

QUALITY OF LOW COST HOUSING SETTLEMENT PROJECT

CASE STUDIES: LOW COST HOUSING PROJECT PROVIDED BY DEVELOPER AND PERUMNAS IN DENPASAR

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ABSTRACT

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 come to live in it and it has to be acceptable in a community. Housing also means privacy and is an expression of ways of life, aspirations and social relationships. Therefore, housing is the provision of comfortable shelter with available infrastructure, services and facilities that address the people needs.

Denpasar have large the low-income housing and settlement provided by PERUMNAS and private developers as well. Yet, the fast growing of low-income housing projects in Denpasar is not guaranteed addressing the living conditions of low-income group. In fact, most housing projects, which is built both by private developers and PERUMNAS, lack physical quality, lack infrastructure and lack 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 Denpasar. The result is that the low quality of low cost housing project, caused by lack of instruments to force the builders to provide better quality and the households themselves also have no means to influence the quality of project as well.

Key Words: *quality, low cost housing project, low income group..*

INTRODUCTION

1. Background

Indonesia consists of a large archipelago located in Southeast Asia and situated around the equator. At present the total population is about 200 million people (BPS, 2000). As most other developing countries, Indonesia is facing rapid urbanisation in cities, especially the metropolitan and large cities in Indonesia, has given rise to the complicated problem of housing and infrastructure provision in urban areas.

Denpasar, is also one of the fastest growing urban in Indonesia with 373.272 inhabitants in 1997 with the growth rate 2.19% and it will be 425.108 inhabitants in 2004

(Denpasar Dalam Angka, 1997). Denpasar has an important role to play as centre of tourism, industrial and urban housing development. Rapid population growth and rural-urban migration in Denpasar have produced a very high demand for housing and rapid urban expansion.



Perumahan Dalung Permai
Sumber: *Dokumentasi Pribadi*, 1998.

Over the 20 years ago, in Denpasar have grown low-income housing and settlement provided by PERUMNAS (National Urban Housing Co-operation) and private developers as well. This is aimed to address housing needs of the low-income groups by implemented simple and very simple housing (the housing ratio: 1 luxury house, 3 simple house and 6 very simple house). The size of the houses is about 15 square meter in core houses till 70 square meter in the simple houses (on 60-200 square meter plots). This target is as co-operation between institutions to provide development cost (PERUMNAS, Developer, National Saving Bank/BTN and community as beneficiaries). So that the low-income groups can borrow a long-term loan at subsidised interest rate from the National Saving Bank (BTN). Low-income groups benefited by the programme have access to housing loan (mortgage finance) to purchase the shelter with soft interest rate.



Sarana Jalan Perumahan Dalung Permai
Sumber: *Dokumentasi Pribadi*, 1998.

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

Most low cost housing projects in Denpasar are considered affordable especially from PERUMNAS. Yet, most them are still not fulfilled norms standard of a housing and human settlement, which is issued by Public Works. This seems that housing as means of comfortable

shelter with available infrastructure and urban amenities becomes far to satisfy the need of poor.

2. Problem Statement

Referring to the condition discussed above, the problem is *lack of quality of low cost housing projects, which are provided by PERUMNAS (National Urban Housing Co-operation) and Private Developers*. The problems mentioned are caused by lack of instruments to force developers and PERUMNAS to provide better quality. The households themselves also have no means to influence the quality of project. 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 Denpasar.

3. Research Question

Basis on the hypothesis above, the research question can be defined:

1. How is the current quality of low cost housing projects, which are provided by PERUMNAS and private developers in Denpasar, in terms of housing, infrastructure and public facilities?
2. What are constraints faced especially by developers in providing better quality of low cost housing projects?
3. Did the low-income groups have means or instruments to influence the quality of low cost housing projects?
4. What are strengths and weakness of each low cost housing and settlement projects, which are provided by PERUMNAS and private developers?

4. Methodology

Methodology and research methods which is used in this study consists of:

a. Reviewing Urban Housing Development

This was conducted through selecting theory about urban housing concept, approach in low cost housing for low-income groups and guidelines in assessing low cost housing projects as the base in

analysing the quality of low cost housing projects for low-income groups.

b. Sampling

The sample have been conducted through *selecting from among the low-income housing and settlement projects for low-income groups* provided by the PERUMNAS and private developers in Denpasar. The case studies, I would present here consist of four low-income housing and settlement projects. Two cases will be selected from PERUMNAS (National Urban Housing Co-operation) and others are from private developers. The reason to show two different sponsored projects is both of them have the same main role in low cost housing provision in Denpasar.

c. Data Collection and Interviews

Data collection and interviews have been held with representatives of the government, PERUMNAS and private sector who relate to the housing development to get information about the constraints in providing better quality of low cost housing projects for the low income groups in Denpasar.

1. *The primary data* was collected concerning some *low-income housing and settlement projects*.
2. *The secondary data* was collected from official data statistics, law and regulations and the reports or documentation from the representatives agencies.

d. Data Analysis

A *qualitative analysis* will be considered as the quantity of data collected and time consumed are only limited and much data are in the form of case studies. The approach is based on qualitative data and information from the representative people.

To analyse the projects quality and the influential factor of the project quality in

study areas, some indicators or parameters can be used. Futhermore, basis of this analysis is the final results, the strengthen and weakness of the different schemes of low cost housing both provided by PERUMNAS and private developers will be drawn.

THEORETICAL FRAMEWORK

1. Housing Quality

A *house* is a building for people to live in, protecting them from different kinds of damaging elements such as wind, cold, rain, sun heat and others. *Housing* means accommodation in houses. *Home* means one own house, a place where one lives specially with family. Like food and clothing, housing is basic need, even for those who live in places where only the minimal shelter is required. Housing is more than man's way of protecting himself from weather and coming to terms with the environment. It is also an expression of his culture and the way of life, of himself, of family and tribal folk-ways, of the concept of community. It is also an indicator of man's fear and prejudices. For some it is a symbol of pride for others a badge of inferior social status and poverty (UNCHS, 1992).

Housing which can be defined as shelter is considered to be most *basic function* of home and neighbourhood. As a second function, *the utilitarian function* is mentioned the facilities, which the dwelling and the neighbourhood offer to carry out activities like cooking and washing. As a third one is *the domain function*, the home as one's own territory, a place, which guarantees the dweller's privacy. Next is *the social function*, the facility to communicate from the home base with the outside world. The fifth and the last is *the symbolic or cultural function*. Home and neighbourhood offer possibilities to chose or design one's living as symbol for a way of life and its subsequent values, with which the resident wants to be associated (Blauw, 1994).

In the Indonesia society housing as a shelter reflects the level of living, welfare, safety, personality and culture. Housing can not be seen merely as a living and infrastructure/facilities function, but also as settlement process and as

facilities for people to communicate with the environment (neighbourhood, society, nature surroundings). So housing is a means both to actualisation of the individual and to integration with environment (Pembangunan Perumahan, 1994).

However, *housing quality* has been differently defined because of its different attributes or the extent of the housing problem in a given community (Sengendo, 1990). Attempts to measure housing quality are complicated by social economic and political characteristics of communities. Yet, all the different measurements used consider the physical structure of dwelling 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.

Urban authorities in the developing world would find housing quality unsatisfactory when it does not meet the official housing standards and regulations. Thus housing would be seen as satisfactory if built of permanent building materials, with all the infrastructures 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.

2. Low Cost Housing Definition

Regard with low-cost housing, the aim is to achieve 'not second rate housing but a type of housing adapted to the resources, tastes and habits of families who cannot, as a rule find satisfactory accommodation under normal market conditions' (Cancelleri, 1990).

Moreover, the city is at the one hand a centre of dynamic development, on the other hand a collection of poor people. Concerning the latter, the interrelations between urban poverty low productivity and environmental degradation should be taken as a point of departure. This pleads for a holistic, instead of the traditional sectoral approach. Such an urban social policy recognises that the social structure, in which people live, determines their well being, as well as the physical and economic environment (Van Dijk, 1994).

According Graciela Landaeta, (1994), *low income housing* is used instead of terms like *low-cost housing* and *social housing* that were commonly used in the past to refer to housing for the poor. Both terms are now controversial and are linked to ideological conceptions. In the first case it is very much linked to lowering standards as the only means to make housing affordable for the poor. In the second, low-income housing is often understood as charity. Low-income housing will be used for activities for and by people with low-incomes, thus the population that is often not reached by both the public and private formal housing sector.

Based on mentioned above, *the low-cost housing can be defined as a type of housing adapted to the potential resources with specification satisfactory to habits and affordable by low-income as a target groups.*

3. Approach in Low Cost Housing Development

The World Bank and the United Nations are the two international agencies with most influence on the definition of housing strategies in developing countries. Their guidelines have gone through change in the last decades and they have clearly been linked to international development strategies accepted by government all over the world.

This part articulates the housing policy of the World Bank more in depth. The Bank advocates the reform of government policies, institutions and regulations to enable the housing market to work more efficiently and move away from limited, project-based support of public agencies engaged in the production and financing of housing.

Changes in housing policies of the World Bank are explained by its experience working on housing with developing countries during the last twenty years. The Bank considers that in the past its intervention was 'too narrow', and therefore it should now play an expanded role in enabling housing markets to work more efficiently.

According to World Bank (1993), there are seven instruments to enable the housing market to work efficiently:

1. **Developing property right:** ensuring that rights to own and freely exchange housing are established by law and enforced, and administering programs of land and house registration and regularisation of insecure tenure;
2. **Developing mortgage finance:** creating healthy and competitive mortgage lending institution, and fostering innovative arrangement for providing access to housing finance by the poor;
3. **Rationalising subsidy:** ensuring that subsidy programs are of an appropriate and affordable scale, well-targeted, measurable and transparent;
4. **Providing infrastructure** for residential land development (roads, drainage, water and sewage);
5. **Regulating land and housing development;**
6. **Organising the building industry;**
7. **Developing institutional framework for managing the housing sector:** bringing together all the major public agencies, private sector, NGO's and CBO's

The main objectives can be inferred from the World Bank's new approaches:

1. The housing sector must function as an effective and profitable economic sector;
2. Private sector might assume the main responsibility in shelter supply;
3. Public sector has to limit its role to managing the housing sector;
4. Investment should be put in large infrastructure projects (water supply, sanitation and urban transport); and
5. To develop the building materials industry.

The World Bank (1993) suggested that (a) *the provision of infrastructure*, (b) *the involvement of private sector* and (c) *rationalising subsidy in housing production all have a bearing on the production of housing*. These instruments affect the quantity of the housing available to meet the needs of final consumers of housing services, and the prices and hence the affordability, equity and production of informal housing, which accommodates most of the population in developing countries.

Moreover, the critical importance of housing has been highlighted in the second UNCHS (Habitat II), held in Istanbul where various nations of world gathered together to discuss shelter and human settlement issues under the broad themes of *Adequate Shelter for All and Sustainable Settlements in Urbanising World*.

The goal of adequate shelter for all by year 2000, is stated to ***mean more than a roof over one's head***, it means ***adequate privacy, adequate space and security, adequate lighting and ventilation, adequate infrastructure and location*** in regard to work and basic facilities at a reasonable cost (UNCHS, 1996).

To operate this goal, government must assume an ***enabler or facilitator role*** in the provision of low cost housing. This means that government has to create the environment whereby ***laws, institutions and policies*** are developed such that both the users and the builders can obtain the necessary resources, which they would need in terms of land, infrastructure, materials and finance. The enabling approach hinges on the following role of government:

1. ***An institutional structure*** to maintains basic structure and services which is responsive to local needs and priorities
2. ***A regulatory and incentive structure*** to encourage more sustainable levels of resources use
3. ***The enabling environment*** to support and encourage the initiatives of individuals and community organisations to improving housing and living conditions.

This does not mean that government shuns away from its responsibility but rather, what is required is a relocation of public activities and human, physical and financial resources.

4. Guidelines in Assessing and Role of Low Cost Housing Provision Projects

a. Guidelines in Assessing Low Cost Housing Provision Projects

Many factors can influence the ability of projects to meet the needs of the poor. These factors provide a basis for development of future

projects, though the importance of each will, of course, vary with local conditions. To assist in the preparation and assessment of project proposals, it is recommended that specific objectives be prepared that indicate the scope and nature of the projects and the means whereby it is intended that the objective will be attained.

The following points are offered as guidelines that should be included in all project proposals:

1. The aspects of policy that *the project is intended to demonstrate or test*;
2. The elements that distinguish the projects from previous *projects addressing the needs of the poor*;
3. The *intended impact of the projects on land and housing markets*;
4. The degree to which *the projects is intended to be self-financing or dependent upon direct or indirect subsidies*;
5. The cost of entry to the projects compared with other *options for residents to use housing as means of income generation*;
6. The option of *residents to participate actively in the planning, implementation and management of the project*;
7. *The adequacy and flexibility of administrative structure*;
8. *The methods for monitoring and evaluating the projects* and indicating the extent to which the objectives have been fulfilled, so that lessons learnt can be incorporated into future projects.

b. Role of Projects in National Policy Context

The shortage of independent evaluations of projects, in terms of internal objectives as well as their impact on wider policy issues, makes it difficult to identify future roles for the project approach with confidence. More effort is needed to learn from experience gained so far, and greater willingness is equally necessary to accept and act upon such evaluations. In general, there are at present too few incentives for public sector personnel in developing countries to learn from previous experience and to rectify the limitations of previous projects when preparing new ones (Habitat, 1991)

Despite these difficulties, it is clear that projects can fulfil several *roles* in promoting the formation and implementation of national shelter policies and their ability to help the poor. Some of these roles are outlined below.

1. One of the most important roles is *the possibility to provide the basis for relationships between the public and private sectors, NGOs and Community groups*. This will require a transformation from traditional administrative practices, towards *innovative, flexible and demand-driven managerial approaches*. Although such a change will take several years to complete, projects can provide the necessary practical experience and feedback.
2. Secondly, and *to assist the development of the above process*, it will be necessary to establish *an effective monitoring and evaluation component* all projects, so that from lesson learned are incorporated into mainstream practices and sectoral policies as appropriate.
3. A third role can *consist of experiments in the acceptability of revised standards, norms, regulations and procedures developers and NGOs*. Current standards and procedures, based upon ideals rather than realities, have in general been demonstrated to be counter-productive, since the force households that are unable to conform to pursue the very unauthorised options they are intended to prevent. One way of achieving this objective would be to distinguish between initial and long-term standards, so that the traditional process of incremental development can flourish openly. Another would be to relax selected regulations that do not have a direct bearing on the public aspects of development, such as floor area ratios. Yet another could be to formulate separate standards for low-income areas, changes based upon performance specifications, rather than prescribed solutions, would enable a range of innovative technologies and materials to gain wider acceptance.
4. A fourth role would be *to link low cost housing projects more effectively with*

economic development programmes, so that they could contribute to, and benefit from, the evolution of multi-nucleated urban centres, offering a range of employment prospects in areas of intended growth.

5. Fifthly, it will be necessary *to use projects as a means of providing feedback for development of policies, rather than merely the means of implementation them*. To this end, the terms of reference for low cost housing projects should be based upon assessments of total needs and resources in the sector.
6. Finally, *projects should concentrate on providing those elements of housing* that residents cannot provide or organise for themselves, such as *affordable land, infrastructure and public services*.

RESULTS OF STUDY

1. Indicator of Analysis

Firstly, we would analyse the housing and settlement projects quality in study areas which would used consider of the physical structure of the dwelling, infrastructure and facilities available within a dwelling unit. To analyse the quality of projects based on the observation in study areas, which used a guidance technique, issued by public works department and also based on the opinion of households (respondents) in study areas.

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.

Secondly, we intend to analyse the influential factors on the quality of housing projects to get a better understanding, which factors can be influenced by different actors (public and private developers). A set of indicators would be applied based on the theoretical framework and empirical information collected during the fieldwork and the interviews of developers and people living in the study areas, as well as interviews and secondary data from Real Estate Indonesia and government representatives. These indicators are:

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 cost will calculated in the selling prices of house. Less house prices could influence less quality of projects. To measure the relation house prices to quality of projects would be measured by the spending in *land prices, building material cost, infrastructure and facilities cost, administration fees and economic crisis*. In this case, the administration fee is a permit fee and marketing cost. Obviously, these cost influence to 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 to the quality of projects. The higher selling prices of house than the ceiling prices will lead better quality of 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 ideals rather than realities sometimes viewed as being cumbersome. These are related to ***the local government 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 to be responsible to evaluate the project proposals and supervise their implementation. Moreover, the corporation among the controller institution to verify the projects in those areas will lead better quality of projects. Otherwise, less enforcement of these rules will create low level the quality of projects.
4. ***Means and Efforts Undertaken by Households***, the influences of household, as customers are the most important factors to determine the quality of projects in those areas. It means that whether the residents as means to participate actively in pre-construction, construction and post construction phase of the project, in particular in construction phase of projects, or not. The adequacy of means and efforts undertaken by household in projects will provide better the quality of housing projects.
5. ***Human Resources Capability of Developers***, the capability of developers in particular human resources will influence to the quality of projects. Although this factor determines indirectly to the quality of projects, however, the prudence of developers with the adequacy of professional human resources will provide better quality of projects in those areas.

The analysis that follows views the main indicators to determine the project quality related to some constraints or factors faced by the developers in providing better quality of project. It is hoped that this will provide useful feedback for local government in Denpasar as enabler and facilitator role in the provision of urban housing especially for low-income groups to be more responsible for the formulation of housing policy development.

2. Findings

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

Some significant remarks will be highlighted below:

1. ***Housing quality*** of PERUMNAS projects is generally low due to the building materials used, particularly for walls and floors and poor number and size of room especially too small size of room. Whereas housing quality of private projects provided better quality of building material and better design size of room and building plot.
2. With regards to ***infrastructure and service delivery***, PERUMNAS 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. While the private provided apparently lower infrastructure provisions. These are poor road condition, low level water supply provision and also poor solid waste management. However, it has better drainage, sanitation and partly better water supply provision.
3. In terms of ***public facilities***, both PERUMNAS and private developers have actually lack of availability and accessibility of public facilities and PERUMNAS projects is even low level in maintenance of public facilities.

4. ***Selling prices of house*** is considered as indicator to determine the quality of projects. The high price of the house results in better quality of housing and more the complete infrastructure and facilities. These cost will be included in the selling prices of the house. Lower the house prices lead to lower quality of projects. The selling prices of houses in PERUMNAS projects are considered affordable and much lower than in private projects. The use of low cost building material, low land prices, low administration fees are the factors reflecting the prices of PERUMNAS houses. The findings showed that PERUMNAS projects did not apply the building standard cost, which is issued by Public Works. As result, the housing in PERUMNAS projects show lack of quality mainly due to low level building materials. The other hand, private projects used building standard cost even higher than standard. So that, it reflected better quality of housing.

The high prices of land and extra cost for accessing the legal permit are considered the constraint of developers to provide better quality of projects in particular the completeness infrastructure and public facilities. Moreover, ***the economic crises which are hindering in Indonesia*** are also factors contributing the constraints of developers in providing affordable house and better quality of housing especially for private developers who used the commercial bank with high interest rate and short maturity loans to finance their projects.

5. ***Incentives prepared by government*** could be as indicator to determine the quality of projects. The findings of analysis showed that PERUMNAS projects have more support in infrastructure provision, administration process and even in financial support compared to private developers. PERUMNAS has easily ***in land acquisition and obtaining financial support and accessing legal permits***. In construction phase, they have easily ***accessing to road and water supply provision*** by connection of the main piped of clean water to the projects. As a result, the infrastructure and services

provided by PERUMNAS has better quality than the private developer projects.

6. Enforcement of building standards and regulations ***is an indicator to determine significantly quality of projects. The findings show that the weakness of the PERUMNAS project is related to*** the low enforcement of regulations particularly building standard. ***While the private developers has implemented better building standard. Moreover, There was unsatisfied with*** no strongly control and monitor and accountability of the appraised team to verify and supervise the projects ***and the control was only 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 factor to influence directly to the low quality of projects in those areas.***

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

8. ***Human resources capability of developers***, the capability of developers in particular human resources will influence to the quality of projects. The findings show that PERUMNAS have quite enough staff to manage the projects. Yet, ***they lack of skills and capability to professionally manage projects.*** While, private developers have the sufficient staff who have skills and capability and also are ***professional in management of project.*** It is clear that the factor determine indirectly the quality of projects. This is influencing generally the project management and eventually influences to the quality of projects themselves.

Table 1. Conclusion of Analysis of Projects Quality and Influential Factors in Study Areas

INDICATORS	PERUMNAS Projects	Private Developer Projects
Projects Quality		
1. Housing	<ul style="list-style-type: none"> ▪ Poor building material especially wall and floor ▪ Poor number and size of room especially too small size of room and inadequate bed room 	<ul style="list-style-type: none"> ▪ Better on the size of building and plot ▪ Poor building material especially floor and ceiling material
2. Infrastructure and Service Delivery	<ul style="list-style-type: none"> ▪ Poor solid waste management and disposal especially garbage disposal ▪ Poor drainage and sanitation system ▪ Good road condition ▪ Good water supply provision 	<ul style="list-style-type: none"> ▪ Poor road condition ▪ Poor water supply provision especially the use of wells as drinking water ▪ Good water supply provision
3. Public Facilities	<ul style="list-style-type: none"> ▪ Lack of availability and accessibility of public facilities ▪ Low level maintenance of facilities 	<ul style="list-style-type: none"> ▪ Better availability and accessibility of public facilities
Influential Factors		
1. Selling Prices of House	<ul style="list-style-type: none"> ▪ More affordable ▪ Approximately to ceiling prices ▪ Lower land prices ▪ Lower building material cost ▪ Lower administration fees ▪ Lower influence economic crises 	<ul style="list-style-type: none"> ▪ Less affordable ▪ Higher than ceiling prices ▪ Higher land prices ▪ Higher building material cost ▪ Higher administration fees ▪ Higher influence economic crises
2. Incentives Prepared by Government	<ul style="list-style-type: none"> ▪ Good access to water supply provision ▪ Good access to road provision ▪ Good access to legal permit ▪ Good access in obtaining financial support ▪ Adequate subsidy for low-income groups ▪ Support in land acquisition 	<ul style="list-style-type: none"> ▪ Good access to legal permit ▪ Adequate subsidy for low-income groups
3. Building Standard and Regulation Enforcement	<ul style="list-style-type: none"> ▪ Low building standard of houses ▪ Better standard in infrastructure provision ▪ Low standard in public facilities ▪ Lack corporation of appraised team to verify quality project ▪ Clear government responsibility in project upkeep and maintenance 	<ul style="list-style-type: none"> ▪ Good building standard of houses ▪ Lower standard in infrastructure provision ▪ Better standard in public facilities ▪ Inadequate strongly control and accountability of the appraised team to verify quality project ▪ Unclear responsibility in project upkeep and maintenance
4. Means and Efforts Undertaken by Households	<ul style="list-style-type: none"> ▪ Almost 73% households have no means to influence 	<ul style="list-style-type: none"> ▪ Almost 69% households have no means to influence
5. Human Resources Capability	<ul style="list-style-type: none"> ▪ More human resources ▪ Lack of human resources capability ▪ Low skills in project management 	<ul style="list-style-type: none"> ▪ Good human resources capability ▪ Better skills in project management

Source: Analysis, 2004

Table 2. *the Influential Factors on Projects Quality in Study Areas*

Influential Factors	Projects	PERUMAS Projects	Private Developers 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 crises		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

Source: Analysis, 2004

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



Perumahan Nuansa Hijau
 Sumber: Dokumentasi Pribadi, 1998.

Table 3. Strength and Weakness of Different Schemes of Low Income Housing and Settlements Development

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

Source: Conclusion of Analysis, 2004

3. Strength and Weakness of Projects

Many efforts and approach have been fully conducted and many program have been attempted in order to provide greatly a better housing and settlement that is affordable, safety environmentally, better standard of housing, better infrastructure provision and better public facilities in terms of availability and accessibility. However, the fact that there are not exist the perfectly housing and settlement development, mainly for low-income groups. Some constraints are unable to overcome immediately without the strongly efforts from all actors involved in the projects to ease the problem. Basis on the final results represented formerly, I would like to draw strengthens and weakness of those schemes which are shown in *Table 3*.

CONCLUSION

Government of Indonesia, which has been involved greatly in housing and settlement started explicitly in 1975 by including a mortgage program within National Savings Bank (BTN) as well as the launching of National Urban Housing Corporation (PERUMNAS). The aim is to promote house ownership built by commercial real estate developers, provision of mortgages for interest rate subsidies and PERUMNAS acting as a spearhead in urban development with the idea of PERUMNAS being a fellow player within the emerging real estate sector.



Type 21 Perumahan Dalung Permai
Sumber: *Dokumentasi Pribadi*, 1998.

Government of Indonesia has applied low cost housing, so called very simple housing and

simple housing (RSS and RS). Low-income people can take benefit by program to access the housing loan (mortgage finance) to purchase the shelter with soft interest rate. Moreover, Government of Indonesia has assisted the growth of a commercial real estate development sector. Appeasing the market for their product by providing cheap mortgages. The government only reoriented its housing policy, *changing from a providing policy a direct producer to an enabling policy*.

Denpasar is as activities core of tourism, industrial and economic activities leading to rapid population growth and producing a very high demand for housing and rapid urban expansion. From 1996 to 2000, the houses demand in Denpasar increasing by 4.12% per year. The other hand, the limited land tends to conceive narrower for housing and settlement. The high price of land in Denpasar will influence significantly to the selling price of house units. Because the high prices of land induces directly on the high price of houses, while the purchasing power of people is not the same. Most houses provided by public and private developers are still not affordable particularly for low-income groups.

As mentioned previously, the Government of Indonesia also established PERUMNAS legalised in *Government Policy No. 29/19974* and *No. 12/1988*, in which firstly they performed the housing activities in Jakarta and then widespread in each region including Denpasar. The aim is to meet demand of people on housing and settlement, which is good quality for living, cheap and affordability, particularly low-income groups.

The other hand, over 5 years, the private sectors have been a predominant role in emerging low-income housing provision in Denpasar. They have built almost 82.3% of house units of low cost housing projects in Denpasar. They start progressively taking over in the entire process of housing development and intensively involved in low cost housing projects.

The low cost housing through simple and very simple housing scheme was launched firstly in metropolitan cities in 1976 and therewith,

widespread to other cities including Denpasar. This scheme is a co-operation between PERUMNAS, Private Developer, National Saving Bank and community as beneficiaries. Low-income groups are able to obtain a long-term loan at subsidised interest rate through house ownership credit. It means that the credit, which is granted by national bank to low income groups who need subsidy loan in the form of low interest rate to purchasing their house. These interest rate subsidies are promptly 9% for T.21 and 12-15% for T.36 and those are considered below market interest rate, which is precisely around 23 till 29%.

Yet, the political and economic crises, which are impeding in Indonesia, are carrying out a big influence for urban and housing development in Denpasar. It noted that these crises are hindering not only on developers as provider and even worse for people as customer. The developers is related to constraints in financial support and most them put off to build houses because they are unable to earn lower interest rate with long maturity loans to finance their housing development. The other hand, the power of people to purchase the house is decreasing sharply particularly for low-income groups who are more likely thinking to the main basic need rather than to give priority to purchase the house.

Local government in Denpasar has already conducted some attempts in order to wake up the economic activities to stimulate the housing development. However the degree of success to mitigate the problem more much depending on the attitude and the willingness of all actors that are involved seriously in housing and settlement development rather than merely legalized in formal paper.

However, currently, it is big challenge in Indonesia by issued two laws about decentralisation, *Law No. 22/1999* on Regional Government (UU PD) and *Law No. 25/1999* on the Fiscal balance between the Central Government and the Regions (UU PKPD). It seems that it would be long structural reform in Indonesia in order to response the political and economic crises, which are hindering in Indonesia. This implies that it might be a great

opportunity for local government to be fully autonomous. Hopefully, local government in Denpasar would be more responsible in service delivery especially in housing development. The decisions of local government would be more responsive to the wishes of people in particular the poor people. So that public services delivery are more closely to the preferences of individuals in those jurisdictions rather than at uniform national levels.

Relied on the comparative study of the low-income housing and settlement projects in the study areas as representatives of housing projects in Denpasar have been previously analysed. We would intend to conclude by answering the four research questions as mentioned above.



Type 21 Perumahan Monang Maning
Sumber: *Dokumentasi Pribadi, 1997.*

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

- The findings show that almost 60% of PERUMNAS projects are low **level quality of housing** particularly building material and number and size of room and only 20% are good. 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 PERUMNAS.
- Referring to **infrastructure and service delivery**, only 35% of PERUMNAS are

considered poor especially low level of garbage disposal management and almost 58% are good. While more than 40% of private developer projects are low level quality of infrastructure and service delivery by poor road condition, low level water supply provision and poor solid waste management and only 45% are good. This implies that PERUMNAS provided better infrastructure and service delivery than private developers.

- With regards to *public facilities*, both PERUMNAS 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 that what are constraints particularly for developers in providing better quality of low cost housing projects? By applying a set of indicators in analysis in order to determine what are the main factors influencing better quality of projects, the findings are:

- *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. Although the government set up the ceiling of houses considering each region. However, most developers argued that this factor is constraint for them in providing better quality of 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 PERUMNAS projects are considered much affordable than private projects.
- *Incentives prepared by government such as the ease in land acquisition, obtaining financial support, accessing legal permits, the easily accessing to road and arranging water supply provision* are the factors to determine the quality of projects. The findings showed that PERUMNAS 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 PERUMNAS are better quality than private developer projects. *Lack of incentives provided by government* is considered as constraints for private developers in providing better quality of low-income housing and settlement projects.

- *The building standard cost*, which used in the projects, is a significant factor to influence the quality of projects. PERUMNAS projects did not apply the building standard cost, which is issued by Public Works. As a result, the housing of PERUMNAS projects lack the quality mainly low level building material. The other hand, private projects used building standard cost even higher than standard and resulting better the quality of housing.
- *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 of projects in particular in providing the completeness of infrastructure and public facilities.
- *The economic crises, which are hindering in Indonesia*, are also the constraints for developers in providing better quality of house and also affordable house especially for private developers who used the commercial bank with high interest rate and short maturity loans to finance their projects.
- *Low enforcement of building standards and regulations is significant factors to influence to 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 strongly control and monitor 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 is leading directly to unclear responsibility for project upkeep and maintenance. These are the important factor to contribute directly to the low quality of projects in study areas.

- *Human resources capability of developers*, the capability of developers in particular human resources will influence to the quality of projects. The findings showed that PERUMNAS have quite enough staff to manage the 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 management projects. It is clear that this factor determines indirectly the quality of projects. This is influencing generally to project management and in due time influences to the quality of projects themselves.

The third questions are that did the low-income groups have means or instruments to influence the quality of low cost housing projects? The findings are:

- *Means and effort undertaken by households*, the influences of household, as customers are the most important factors to determine the quality of projects in those areas. As referred to the argument of BTN, households as customers have a *contract of selling-purchasing with developers*. It means that people as customers have power to influence about house condition, which is provided by developer when they are unsatisfactory with the quality of the house and its environment.
- The findings showed that either PERUMNAS or private projects lack means or efforts of households to intervene fully to control the quality of project. 73% of households in PERUMNAS projects have no instrument to complain about the quality of projects while 69% for private developers. This *give opportunities for developer to deceive the quality of projects* in those areas.

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