Partnership Scheme Alternatives for Low-Cost Rental Public Apartment in Indonesia
Alternatif Skema Kerjasama bagi Rumah Susun Sewa (Rusunawa) Tarif Rendah di Indonesia

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ABSTRACT
The low-cost apartment development program is one of the reliable solutions to reduce housing backlog in Indonesia, especially in some major cities, due to land scarcity and high price of land. In order to accelerate the low-cost apartment, either ownership or rental apartment, it needs the private sector’s involvement. However, it requires suitable partnership scheme to attract the private sector and to deal with the land provision problem. The objective of this study is to propose partnership scheme alternative for low-cost apartment. Interview to nine government officers (ministry and local) and three person from private sector companies have been conducted to explore the possibilities of the proposed scheme. The result shows that there two major groups of scheme alternatives, which are classified based on the land owner. The first group is the scheme, which government owns the land, while the second group is the scheme, which the land is owned by the private sector. The first group has three alternative schemes, while the second one has two alternative schemes.

Keywords: facility management, partnership scheme, low-cost apartment, Indonesia

BACKGROUND
Urbanisation issue has arisen in some developing countries, such as in Indonesia. It leads to the needs of affordable housing. The land scarcity and high land price close to employment centre are the obstacle of low-cost housing provision (Rachmawati, Soemitro, Adi, & Susilawati, 2015). Major urban areas in Indonesia faces the problem related the supply for basic service because of the lack of housing investment. In the current condition, the majority public housing supply, both landed house and low-cost apartment, still comes from the government. Indonesian Ministry of Public Works and Public Housing (Ministry of PUPR) claimed the housing backlog reaches 7.64 million unit in the beginning of 2020. The supply target is expected to be achieved by the government and the private sector involvement.

One of procurement and partnership method is Public Private Partnership, which has been applied in many infrastructure projects. PPPs bring benefit to give an opportunity for private sector to contribute to public infrastructure development and service provision. They also enable to merge the resources of both public and private sectors to provide the better services (Zhang and Chen 2013). In the housing research, PPP has been introduced as the method to involve private sector. In Indonesia, PPP is used as the delivery method in all toll road project and power plant project (National Body of Development Planning, 2014). Therefore, it will be the great chance for both public and private sector to collaborate in developing low cost apartment, in the land availability, building construction or operation maintenance stage. The government support can be in the form of cross-subsidy policies, subsidies public utilities, and
the provision of land (Sengupta, 2005), while the industrial estate support can be in the form of Corporate Social Responsibility (CSR) for a collaboration on legal aspects, technology, economy and society (Othman A and Abdellatif M, 2011).

Unfortunately, the current partnership in the housing sector is still limited in land rental. The private sector rents the land for low-cost apartment, then the government as the building operator pays the rental fee annually. Partnership between government and private sector, such as industrial estate developer in providing low-cost apartment for employee bring a lot of good effects for both parties. The short distance between workplace and housing leads to high efficiency, both transportation cost and time. It also maintains the employee’s energy for working which leads to higher productivity. Meanwhile, the government has the benefits such as reduce number of illegal settlement, and accelerate the low-cost housing provision program.

Various types of partnerships have been implemented to reflect different project objectives and requirements. These partnership scheme are arranged based on the level of private sector’s involvement (Kwak, Chih & Ibbs, 2009). In the extreme condition, public sector provides full service and full responsibility for all aspects of delivering public services; while at the other extreme condition, the private sector takes those roles. The degree of private involvements are varied in between and tends to increases. These PPP scheme are also arranged based on finance sources and ownership of properties. The partnership is a long-term contract, which contains variety of uncertain projection and circumstances. Therefore, it needs a proper scheme that enable risk allocation. The main reasons for partnerships are the expectation that the private sectors are able to share the risk sharing and are able to deliver, finance, maintain, and operate project at more effective cost than the public sector (Mladenovic and Vajdic, 2013). Moreover, one of critical success factors of partnership in housing sector is stakeholder’s commitment and appropriate risk allocation and risk sharing (Rachmawati, Soemitro, Adi & Susilawati, 2018). Meanwhile, Low-Cost Public Rental Apartment, as capital Public Facility, have to be well managed. This must be included in the partnership scheme (Soemitro & Suprayitno 2018). Several types of Low-Cost Public Rental Apartment has been identified in Surabaya (Purnaasari, Soemitro & Suprayitno 2020).

The study discussed the partnership scheme is still limited and focused on certain schemes. This study attempted to propose alternative partnership scheme, based on land owner. This paper begins with a background followed by the research methods and the case study description. Then it continues with an analysis, which is supported by data from semi-structured interviews. The recommendations are summarized based on theory and the results of data analysis. Finally, this paper provides the study conclusions and implications for future research.

RESEARCH METHOD

The data collection is conducted by observation and semi-structured interview. The semi-structured interview was aimed to obtain the respondents opinion the existing low-cost apartment policy. Therefore, the respondents are the key person in low-cost apartment management, either from province or district/municipal government. The semi-structured interview participants also came from the private sector or non-government sector, such as officer from National Housing Company (Perumnas), industrial estate developer and some private housing developers as potential player in low-cost apartment sector. Some of them have contributed to be partner in housing development. In the province government level, the officers from state-owned company who are responsible for low-cost apartment management owned by province and local government were interviewed and asked for their opinion related to housing finance policy related to low-cost apartments and partnership scheme.
CASE STUDY DESCRIPTION

Indonesia has three tiers of government, which province and district/municipal is the second and third tiers respectively. East Java Province, one of 34 provinces in Indonesia has a total population of 39.29 million in 2019 and is divided into 29 districts and 9 municipals (Statistic Bureau-East Java Province, 2019). Greater Surabaya is the part of this province that includes Gresik District, Sidoarjo District and Surabaya Municipality. Surabaya is the capital city of this province, which the total population in 2019 was 2.85 million, and 40% of these are migrant tenants (Statistic Bureau-East Java Province, 2019).

The low-cost apartments in Surabaya Metropolitan Area are classified into four administrators in charge, Surabaya government, Sidoarjo government, Gresik government and East Java provincial government. There are 33 low-cost rental apartments, which are located in Greater Surabaya (Surabaya, Sidoarjo and Gresik). 20 low-cost rental apartments are managed by government of Surabaya, 4 of them are managed by government of Sidoarjo, 5 of them are managed by government of East Java Province and the rest are operated by government of Gresik.

RESULT AND DISCUSSION

According to the survey, all stakeholders agree that the Public Private Partnership arrangement is essential to combine the strengths of the private sector with those of the public sector in order to overcome challenges faced by affordable housing and to achieve superior outcomes. They found other benefits of implementing PPP. Better risk allocation is the first and important benefit based on overall, public and private perceptions. Li et al (2005) and Ismail (2013) mentioned that transfer of risk to private sector variable is the major reason to implement PPPs. This is because, it is believed private sector might be able to manage some types of risk more effective which ultimately lead to a better quality of services provided, cost savings and the reduction. While public sector is able to manage the risk related to admit and society. Therefore, using proper risk sharing mechanism, both public and private sector will allocate the risk to the party best able to manage it. While acceleration of infrastructure provision is the second benefit according to overall, public and private perceptions. The respondent’s answer is in accordance with Ismail (2011) concerning PPP advantage to fasten delivery of public infrastructure, because the private sector is perceived as being more innovative and efficient due to their competitive commercial environment.

There are variety PPP schemes based on the owner of the asset. They lies between supply and management until private ownership. The bottom line of PPP in low-cost apartment is in the end of concession period, the asset should be owned by the government, as the low-cost apartment is categorized as public building. In addition, the low-cost apartment provision is one of government programs. Therefore, there are three main groups of PPP scheme, which meet that requirement, they are contracting or supply and management, Build Operate Transfer (BOT) and Design, Build, Finance, Operate (DBFO). Table 1 described the advantages and disadvantages of those groups.
Table 1. Advantages and Disadvantages of PPP Scheme

| Ownership of building | Supply & Management | BOT | DBFO |
|-----------------------|---------------------|-----|------|
| Ownership of land     | Yes                 | Yes | Yes  |
| Responsibility for investment | Yes | No  | Yes  |
| Responsibility for operational & maintenance | No | No  | Yes  |
| Enhanced risk sharing | Yes                 | Yes | Yes  |
| Duration of contract  | Long                | Long| Medium|

This advantages and disadvantages matrix will help to design the partnership scheme. For example, in BOT, land and building remains in public ownership, while key driver is the transfer of operating risk in addition to design and construction risk. Similar to BOT, supply and management has the key advantage that facility is financed and owned by public sector. Its key driver is the transfer of design and construction risk under contract/agreement with Private party to design and build public facility. The proposed partnership model will not totally adopt those schemes; some adjustment will apply to suit the real condition.

There are some possibilities combination in terms of the responsible party for each stage as described in table 2. This matrix shows that land could be provided by government, then the building could be provided by the government as well, while operation and maintenance would be served by the private sector. The other alternative is land would be provided by government, while building and operation maintenance would be served by the private sector.

On the other hand, if land is provided by private sector, the building could be provided by private sector and private as well. While the building which is provided by both government and private sector, the operation maintenance could be managed by the private sector. Another possibility is both government and private sector are actively involved in design, construction and operation maintenance stage.

Table 2. Combinations of PPP Model

| Land is provided by Government | Land is provided by Private Sector |
|-------------------------------|-----------------------------------|
| Government | Private Sector | Shared | Government | Private Sector | Shared |
| Design and Construction |
| Comb 1 | x | x | x | Comb 1 | x |
| x | Comb 2 | x | x | x | Comb 1 |
| x | x | Comb 3 | x | x | Comb 3 |
| x | x | Comb 4 | Comb 4 | x | x |
| x | x | Comb 5 | x | x | x |

| Operation and Maintenance |
|----------------------------|
| x | Comb 1 | x | x | Comb 1 | x |
| x | Comb 2 | x | x | Comb 2 | x |
| x | x | Comb 3 | x | x | Comb 3 |
| x | x | Comb 4 | Comb 4 | x | x |
| x | x | x | x | x | x |

Note: Comb = combination

The proposed model could be developed from those combinations. However, there are some constraints related to which party will responsible for the certain scheme. There are two reasons that operation and maintenance should be kept by private sector:

1. The private sector is best able to manage operation and maintenance stage. Previous studies (Ke et al, 2011; Ameyaw et al, 2013) suggest that activities and risks related to...
operation maintenance stage should be borne by the private sector, as they have capability, both technical and financial to overcome the problems in operation maintenance.

2. The private sector can be more flexible to do transaction process with tenants using the more flexible financing mechanism. The flexible financing mechanism is one of the outcomes in preliminary survey, which is considered should be applied by the low-cost apartment operator in order to provide better service to tenants. Risks which have not been managed well in the past by government, should be transferred if cost-effective (construction, operation), should be borne by private sector.

While the building in the design and construction could be provided by both parties, as the government has annual program, so that the private sector may contribute to intensify the supply of low-cost apartment units. Government may subsidy the private sector investment by granting the low-cost apartment units. Then, the unit would be operated by the private sector. Some combination possibilities are then summarized into the table 3.

Table 3. Summary of Combination Possibilities

| No. | Selection | Design & Construction | Operation Maintenance | Name | Recovery by |
|-----|-----------|-----------------------|-----------------------|------|-------------|
|     |           | Government            | Private Sector        | Government-land Based Mixed Development Cross-subsidized | Revenue generated from commercial unit/ facilities |
| 1   | ok        | Government            | Private Sector        | Government-land based – Annuity Based Subsidized | Local government pays long-term annuity to private partner |
| 2   | ok        | Private Sector        | Private Sector        | Government-Land Based Direct Relationship | Beneficiaries pay monthly rent to private partner |
| 3   | X         | Shared                | Shared                |                               | |
| 4   | ok        | Shared                | Private Sector        | Private Land Based Model       | Revenue generated from units rent & commercial facilities |
| 5   | X         | Private Sector        | Government            |                               | Revenue generated from units & commercial rent |

For both models tabulated above, there are five key stakeholders need to be considered. Those five stakeholders are as follows.

1. Ministry and local government
   Ministry government commonly plays a role as a regulator or policy maker, while local government will execute the plan. In addition, the local government has the authority to manage the land asset. In this study, local government is province and municipal/district government.
2. Private sector or private partner
   Private partner could be in the term of housing developer, industrial estate company or 
   other private sector

3. Beneficiary
   Beneficiary is the organization appointed by the government to manage and operate the 
   low-cost apartment

4. Financial institution
   Financial institution could be in the term of financier or the guarantee fund institution

5. Community
   In some areas, community or village government has the authority to own the land asset 
   which could be utilized for the low-cost apartment.

   Regarding land provision by the public sector, enhancing access to low cost land, there 
   are two options:
   1. Enhancing the land pool or land banking, owned by local government, state-owned 
      company or government agencies, which are very poorly utilized and are often illegally 
      encroached.
   2. Redevelop of ineffective public urban areas to increase the value of land. It has the 
      potential to create value by combining government’s program and the ability of private 
      sector to design, construct and operate the asset effectively.

CONCLUSIONS

This paper reveals the alternative partnership scheme for low-cost apartment. The collaboration 
or partnership could be meant as the degree of involvement of each stakeholder. In the extreme 
condition, public sector provides full service and full responsibility for all aspects of delivering 
public services; while at the other extreme condition, the private sector takes those roles. The 
degree of private involvements are varied in between and tends to increases. These PPP scheme 
are also arranged based on finance sources and ownership of properties.

This research presented two generic PPP model based on the owner of the land. First 
model is Government-Based Land. Three models have been generated from this generic model. 
There are Government-land Based Mixed Development Cross-subsidized Low-cost Apartment, 
Government-land based – Annuity Based Subsidized Low-cost Apartment, Government-Land 
Based Direct Relationship Rental Low-cost Apartment. The building is constructed by the 
private sector and the low-cost apartment management as well. Meanwhile, the second model 
is Private-Based Land, include Private Land Based Model and Private Land Based Community. 
In Private land based model, the construction and the management are the private sector’s 
responsible, while in the second model, the public sector and the beneficiary play the dominant 
role in construction and management There are five key stakeholders involved in all schemes: 
Ministry government, Local government, Private partner, Beneficiary and Financial institution.

Given the proposed alternative partnership schemes for low-cost apartment, this study 
could be enhanced by obtaining further data from a wide range of respondents and more 
comprehensive decision-making method. In addition, the risk analysis could be adapted to 
decide the most suitable scheme. To a larger extent, the findings of this study could be adapted 
and applied to public low-cost rental apartment development in countries, in which land and 
buildings are provided by the government.
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