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AFFORDABILITY OF HOUSES
PROVIDED BY HOUSING SCHEMES
MUST BE CONSIDERED BEFORE
IMPLEMENTATION IN PAPUA NEW
GUINEA

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Key Points

- Some housing schemes have been implemented in Papua New Guinea (PNG) without considering the income groups that should benefit from them.
- Housing affordability measure that can assist us determine income groups that should be targeted by a housing scheme is lacking.
- Housing affordability measure should be established before implementing a housing scheme.
- To increase the level of housing affordability, establish strategy for lowering cost of materials for constructing houses and more houses constructed.
- Affordable housing schemes should focus on both home ownership and home rental.

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AFFORDABILITY OF HOUSES PROVIDED BY HOUSING SCHEMES MUST BE CONSIDERED BEFORE IMPLEMENTATION IN PAPUA NEW GUINEA

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This paper focuses on one of the findings from an article by Ezebilo (2016) concerning housing affordability and strategies that are required for provision of effective affordable housing in Papua New Guinea (PNG). The article stated that housing cost to income ratio is the commonly used housing affordability measure in most countries and that affordable housing schemes target low-income and middle-income groups. However, housing affordability measure is lacking in PNG and the income groups targeted by affordable housing schemes in the country is not clear. The study was based on a brief review of literature regarding affordable housing schemes in four countries which was used to assess the provision of affordable housing in PNG. In this paper, emphasis is placed on the need to measure the affordability of houses being provided by an affordable housing scheme before its implementation. Establishing housing affordability measures in PNG will ensure that unnecessary confusions regarding income groups targeted by an affordable housing scheme is avoided and severity of housing affordability problems reduced. In order to increase the level of housing affordability in the country, it is necessary to increase the supply of houses relative to demand, regulate house rent prices and establish a national mortgage bank. It is also necessary to provide trunk infrastructure where they are lacking and make more customarily-owned land with proper title available for development. Affordable housing schemes should focus on both home ownership and home rental. It is important to note that other factors such as location, condition of the house, and neighbourhood characteristics also influence housing affordability. However, these were excluded from the analysis provided in this paper.

Housing affordability measures

Housing affordability involves the relationship between a household's expenditure on housing and their income. The approaches used for measuring housing affordability can be classified into two measures:

- *Ratio measure* — This entails housing expenditures in relation to household income. It is the most commonly used measure of housing affordability (Kutty, 2005). This is because the ratio measure is simple to calculate, can be easily applied in practice and often accepted by the governments of most countries. Most policymakers, academics and the general public are more familiar with the use of the measure. The ratio measure is used in countries such as Canada, United States, Australia, New Zealand, China and India and the countries of the European Union. For example, in the United States, housing is affordable when monthly house rent or mortgage does not exceed 30 percent of a household's monthly income (Human & Urban Development, 2018).
- *Residual measure* — This focuses on the capacity of a household to maintain a minimum standard of living after paying house rent or mortgage (Stone, 2006). The motivation for the use of this measure is that, a household might become "shelter poor" if the remaining income after paying for housing is not enough to cover other necessities. This indicates that it is necessary to consider money spent on other necessities as well as family size in housing affordability discussions.

Factors that increase housing affordability levels

Several factors that increase the level of housing affordability for low-income and middle-income groups include the following:

- *Increase in the supply of houses relative to demand* — An increase in the supply of houses relative to demand, ceteris paribus, would push down house sale and rent prices and increase the housing affordability level for low-income and middle-income groups.
- *Policy instruments that promote the regulation of house rent prices* — This has the potential of reducing the tendency of real estate agencies from manipulating house rent prices and assists in lowering prices and

increasing the rent affordability level.

- *Policies that promote the rise of income of households in low-income groups* — An increase in the income level of low-income groups, such as increasing their salaries or opportunities to earn more money, will provide more money to pay for housing, increasing their affordability level.
- *An increase in the ability of low-income households to access housing loans with low interest rates* — This has the potential of providing low-income households with the opportunity to construct their own houses, which increases their housing affordability level. This could be achieved by the establishment of a State-owned mortgage bank that could provide housing loans to low-income groups at low interest rates. Furthermore, the stringent requirements often imposed by commercial banks that makes it difficult for low-income groups to access loans should be relaxed.
- *Provision of trunk infrastructure by the State* — This will assist in reducing house sale and rent prices and increase the housing affordability level. The availability of trunk infrastructure such as potable piped-borne water, sewerage and electricity will reduce the cost of constructing houses and consequently lower house sale and rent prices.
- *A decrease in land prices with proper titles for development* — This will assist in reducing the cost of constructing houses and consequently push down house sale prices. It is necessary to bring more customarily-owned land to the formal land market in PNG by providing proper titles for the land. This will contribute in reducing house construction costs and increase housing affordability levels.

Income groups targeted by affordable housing

Expenditure associated with housing often accounts for the largest share of the low-income and middle-income groups' expenditure. Therefore, these groups are often hit harder when there is housing affordability problems in a country. Affordable housing often targets low-income and middle-income groups (Deng et al., 2011).

In PNG, low-income and lower middle-income groups seem not to be benefiting from the housing interventions provided by the State. For example, these groups might find it difficult to access the "First Home Ownership Scheme (FHOS)". They may not be able to meet the requirements such as the 10 percent house sale price that must be paid upfront before

accessing the FHOS loan (equity).

Necessary policy interventions

A house sale or rent price is said to be affordable when a household with an established median income can afford it. The median income is often established by the government at different levels such as the State, Province and Municipality using the housing affordability index. The index can be calculated by dividing the annual median house price by gross annual median household income. However, the findings show that housing affordability measures have not been established in PNG. In addition, the income groups targeted by affordable housing schemes in the country is not clear. Several policy interventions must be introduced for affordable housing schemes to be effective in PNG. These include the following:

- *Identify the housing affordability measure to adopt in PNG* — There are two commonly used measures of housing affordability. It is necessary for government agencies such as the Department of National Planning and Monitoring (DNPM) in collaboration with the National Housing Corporation (NHC) to determine the housing affordability measure which is suitable for PNG. They may consider choosing the ratio measure because it is simple to calculate and easier to comprehend by policymakers and planners.
- *Determine thresholds for different income groups (low-income, middle-income and high-income)* — The classification of households in relation to their income is necessary for planning and making informed decisions on access to affordable housing. However, the criteria for assigning households into different income groups in PNG is not clear. It is necessary for DNPM, NHC and the Department of Treasury to develop thresholds for income groups in PNG. They could consider using the income thresholds associated with the 2017 Personal Income Tax Rates.
- *Determine income groups targeted by affordable housing* — Affordable housing schemes often target low-income and middle-income groups. However, the groups targeted by affordable housing schemes in PNG is not clear. It is necessary for the affordable housing scheme is reviewed.
- *Establish household median income for different cities and towns in PNG* — This information is necessary for determining housing affordability levels for cities and towns in the country. The affordability levels will assist urban development managers in the planning of

intervention measures aimed at mitigating housing affordability problems in PNG.

- *Determine the maximum portion of a household's income in percentage that should be used for housing expenditure* — This is necessary for identifying households that have housing affordability problem. In some countries, households should not use more than 30 percent of their monthly income to pay for monthly house rent or mortgage. However, this is lacking in PNG. It is necessary for the DNPM, NHC, and Department of Treasury to establish the portion of household's income that should be used for housing expenditure.

Concluding remarks

Several housing initiatives have been introduced in PNG with the aim of providing houses to people at affordable prices. However, for these initiatives to be effective, it is necessary to consider and determine the categories of people that should benefit from it, to avoid confusions. Housing affordability measures must be established to enable us understand the share of the population that have affordability problems and potential ways to tackle the problems. In principle, an affordable housing scheme should target low-income and middle-income groups. However, the income groups targeted by affordable housing schemes in PNG is not clear. It is necessary to provide thresholds for identifying different income groups and highlight the groups targeted by affordable housing. If the intention is to increase housing affordability levels in PNG, it is necessary to facilitate the private sector to increase the supply of houses relative to demand, and policy instruments that promote the regulation of house rent prices established. Others include the establishment of a mortgage bank that approves loans at low interest rates, the provision of trunk infrastructure where they are lacking and make customarily-owned land with proper title available for development. Most affordable housing schemes in PNG focus only on home ownership. It is necessary to also provide "home rental schemes" so that people can also rent houses at affordable prices. It is important to consider constructing high-rise multi-family apartments in the country's major cities in order to maximise the use of land. Hopefully, this paper will help planners and policymakers involved in planning and designing affordable housing schemes understand more the

need to consider housing affordability measures and income groups targeted by the schemes before implementing them.

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