

Sustainable Development of Civil, Urban and Transportation Engineering Conference

## Building up a System of Indicators to Measure Social Housing Quality in Vietnam

Lan Huong Le<sup>a,\*</sup>, Anh Dung Ta<sup>a</sup>, Hoang Quyen Dang<sup>a</sup>

<sup>a</sup>*Faculty of Architecture and Planning, National University of Civil Engineering (NUCE), 55 GiaiPhong Road, Hanoi 100000, Vietnam*

### Abstract

Development of social housing is an important and urgent issue that needs the attention of the Government as well as the entire construction industry to meet the welfare needs of regular citizens and to achieve social stability. There always appear two sides of a coin in the development of housing projects: “quality” and “price”. Both of the two elements are important, however cost reduction seems to be of utmost importance to social housing projects rather than quality factor. In fact, the role of construction quality is sometimes considered redundant, which leads to long-term effects for users, and this addresses the reason why people gradually lose faith in social housing provisions. Therefore, it is necessary to set up a system of a workable set of indicators to measure social housing quality. The assessing system is not only beneficial for investors, consultants to apprehend their housing products, but also for regular citizens to make a better choice in buying themselves an apartment, and this is the aim of our research.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of CUTE 2016

**Keywords:** Assessing system of housing quality; housing quality indicators

### 1. Social circumstances and research question

Vietnam is in the process of rapid urbanization, and the need of housing is not an issue that can be ignored any longer. Although the Government has issued policies that offer tax deductions, provide loans for investors as well as allocate land for social housing to promote the supply of affordable housing market

However, in parallel with the development of social housing to meet the required quantity, housing quality is

---

\* Corresponding author. Tel.: 0084986699698;  
E-mail address: [huongll@nuce.edu.vn](mailto:huongll@nuce.edu.vn)

also something that we need to keep in mind. Many social housing projects invested inconsistently have been handed over and put into use. As the result, these projects that lack infrastructure services and social infrastructure reveal the shortcomings in the design, construction and management, and cause severe long-term effects for users.

So as to provide people of middle and low income with access to housing, it is crucial to think a way to reduce housing cost. However to achieve that goal, many social housing projects have been situated too far away from the centre, with a lack of proper infrastructure, equipment, design and quality manipulation. This raises a question of how to distinguish cheap projects with poor quality from affordable projects that minimize the cost on the one hand, yet still assure the quality on the other hand? It is clearly seen that price for sale/rent can not be used as a reasonable measure to evaluate social housing quality, and thus it is essential to set up a measurement and assessment tool to evaluate housing on the basis of quality rather than simply of cost.

Therefore, the research team has developed “a system of indicators to measure social housing quality” with the desire to contribute an authentic and more concrete perspective about the current situation of social/ affordable housing projects in Vietnam. This is the content of our research proposal that was funded by National University of Civil Engineering and was commissioned in 2014 with rave reviews.

## 2. Literature review: An overview of housing quality systems in some nations and lessons learned

### 2.1. Some housing quality systems studied

Assessment criteria for housing quality was firstly established in France then rapidly developed in European countries and in the US, in the past few decades. Since then many Asian countries have been following by setting up distinct systems to measure housing quality. The criteria system can be varied at distinct levels to meet the demands of different organizations that could be governmental departments and agencies or even (just) a team project.

#### France

France established a housing evaluating system called Qualitel in 1974 by Qualitel Association. The Qualitel Association defined a series of criteria evaluated on a scale of 1 to 5, where 1 corresponds to the minimum standard and 5 is a comprehensive design solution. Qualitel profile is simple, straightforward and easily understandable by non-technicians [1].

#### Switzerland

SEL method - Système d'Évaluation of Logements based on a federal law in 1974 was established in Switzerland. The analyzed components including 39 indicators that have currently been using up to now are, entirely, in the architecture's domain. The rating scale of the SEL method, as the Qualitel method, has 5 levels of evaluation ranging from 0 to 4. Each criterion is given a weighting value, and the final grade is the sum of each mark in each criterion. The weighting values that were established by a team of 7 researchers who are deeply knowledgeable about the housing needs are periodically reviewed.

$$VU = \sum_{i=1}^{39} n_i \times P_i \quad (1)$$

(VU: final grade, P: weighting value, n: criterion)

#### The United Kingdom

Since 1996, the Housing Corporation [2], in collaboration with the Office of the Deputy Prime Minister (ODPM), has been establishing the development of Housing Quality Indicators (HQI). The HQI system is a measurement and assessment tool designed to evaluate housing projects on the basis of quality rather than simply of cost. The HQI covers ten indicators: 1. Location, 2. Master plan of the building, 3. Open space; 4. Traffic, 5. Unit (Apartment)'s size, 6. Unit (Apartment)'s layout, 7. Noise and light manipulation, 8. Accessibility, 9. Sustainability, 10. Vision for life. Each indicator contains a series of questions for both investors and clients. The information from the HQI form is transferred to a spreadsheet that is used to calculate the final score (aggregate result). It is the profile of the ten different indicators that gives the most useful information about the strengths and weaknesses of a housing

Download English Version:

<https://daneshyari.com/en/article/853496>

Download Persian Version:

<https://daneshyari.com/article/853496>

[Daneshyari.com](https://daneshyari.com)