

Communications

GROWTH AND RESIDENTIAL CONDITIONS OF A SLUM COMMUNITY IN COLOMBO, SRI LANKA

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Based on the authors' fieldwork, this article examined the spatial and demographic growth of a slum community in Colombo, Sri Lanka, in association with the inhabitants' socio-economic conditions. In this slum community, which is near the industrial and commercial centers and has developed especially since the early 1970s, most dwellers are migrants from other parts of Colombo. The increase of dwellers resulted in a high-density residential condition, represented by an extremely small floor area per person, despite an income level that is not extremely low.

In developing countries, urban population has markedly increased in the past several decades. In Asia, for instance, the proportion of the population residing in urban area was 21% in 1970 and was expected to increase to 33% by 1994 and 57% by 2025 (United Nations, 1995). Such an increase of urban population will directly trigger retarded environmental and health situations, especially in slum areas (United Nations, 1994).

In Colombo, the capital of Sri Lanka, 1,450 slums and shanties are identified by the Colombo Municipal Council (CMC). According to the definitions of the CMC, the slums are housing built mostly for long-term use and are often single-room dwellings, compactly arranged in back-to-back rows, whereas the shanties, distinct from the slums, are improvised and unauthorized dwellings with no legal rights of occupancy. However, the distinction between the two categories is indiscernible because both co-occupy the same area; thus both are termed slum in this paper.

Based on the authors' fieldwork in one Colombo slum community, which was first inhabited in the 1950s or earlier and has developed especially since the 1970s, the present study examined the process of its spatial and demographic growth and the household-based socioeconomic characteristics of the inhabitants. A major purpose of this paper is to elucidate the residential condition, represented by floor space per person, which has been recognized as a basic factor in regard to the people's living and health.

SUBJECTS AND METHODS

Colombo is along the coast at the mouth of the Kelani River. The population has increased to 590,000 in 1981, from 510,000 in 1963, and its urban area has gradually expanded to the neighbouring municipalities. The high-income people have tended to move their residences from the central part to the suburbs, whereas the low-income people have tended to congregate in the central part. Thus the slum communities, which are along canals or marginal lands at the edge of the marshes and close to industrial areas, have become large. The CMC reported in 1980 that 53,000 housing units in the slum communities accounted for 51% of the total housing in Colombo.

The target slum community of this study, called Maligawatta Place, is a typical slum community

that has grown in accordance with the economic development of Sri Lanka in the past several decades. Maligawatta Place is in Ward 15, one of 47 wards that comprise the administrative units of Colombo. According to the city's land use plan, Ward 15, in which small-scale trade stores and markets for steel materials and related goods are collected, is categorized as a mixed residential and commercial zone.

In this study, a preliminary survey was conducted in September 1995, and the main survey was done from July to September 1996. In July 1996, Maligawatta Place was inhabited by 1,717 persons in 300 households; since its area was 1.21 ha, the population density per ha exceeded 1,400. The authors, with the assistance of two CMC health instructors, interviewed each household head (or other family members if he or she was absent) to learn the following information: (1) household composition, including date and place of birth and migration histories of all its members, and (2) its current socioeconomic status, e.g., principal occupation and income. The floor area of each household's dwelling was measured, and the floor area at the time of arrival in Maligawatta Place for the households, whose dwellings had been remodeled, was estimated by interview.

RESULTS

Figure 1 illustrates the location of the dwellings in Maligawatta Place in 1996 by four groups classified according to the arrival year. In 1969, only 36 houses were on the marshland along the San Sebastian canal bank. Since then, the land available for housing, which was in the inner zone, had almost been exploited by the 1980s.

Table 1 shows the average per-person floor area of the dwellings for existing households in the five years from 1960 to 1996 (Table 1-A) and for households, classified into four, according to the time of arrival (Table 1-B). The average per-person floor area has decreased to 3.4 m² in 1996, from 5.1 m² in 1960, with a marked decrease from 1960 to 1970. Comparing the household groups classified by the arrival year, the average per-person floor area at the time of arrival decreased to 5.0 m² in the 1990-96 arrival group, from 7.2 m² in the before-1970 arrival group. From both aspects, it is apparent that the per-person floor area of Maligawatta Place was narrow and constrictive, though this kind of information for the slum areas has seldom been reported. According to Edward et al. (1993),

Table 1. Average per-person floor area, excluding kitchen, in Maligawatta Place.

A. Floor area in the five selected years for all households

Year	Number of persons	Floor area (m ²)	Floor area (m ²) per person
1960	53	271	5.1
1970	159	609	3.8
1980	781	2845	3.6
1990	1271	4340	3.4
1996	1717	5777	3.4

B. Floor area at the arrival time for four groups of households

Arrival year	Number of households	Floor area (m ²) per person
Before 1969	26	7.2 ^a
1970-79	108	6.0 ^a
1980-89	77	5.7
1990-96	89	5.0 ^b
Total	300	-

Note: A t-test showed a significant difference ($p < 0.05$) between figures marked "a" and "b".

Fig. 1. The growth pattern of housing in Maligawatta Place. The houses are categorized into four groups according to the year of construction.

the per-person floor area of the slum dwellers in Bangkok, in general, was wider and less constrictive than in Maligawatta Place.

An interview survey also revealed that the average age of the household heads at the time of arrival in Maligawatta Place was 33.8 (SD=11.1) and that about 80% of the household heads and

their spouses were born in Colombo, including Ward 15.

The current socioeconomic status of the households in Maligawatta Place was summarized as follows. First, most working-age males had jobs, and 95% of the workers were engaged in such informal-sector jobs as casual labors and self-employment; their mean per-day income was rupees (Rs) 150 (US\$ 1 = Rs 57) with small variations. Second, the mean monthly income of the households was Rs 4,806, which was about 70% of that of all households in Sri Lanka, i.e., Rs 6,287, and half that of all households in the Colombo district, i.e., Rs 10,570 (Department of Census and Statistics, 1995). Third, nearly half the women worked under contract conditions, such as house-keepers in the Middle East countries, e.g., Kuwait, Saudi Arabia, Dubai, Bahrain, and the United Arab Emirates.

DISCUSSION

Even though population in large cities in developing countries, in general, has increased because of rural-urban migration (Bachiller, 1986; Turner, 1969), most dwellers in Maligawatta Place were born in Colombo. The chief reasons of their migration to Maligawatta Place resulted from its nearness to the industrial and commercial centers and its shortage of affordable accommodations in many parts of Colombo besides the slum areas.

These findings were related to the change of economic activities in Colombo and Sri Lanka as a whole. From 1948, the year of Sri Lanka's independence, to 1959, the agricultural sector, consisting of tea, rubber, and coconut plantations, played a principal role in the exports of this country. By 1960, according to changes of the national development policy, the industrial sector had progressed to take the place of the agricultural sector. Therefore demands for labor in industries have increased in Colombo, leading to the growth of slums as the residential area for workers. Thus the dwellers in Maligawatta Place got jobs and consequently have not been extremely poor. A similar growth pattern of slum areas in developing countries was pointed out by Desai and Pillai (1990), who emphasized indispensable roles of slums in absorbing an industrial labor force.

The residential conditions, as a highly basic environmental factor, should have relevance to health status and risk of diseases (Gath, 1974), and disadvantageous effects of high-density residences, which were caused by an increase in the population, have been reported (McCarthy and Saegart, 1978; Edward et al., 1993). The findings of this study highlighted the narrow and constrictive per-person floor area in Maligawatta Place in contrast to a not extremely low income level. Further studies are needed to clarify the effects of residential conditions on living conditions and on the health status of the inhabitants.

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