastructure provision	XXX	X
b.	Ease of funding sources	XX	X
c.	Subsidy for low-income groups	XXX	XXX
d.	Ease in administration process	XXX	X
3.	Enforcement of building standards and regulations		
a.	Government controlling and monitoring	XX	X
b.	Clear responsibility in project upkeep and maintenance	XXX	X
4	Means and efforts undertaken by households	X	XX
5.	Human resources capability of developers		
a.	Sufficiency of human resources	XXX	XX
b.	Skills in management project	X	XXX

Note: XXX = strong; XX = fair; X = weak.

weaknesses of those schemes are shown in Table 3.

## Conclusion

Based on the comparative study of the affordable housing and settlement projects in the study area, using housing projects in Sarbagita Metropolitan, we would like to conclude by answering the four research questions as mentioned above.

The first question is how is the current quality of affordable housing projects, which are provided by public and private developers, in terms of housing, infrastructure and public facilities? The findings would be defined as follows:

1. 60% of public projects are low level quality housing (Figures 4 and 5), particularly building material and number and size of room; only 20% are good. On the other hand, only 30% of private projects are considered poor in housing quality and almost 58% are good. This implies that private developers provided better quality of housing compared to public.
2. Referring to infrastructure and service delivery, only 35% of the public are considered poor especially low level of garbage disposal management and almost 58% are good. While more than 40% of private developer projects are of low level quality in terms of infrastructure and service delivery like poor road condition, low level water supply provision and poor solid waste management and only 45% are good. This implies that the public

provided better infrastructure and service delivery than private developers.

3. With regard to public facilities, both public and private developers are almost 55% considered as poor, which generally lack availability and accessibility and low maintenance of public facilities.

The second question is, what are the constraints particularly for developers in providing better quality affordable housing projects? The findings are:

1. Selling prices of house vs. ceiling prices of house: it means that selling prices of house are much determined by market price while government sets up the ceiling prices of house. However, most developers argued that this factor is a constraint for them in providing better quality projects. They are unable to provide the selling prices of house appropriating to ceiling prices of house related to cost recovery and unprofitable projects. The findings showed that the selling prices of houses in public projects are considered much more affordable than private projects.
2. Incentives prepared by government such as the ease in land acquisition, obtaining financial support, accessing legal permits, easy access to road and arranging water supply provision are the factors to determine the quality of projects. The findings showed that public projects received more support in infrastructure provision, administration process and even in financial support compared to private developers. As a result, the infrastructure and services provided by the public are better quality than



**Table 3.** Strengths and weaknesses of different schemes of affordable housing projects.

Indicators	Strengths		Weaknesses	
	Public projects	Private projects	Public projects	Private projects
1. Demand side	<ul style="list-style-type: none"> <li>- Affordable prices</li> <li>- Larger land plot size</li> </ul>	<ul style="list-style-type: none"> <li>- Affordable to certain market segment</li> <li>- Better quality of house building material</li> <li>- Larger number and type of houses</li> <li>- Better design of houses</li> <li>- Better image of living environment</li> </ul>	<ul style="list-style-type: none"> <li>- Lower quality of house building material</li> <li>- Limited number and type of houses</li> <li>- Simple design of houses low cost image</li> <li>- Lower living environment image</li> </ul>	<ul style="list-style-type: none"> <li>- More expensive of house prices</li> <li>- Smaller land plot size</li> </ul>
2. Supply side	<ul style="list-style-type: none"> <li>- More marketable</li> <li>- Lower cost because most support by subsidies</li> <li>- More complete infrastructure and services</li> <li>- Lower land prices</li> <li>- Lower building material cost</li> </ul>	<ul style="list-style-type: none"> <li>- More profitable</li> <li>- Located in strategic area</li> <li>- Better level of public facilities</li> </ul>	<ul style="list-style-type: none"> <li>- Less profitable</li> <li>- Lower level of public facilities</li> </ul>	<ul style="list-style-type: none"> <li>- Less marketable</li> <li>- Higher cost because of less incentives</li> <li>- Limited infrastructure provision</li> <li>- Higher land prices</li> <li>- Higher building material cost</li> </ul>
3. Development implementation	<ul style="list-style-type: none"> <li>- Faster only in small scale development</li> </ul>	<ul style="list-style-type: none"> <li>- Faster and capable for large scale development</li> </ul>	<ul style="list-style-type: none"> <li>- Slower in larger scale development</li> <li>- Low target when limited resources</li> <li>- Development depend on government support</li> </ul>	<ul style="list-style-type: none"> <li>- Development depend on demand side</li> </ul>
4. Government incentives	<ul style="list-style-type: none"> <li>- More access to subsidy</li> <li>- More access to financial resources, commonly financial support from government</li> <li>- More access to land provision</li> <li>- More access to infrastructure provision</li> </ul>	<ul style="list-style-type: none"> <li>- More incentives under certain circumstances</li> </ul>	<ul style="list-style-type: none"> <li>- Low development without government incentives</li> </ul>	<ul style="list-style-type: none"> <li>- Limited access to subsidy</li> <li>- Limited access to financial resources, usually use commercial finance resources</li> <li>- Limited access to land provision</li> <li>- Limited access to infrastructure provision</li> </ul>
5. Developers capability	<ul style="list-style-type: none"> <li>- More human resources</li> <li>- More labour force</li> </ul>	<ul style="list-style-type: none"> <li>- More capability of human resources</li> <li>- Better skills in project management</li> <li>- More efficiency in labour force</li> </ul>	<ul style="list-style-type: none"> <li>- Less capability of human resources</li> <li>- Less skills in project management</li> <li>- Inefficiency in labour force</li> </ul>	<ul style="list-style-type: none"> <li>- Limited human resources</li> <li>- Limited labour force</li> </ul>

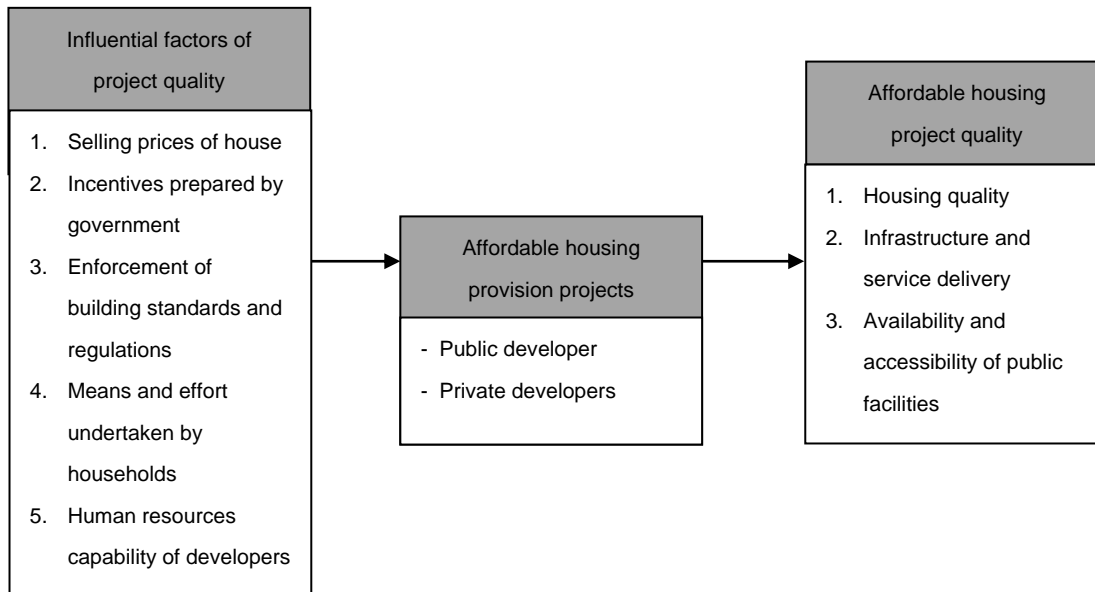
projects of private developer. Lack of incentives provided by government is considered as constraints for private developers in providing better quality and affordable housing and settlement projects.

3. The building standard cost, used in the projects, is a significant factor that influences the quality of projects. Public projects did not apply the building standard cost, which is issued by Public Works Department. As a result, the housing of public projects lacks quality mainly due to the use of low level building material. Private projects

used standard building material even higher than standard, resulting in better quality housing.

4. The high prices of land and extra cost for accessing the legal permit are perceived as the problem particularly for private developers to provide better quality projects, in particular, in providing complete infrastructure and public facilities.

5. The economic problems, which hinder in Indonesia, are also the constraints for developers in providing better quality and also affordable houses especially for private



**Figure 3.** Indicator of analysis - influential factors of project quality.



**Figure 4.** Type 21 - Monang Maning – public housing project.  
Source: Acwin (2009).



**Figure 5.** Type 21 - Dalung Permai – private housing projects.  
Source: Acwin (2009).

6. Low enforcement of building standards and regulations is a significant factor that influences quality of projects. The findings showed that the weakness of the projects is related to the low enforcement of regulations particularly building standard. This factor is related to inadequacy of strong control and monitoring and also accountability of the appraised team to verify and supervise the projects. The control was only in the phase of approving the project proposal and this leads directly to unclear responsibility for project upkeep and maintenance. These are important factors that contribute directly to the low quality of projects in study areas.

The capability of developers, in particular, human resources influences the quality of projects. The findings showed that the public have quite enough staff to manage their projects. Yet, they lack skills and capability of human resources to manage professionally the projects. While, private developers have the sufficient staff who have skills, capability and also are professional in project management. It is clear that this factor determines indirectly the quality of projects. This influences generally project management and in due time influences the quality of the projects.

The third question is, ‘do the low-income groups have means or instruments for influencing the quality of affordable housing projects?’ The findings are:

1. Means and effort undertaken by households, the influences of household as customers are the most important factors that determine the quality of projects in those areas. Referring to the argument of BTN, households as customers have a contract of selling-purchasing with developers. It means that people have power to

developers who used the commercial bank with high interest rate and short maturity loans to finance their projects.

influence house condition, provided by developers when they are unsatisfied with the quality of the house and its environment.

2. The findings showed that either public or private projects lack means or ability of households to intervene fully in controlling the quality of project. 73% of households in public projects have no instrument to complain about the quality of projects while it is 69% for private developers. This gives opportunities for developers to lie about the quality of projects in those areas.

## **Recommendation**

### **Monitoring and evaluation of project**

To improve the housing and settlement projects in the future, it is more likely necessary to establish an effective monitoring and evaluation component of projects. It means that the projects have to allow demonstration or testing so that previous projects can be learned and incorporated into mainstream practices and policies. The projects can be used as a means for providing feedback for local government as enabler and facilitator in urban housing and policies development rather than merely the means of implementing them.

Monitoring should be considered as a prerequisite for, but quite separate from, evaluation. Ideally, monitoring provides a day to day capability for assessing all aspects of project allowing for effective remedial measures when flaws or problems develop. It is an operational tool, a means of reinforcing the chances for the success of the project. For this reason, it is needed urgently to develop the institutional framework for controlling and monitoring housing projects, bringing together all actors involved like public agencies, private sector, NGOs and CBOs.

The strengthening of capacity building within local government and community itself and other actors involved is very important. It is necessary to improve institutions in undertaking approach for controlling and monitoring housing projects for effective direction; examples: co-ordination techniques in solving problem, new participate approach, personal and management related to working in interdepartmental and also ability to work in partnership with actors outside government like NGOs, CBOs and private sector.

Although, previously it is realised that interns of authority, the power of local government to undertake this approach and co-ordination of the public, private sector and other actors are often very restricted by the central government. However, since the laws of decentralisation (Law No. 22/1999 and Law No. 25/1999) were issued in 1999, the local government in Sarbagita Metropolitan has been the power to become more responsible for urban housing development. Moreover, it would be a potential to increase the accountability of local government and make the government to be closer to the needs of the poor.

It is suggested that the local government should try to reform all aspects, particularly, in local administration by increasing training skill and capability of staff and working together with other actors outside the government to encourage the capacity building in urban housing development. Moreover, the local government should put on policy that is transparent in all process, in order to anticipate trust from the community. It is hoped that the local government does not end as enabler, facilitator and also policy developer, but be more likely to direct the needs of the poor.

### **Norms, standards and regulations enforcement**

Ideally, it is supposed that laws, norms, standards and regulations are appearance of manifestation of social responsibility especially for poor peoples. Yet, current norms, standards, regulation and procedures, which exist sound ideal rather than their implementation in realities.

However, to force the actors involved particularly developers to obey standards and regulations is difficult because the developers are profit oriented rather than social oriented. Law enforcement will not work properly without forcing the actors who are out of track to obey the rules. It is suggested that it is important to set up strong independent board from the society, which can control and monitor strictly the projects from planning, implementation till post construction.

The current mechanism of housing and settlement controlling is not spread all over. It sounds clear in formal procedures and more on planning approach; however, the voice of the community, as main partners is often not deeply seen. The arbitrariness of developers to manage the projects becomes neglected without strong touch from the local government.

The shift of behaviour of developers is also an important issue. Developers should not only think of making profitable but also on how to really help the low income groups who need the house to live in. It means creating houses, which are cheap and affordable and at the same have all the infrastructure and facilities that meet the norm standard of housing and settlement.

### **Support for developer**

As mentioned previously, the developers particularly the private sectors have dominant role in taking over the entire process of housing development. Supports or incentives for developers are considered important to improve the quality of housing and settlement projects.

At present, the involvement of private developers in housing sector has so far only limited impact on the sense of affordability. Private developer has introduced 'too' high standard building and housing mortgage bank has high interest rate. All of these factors have influenced housing market to work in a diverse way. Moreover, the involvement of private developers does not address the

better quality of housing and settlement especially for low-income groups.

Fundamentally, private developers are characterised by profit oriented rather than social oriented. Profits oriented enterprises have to be innovative to survive; therefore they are adopting to change and quickly to abandon unsuccessful venture. They have ability to attract more trained-well professionals than the government. They are more capable of executing tasks that are highly technical.

The involvement of private sector in affordable housing in an emerging force may be considered as a great effort to produce more urban housing. It is then the task of the local government in Sarbagita Metropolitan to create a good atmosphere that is more transparent, accountable and responsible to enable the developers to fully involve. Positive government intervention will lead to developers producing more affordable houses and better quality housing, infrastructure and facilities for low-income groups.

It is suggested that communication between local government and private developers be strengthened to provide a realistic goal and objective of the housing development. Real Estate Indonesia (REI) as a legal institution in property business in urban areas should be involved more intensively to set goal and objective together as these both actors already did.

In order to enable the members of REI to provide a more realistic price per housing unit, government should support a competitive mortgage bank to supply urban housing loan with low interest rate necessary to provide infrastructure. It is a big challenge for government to call for private developers to set a realistic price if they bear to involve in low-income housing and also building standard of housing should not be too high.

The local government should stimulate the developers by providing adequate and flexible administrative process such as the ease of legal permit fees, minimizing certificate fees of land especially for affordable housing, fees of location permit, land acquisition and instalment fees of electricity and water. The great transparency and accountability in administrative procedures are fully needed in order to encourage the developers addressing better quality housing and settlement project.

The local government should share the power in housing development with private sectors in future. It means that the local government should not be direct producer in housing but more as facilitator to work together with private sector. It is then task of local government to create the strategy approach, for instance through public private partnership to support urban housing development. It seems that partnership would be an appropriate way of formal housing development, for low-income groups.

### **Support for community efforts**

The effort of the local government in Sarbagita

Metropolitan to increase the living condition in affordable houses is not only to increase the physical environment but also the non-physical environment such as giving information about developing system within the community. Stimulating community to change their attitude and mentality in order to increase the awareness for improving their environment and housing condition could increase the efforts undertaken by the local government.

Moreover, it is hoped that local government should seek advice from community agencies (CBO) to meet human needs and the appropriate mechanisms for strengthening local organisations and to ensure that the projects could enhance the need of urban poor. The community agencies should be encouraged to act as linkages between the poor and the formal sector in the development of community structures and the distribution of resources to achieve adequate eligible housing and settlement.

Significant recommendations can be proposed to improve the quality of housing projects. First of all, affordable housing projects should provide options for the residents as customers to participate actively in the planning, implementation and management projects. It means that through community agencies (CBO), the community ought to be encouraged to share effective decision-making power in housing projects to directly address the needs of the poor.

Second, if the community can organise themselves to participate in the improvements. So the most important factor is to generate the belief in the people that they can contribute to the improvement of housing. The perceived housing needs of the communities and the designing of participatory programs which satisfy these needs directly would benefit the community more than a pre-conceived idea imposed on them.

The third is that the government should encourage people to house themselves. It means that the local government in urban management context has the responsibility to stimulate urban housing in particular for low-income groups and also the local government has to shift from a direct producer to facilitator of housing development. To use this approach, the local government should provide the elements of housing that residents cannot provide or organise for themselves, such as affordable land, infrastructure and public facilities. It is task of the local government to support the people by providing more infrastructures like urban road, water supply, drainage and solid waste management. Besides, it is suggested that local government should provide more easy access to housing loan for low-income groups with lower interest rate to upgrade and improve their houses.

Considering the limitation of budget and capability of local government to provide urban services, like handling or improving the housing and environment, participation of community in this process should count. The willingness and ability of the community to improve their

houses and environment are potential for keeping the results of development. Local government should encourage the community to strengthen self-financing of house. Community has to be involved, participate actively in improving their housing condition. The involvement of the community really needs interns for development process, operation and maintenance process and it would stimulate them to feel the results of development and lead to a sense of belonging.

Moreover, local government should give information and motivation to the community, so that the community is aware and understand the housing development process. To actualise this approach, it is suggested that local government establish housing and settlement information centre in order to give space for community and developers to access the information about norms and standards of housing and settlement and to get better understanding of mechanism of urban housing development. Hopefully, the community would be willing to participate in the housing development process and has a sense of belonging in the development result.

### Financial support

Financial support is essential for improving housing projects and for emerging the affordable housing development. The community has inadequate and unreliable financial sources of housing. For instance, it has been conducted that linking formal housing finance institutions with informal sector enables the community to access easy housing finance. Although the subsidies might not be the best solution, the program of current subsidy should be appropriate and affordable scale, well targeted, measurable and transparent.

Because the significant weakness present challenges to be handled with care due to its limited funds, the program and subsidies are given to certain groups, for example, only local government employees and military have access to affordable house provided by developers especially from public developer.

Local government should consider housing as a community affair and be responsible for initiatives that stimulate housing development in the future. To encourage the self-financing of community in housing development, firstly the local government should support by providing financial instruments. This could be done by affiliating the community to housing finance institutions, creating healthy and competitive mortgage lending institution and fostering innovative arrangement by making the poor have access to finance. This could be done through a local rotating credit scheme initiated by the community to avoid collateral requirements.

The most important thing is that low-cost housing projects in the future be encouraged effectively as well employment opportunities and economic activities development programmes. It is suggested that the projects have to be options for residents as means of income

generation, and should not be temporary or not sustainable.

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