

LIVING IN LOW INCOME CONDOMINIUMS: END USERS' PERSPECTIVES

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ABSTRACT

The demand for low income condominiums in the city of Colombo has gradually increased in the past few decades in order to provide accommodation for low income earners and resettlement of shanty dwellers with the upsurge of land values in urban areas. Living in a condominium is considerably different from living in a sovereign house. In a condominium, personal ownership is limited to interior of the unit and requires sharing responsibilities with all the unit owners for the exterior of the complex. Identifying the issues in condominiums which have been designed for the low income community is essential to provide better living environment. Thus, it is vital to identify the satisfaction level of occupants who are settled in low income condominiums with respect to their living condition. Therefore, this study aims to fill the existing research gaps by investigating the existing living condition of condominiums which designed for low income families in terms of user satisfaction. First, a literature survey was carried out. This was followed by a comprehensive questionnaire survey as the data collection technique. Data were collected addressing the satisfaction on living condition under five main areas namely; social condition, facilities availability, management and maintenance of facilities, design and construction, and legal aspects. The results were analysed calculating the percentage values of each aspect. It was identified that 12% of occupants were only satisfied with the social condition in condominium living. In terms of satisfaction level on facilities availability, electricity, telecommunication and water received the highest percentage that is 65%, 62% and 57 % respectively. Moreover, the survey results show that occupants are dissatisfied with quality of construction work, maintenance and management aspects. Less awareness about the legal aspects was another issue among the occupants. Finally, this study suggested conducting post occupancy evaluation will provide stable and sustainable environment for future condominium developments.

Keywords: Condominiums; Living Condition; Low Income Families; Satisfaction Level.

1. BACKGROUND TO THE RESEARCH

There is a significant demand for condominiums in Colombo metropolitan area due to high population density, scarcity of land availability and soaring prices of property particularly in urban areas of the country (Gunawardena and Samarajeewa, 2006) and convenience of buying a condominium rather than constructing a house (Senaratne *et al.*, 2006). Hewamanna (2005) identified that there is a rapid expansion in the construction and sale of condominiums in Sri Lanka during the past few decades. Especially in Colombo and suburbs, the apartment market is mainly vigorous because there is a huge demand for urban living (Wasala, 2007). However, in long-term sustainability of this industry would, certainly, depend on the ability of the property developers to meet the needs and expectations of the end users or the occupants (Gunawardena and Samarajeewa, 2005). Kerti (2014) stated that construction of apartment or condominium is a means of supporting the development options tourism in tourist destination areas which have limited land for construction of tourism facilities. According to the Apartment Ownership Law Act No. 39 of 2003, condominium is a property comprising of land with a building or buildings more than one story and having more than one unit residential or non-residential accommodation.

The population of a country can be generally in three groups according to the income levels as high, medium and low (Central Bank, 2009). The residential sector of Sri Lanka is a major area that shows variations according to the above three levels. Types of the condominium available in Sri Lanka mainly depend on facilities offered such as swimming pool, gymnasium, restaurant and internal and external finishes and

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fittings used. (Senaratne *et al.*, 2006). As Wijeyeweere (2004) mentioned, based on the available facilities, finishes and fittings, condominiums can be categorised into super luxury, luxury, semi luxury and the utility condominiums. The government is the main developer for utility condominiums in Sri Lanka. Therefore, government servants, low-income earners and the shanty dwellers have been the beneficiaries of such state sponsored projects. Siriwardena (2001) stated that low income condominiums have become the most viable alternate homeownership method to provide accommodation for low income earners and resettlement of shanty dwellers with the upsurge of land values in urban areas. Even though living in these condominiums provide many benefits for low income groups in the society, as found by Lorensuhewa (2009) various issues existed with the low income community in Sri Lanka. According to the findings of Gunawardana and Samarajeewa (2005), significant differences could be seen between the expectations of occupants in condominium and understanding of the developers. As stated by the same authors, this situation is more worsen in the public sector condominium developments. Gunawardana and Samarajeewa (2006) pointed out that occupant satisfaction is very significant for the progress and existence of the condominium industry. Therefore, identifying the issues in condominiums designed is essential to provide better living environment for the users although few research studies conducted in the particular area. Thus, this study investigates the existing living condition of low income condominiums in Sri Lanka in terms of user satisfaction. This study was limited to the low income condominiums which are located in the Colombo district.

2. LOW-INCOME CONDOMINIUMS AND USER SATISFACTION

2.1. OVERVIEW OF CONDOMINIUM PROPERTY

Condominium is a different type of ownership created in the 1960s of real property unlike subdivisions which have been in existence for centuries (Lee, 2009). The word condominium is derived from the Latin term “Condo” which means to put or joins together (Ranaweera, 2006). A condominium is a form of home ownership in which individual units of a larger complex are sold, not rented (Pollick, 2009). According to Zulfadzlan (2012), at present, developers are more interested to develop condominiums with many facilities with the upsurge demand for high rise buildings. According to the Colombo Development Plan (CDP), condominium complexes can be grouped into three general architectural types as low rise condominiums, medium rise condominiums and high rise condominiums based on storey height and the building area. Buildings with an area of 150m² - 249m² with three floors, maximum height of 11.25m buildings categorised as low rise condominiums, area 250m²- 999m² with eight floors, maximum height of 30m buildings categorised as medium rise condominiums and area 1000m² - 1999m² with 12 floors, maximum height of 45m buildings categorised as high rise condominiums. In today's context, the highest demand is for residential condominiums, which could be subdivided into super luxury, luxury, semi luxury and the utility condominiums (Wijeyeweere, 2004). Super luxury condominiums consist of the all modern and luxury facilities such as restaurants, swimming pool, gymnasiums and highly sensitive electronic security systems (Ranaweera, 2006). Semi luxury condominiums are getting popular among the migrant workers who could own such unit with their foreign exchange earnings and live peacefully on their return or in their retirement (Wijeyeweere, 2004). Government servants, low-income earners and shanty dwellers have been the beneficiaries of utility condominiums. Most of these condominiums in Colombo have come up as resettlements or as urban renewal programmes carried out by the government (Wijeyeweere, 2004).

2.2. THE CONCEPT OF “LOW-INCOME CONDOMINIUMS”

The term low income condominiums is derived from utility condominiums. Basically, the government furnishes these utility condominiums to provide houses to the government servants and especially resettlement of shanty dwellers and low income earners (Mirihaagalla, 1983). The low income families basically identify as families which consisting of five members and whose monthly income is less than Rs. 16,735.00 (Central Bank, 2009). Correspondingly, these families do not have a fixed occupation and live with limited range of necessities. In most of cases, these people represent the lowest community features and majority of them engage in fishery while others are pavement sellers, labourers, day workers and all that lower level hard working people (Lorensuhewa, 2009). In accordance with the Karunaratne (1978) the

various settlements of the low income earners in Colombo could be classified in to three categories as follows.

- Old tenement which have been reduced to slum conditions
- Large, old residences in the industrial and commercial areas which have developed into slums
- Shanties

As mentioned in the background, low income condominiums have been developed by the government or any other institutions meant for resettlement of shanty or slum dwellers and for low income families in urban areas. Affordability is very low among the said community. Therefore, acceptable construction quality cannot be expected from those condominiums. However, if quality of construction is not properly controlled it will be a heavy stain for the country (Bandulahewa, 2006). The new condominium registration system is introduced in terms of the Apartment Ownership (Amendment) Act No. 39 of 2003, also made provision to solve problems faced by the property developers in condominium registration. The people who purchase units in a condominium technically own everything from their walls inward. All of the individual homeowners have shared rights to most common areas, such as the hallways, staircases and utility services. Maintenance of these areas becomes the responsibility of a condominium association or management. Every owner owns a share of interest in the condominium association, plus an obligation to pay monthly dues or special assessment fees for larger maintenance problems (Pollick, 2009). This fee covers maintenance, repairs, grounds keeping and building insurance (Cortez, 2009). However, many researches pointed out that several issues accompanied in the low income community regarding their living environment.

2.3. NEED FOR UNDERSTANDING OCCUPANTS SATISFACTION IN CONDOMINIUM LIFE

Satisfaction is referred to as a criterion for evaluating the quality of the residential environment by measuring the effect of perception and assessments of the objective environment upon satisfaction (Altaq and Gzsoy, 1998). As Choudhury (1997) stated residential satisfaction in an apartment is a measure of the capability of the living environment as evaluated by the occupants. It is documented several methods can be used to identify or measure the occupants satisfaction such as formal marketing research, through experience, feedback on the completed projects (Liu, 1999; Ozaki, 2003). Post-occupancy evaluation (POE) is a platform for the systematic study of buildings once occupied, so that lessons may be learned that will improve their current conditions and guide the design of future buildings. Yirga (2012) mentioned that post occupancy management is one of the most pressing challenges with the condominiums as most of the design principles are not well configured and practiced. However, most of property developers seem reluctant to spend much time carrying out such evaluation after a project has been finished. As Gunawardena and Samarajeewa (2006) emphasised, the sustainability of any product lies in its ability to satisfy customer needs continuously. Thus, conducting surveys to identify occupants' satisfaction in condominium life is essential for sustain the properties for a long time.

3. RESEARCH METHODOLOGY

The background study of the research was conducted on a broader perspective to familiarise with the subject area of condominiums, and occupants satisfaction by referring books, journal articles and unpublished dissertations within the research limitations. Kraemer (2002) stated that survey approach is important when research is quantitative and requiring standardised information from and/or about the subjects being studied. Furthermore, survey approach is used where, the views or opinions of many need to be evaluated in order to achieve a firm conclusion. Therefore, survey approach has been selected as the research strategy for this study. The structured questionnaire survey was selected as the most suitable data collection technique. The questioner survey was designed in order to identify user satisfaction in terms of social condition, availability of facilities, management and maintenance of facilities, design and construction, and legal aspects. The structured questionnaires were distributed among a simple random sample of 150 occupants who were living in the ten low income condominiums which aged at least year after occupancy within the Colombo area. The satisfaction level of occupants were identified using the likert scale of 'satisfied', 'satisfied to certain extent', 'dissatisfied' and 'no idea'.

In this survey, frequency analysis was used to measure the degree of availability and satisfaction for certain aspects in living in low income condominiums in Sri Lankan context and Formula (1) used to calculate figures.

$$\text{Percentage (\%)} = (n/N) \times 100\% \quad (\text{Eq: 01})$$

Where: n = Number of respondents, N = Total number of respondents received

4. RESEARCH FINDINGS AND DISCUSSION

The purpose of this research is to evaluate the satisfaction level and the existing living conditions of families who live in the low income condominiums. 120 completed questionnaires were received from the occupants with response rate of 80% and Formula (1) used to analyse the data. In considering about the general characteristics of respondents, the majority of families had five members (49%) and some of the families had more than five members (4%) in their families. The results showed that 26% of them had four members, 12% of them had three members and 9% of them had less than three members in their families. In considering about the reasons of selecting the condominiums as their living place, the main reason was displacement due to urban development projects. Different psychological, economic and social backgrounds existed among the random sample. The research findings discuss according to the headings included in the questionnaire such as social condition, availability of facilities, design and construction, management and maintenance of facilities and legal aspects.

4.1. SOCIAL CONDITION

During the survey, it was identified that low income families have shifted to condominiums due to resettlement of slums and shanty, displacement due to urban development projects, displacement due to infrastructure development activities and due to resettlement of low income earners. Therefore, it was observed that occupants in low income condominiums were a mixture of different social backgrounds. The breadwinners of most families do not have a permanent occupation. According to the survey results, 26% of them were day workers, 25% of them were engaging in fishing, 18% of them were working as labourers, 8% of them were working as drivers, 7% of them were working as pavement sellers and 16% of them do not have a fixed occupation. Sharing of land, facilities and services, disturbances from others due to loitering and smoking in the common areas and protection of privacy level are some of the complaints made by the condominium users. The data showed that only 12% of occupants were satisfied with the social condition in condominiums as illustrated in Figure 1. Main reasons for their dissatisfaction on social condition were due to not having fixed income and dislike to move with their neighbors who are from different social backgrounds. Moreover, most of the occupants believe that they are not getting enough privacy as a family. Limited space is another issue with them. In addition, they are concerned about sharing common facilities and services which have been misused by some occupants. Thus, except 12% most of the occupants were not satisfied with their existing living condition according to the facts they have provided.

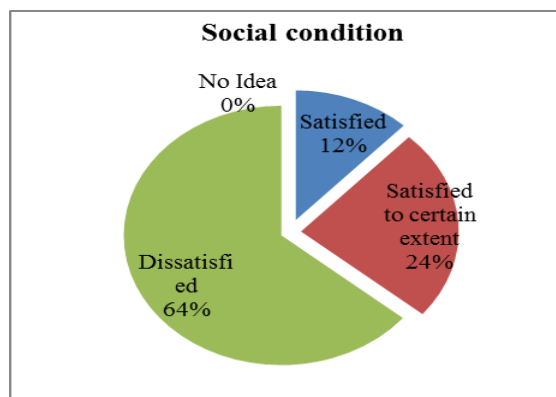


Figure 1: Social Condition

4.2. FACILITIES AVAILABLE

The majority of occupants' were occupied in units: the average usable floor area was between 300-600 sq.ft. The facilities available for the low income condominiums have been discussed in terms of accessibility, water, electricity, lighting, ventilation, acoustic, space, health safety and sanitary, waste disposal, telecommunication, security and finally, recreational facilities. Table 1 displays the satisfaction level of occupants on availability and condition of facilities have already identified.

Table 1: Satisfaction Levels on Facilities

Facilities	Satisfied	Satisfied to Certain Extent	Dissatisfied	No Idea
Overall	21%	28%	50%	1%
Accessibility	16%	32%	51%	1%
Water	57%	25%	18%	-
Electricity	65%	28%	7%	-
Lighting and ventilation	23%	24%	50%	3%
Acoustic environment	14%	32%	54%	-
Space management	9%	21%	68%	2%
Health, safety and sanitary	8%	30%	62%	-
Waste disposal	8%	36%	56%	-
Telecommunication	62%	18%	20%	-
Security	17%	35%	48%	-
Recreational facilities	6%	33%	61%	-

The following facts were obtained based on the data analysis.

- Satisfaction on accessibility was recognise based on width of corridors, width of stairways, availability of emergency access and disability access. Merely 16% of occupants were satisfied in terms of accessibility. During the survey it was identified that issues with the width of corridors, stairways, and emergency exits. There is no disable access in the many low income condominium design. It was observed, width of corridors and stairways less than 3 feet in most of the condominiums and the occupants claimed that difficulties in carrying goods.
- 57% of occupants were satisfied with water supply system. However, there were few issues with the quality of existing water supply system claimed by the occupants.
- 65% of occupants were satisfied with the electricity distribution and only few of them were not satisfied with the safety features of the electrical system.
- Only 23% of occupants were satisfied with lighting and ventilation. Majority of occupants were not satisfied with the natural lighting and ventilation. Some occupants pointed out that window opening are comparatively small. Sometimes use artificial lighting in dark areas during the day time. It was found, it is an additional cost to their electricity bill.
- Majority of respondents had sufficient telecommunication facilities and only 20% of occupants were facing problems due to the absence of telecommunication facilities. Comparatively, occupants are happy about having such facilities.
- Security is another aspect that has been overlooked in low income condominiums. Only 17% of occupants were satisfied with the available security services. It was observed, the community does not trust each other.
- Since living places are very close to each other, acoustic environment plays a very important role to the lifestyle in condominiums. However, only 14% of occupants were satisfied with the acoustic quality in these condominiums. This is one of the biggest issues faced by them.

- Majority of spaces inside the units have not complied with the minimum space requirement of the family members and 68% of occupants were not satisfied with the space given for them. Some believes, the limited space restrict their freedom, whereas 2% of occupants expressed that they have no idea on space management.
- Most of low income condominiums were operated under very poor health, safety and sanitary conditions. Data show that 8% of occupants were only satisfied on this aspect.
- Occupants' perception on waste disposal facility identified based on availability of sufficient provisions for solid waste disposal, sufficient provisions for waste water disposal, sufficient provisions for sewerage disposal, and sufficient provisions for storm water disposal. Having proper waste disposal system is a basic requirement in a condominium building. However, 56% of occupants were not satisfied with the availability and functionality of solid waste disposal systems and waste water disposal systems. They claimed about the bad smell due to poor maintenance.
- As stated above, people living in condominiums are having limited spaces. Thus recreational facilities have become an essential requirement for the condominiums. However, it was found that 61% of occupants were dissatisfied with the availability and adequacy of recreational facilities designed in low income condominiums.

In general 21% of occupants were satisfied and 28% of occupants were satisfied to certain extent with the available facilities, whereas 50% of occupants were dissatisfied with the available facilities. Only 1% of occupants said that they have no idea regarding the available facilities. It was identified that waste disposal facilities, lighting and ventilation, health, safety and sanitary facilities are some of the important aspects that need to be enhanced in order to provide a healthy living environment for occupants in condominiums.

4.3. MANAGEMENT AND MAINTENANCE OF FACILITIES

Management and maintenance of facilities were undertaken by the Management Corporation (MC) with the contribution of unit owners. However, low income occupants are not financially capable of supporting the management and maintenance activities. Thus, low income condominiums were not properly managed and most of the maintenance activities were not carried out in common areas on regular basis. As a result of this situation 43% of occupants were dissatisfied with the management and maintenance in condominiums as shown in Figure 2. When considering the situation of low income condominiums, many individuals who are assigned for maintenance work were not technically qualified in the field of property management. Thus occupants are not happy with the existing management. Therefore, after handing over the condominium property to the occupants, it is required to establish and implement a proper management and maintenance strategies which is lack in the existing process.

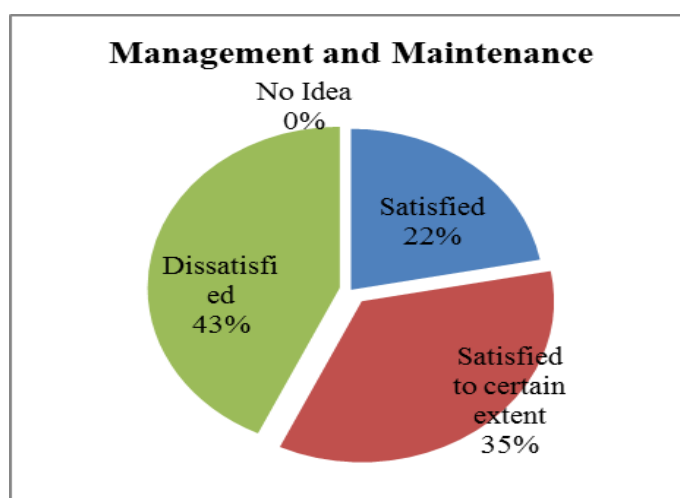


Figure 2: Management and Maintenance

4.4. QUALITY OF CONSTRUCTION

Figure 3 illustrates the results of respondents regarding the quality of construction. It was found that many low income condominiums have been built using low quality materials, poor workmanship, and poor supervision especially the condominiums that have developed within the limited time period and limited budget. Accordingly, 37% of occupants were dissatisfied regarding quality of construction whereas 31% said 'no idea' about the construction aspects. Thus, proper procedures should be implemented to safeguard the quality of construction in the future developments within the allocated budget. Thus, it is pertinent to incorporate sustainability practices to support and enhance the basic needs of occupants keeping their satisfaction level.

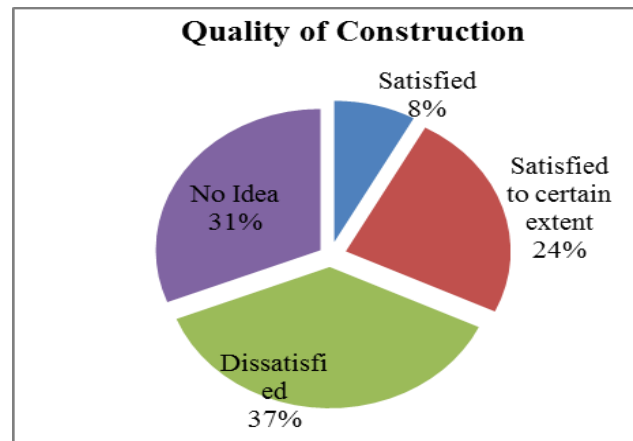


Figure 3: Quality of Construction

4.5. LEGAL BACKGROUND

This is another important characteristic considered during the survey. It was found that less awareness on the legal aspects in relation to the living in condominiums is another issue that exists with the low income families. Most of the occupants in these condominiums live without any concern about their responsibilities. According to the analysis, 43% of occupants said 'no idea' about the legal aspects and 25% claimed as dissatisfied. This proves the awareness of legal aspect is very poor among the community in the low income condominiums. However, majority of the problems associated with their living condition can be solved by providing proper awareness on legal aspects as well as their responsibilities in relation to living in condominiums as interdependency exist among the housing units and the inhabitants. During the survey it was found that majority of occupants do not have writing, reading skills and education level is at very low level. This is the reason that many occupants do not interest get to know about the legal aspects. However, people should pass this barricade in order to skip from common issues faced by them.

5. CONCLUSIONS AND RECOMMENDATIONS

The background to research shows that the demand for low income condominiums in the city of Colombo has gradually increased in the past few decades. This study was aimed to investigate the existing living condition of families in low-income condominiums in Sri Lanka in terms of their user satisfaction. The existing living condition of the occupants was identified under five significant areas namely, social condition, facilities availability, management and maintenance of facilities, design and construction, and legal aspects. The survey findings showed that 12% of occupants were satisfied with their social conditions. Most of these families do not have any fixed income. In terms of facilities available electricity, telecommunication and water received the highest level of satisfaction that is 67%, 62% and 57 % respectively. However, safety features of the electrical distribution systems, quality of water supply systems need to be improved. Only 23% of occupants were satisfied regarding the lighting and ventilation. Most of the low income condominiums does not comprise with systematic security system. Only 16% of occupants were satisfied with the accessibility. Merely 14% of occupants were satisfied with the acoustic quality and only 9% of occupants were satisfied with the availability of space in these condominiums. Furthermore, the

respondents show their dissatisfaction on the areas of health and safety, sanitary facilities, waste disposal facilities, security and recreational facilities. Most of these issues of low income condominiums could be evaded through the implementation of proper design aspects. Moreover, the analysis showed that 43% of occupants were dissatisfied regarding the management and maintenance procedures and 37% of occupants were dissatisfied with the quality of construction. Proper procedures should be implemented in order to overcome these situations. Unawareness of legal aspects related to the living in condominiums among the users is another issue identified through the survey results.

It was identified that some of the available regulations have been neglected by the developers of low income condominiums when designing the condominiums. Thus it is pertinent to make centralised decisions in relation to allocation of land, adoption of standards, preparation of layouts, house plans and designs, infrastructure designs and installations, selection of materials, method of construction, finishes, planning, maintenance and management. In addition, it is worth to study user background, their behavior, attitudes, in order to provide acceptable living standards. Finally, it is recommended to carryout post occupancy evaluation surveys in regular basis in order to enhance the current living conditions and to provide stable and sustainable environment in the future condominium developments.

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