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## The impact of socioeconomic factors on urban residential garden management: A case study in the Gampaha divisional secretariat area

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With rapid urbanization and limited availability of land, the conservation value of residential landscapes is becoming increasingly apparent. These urban landscapes enable people to reconnect with nature, while providing a variety of ecosystem services. The present study evaluated the socio-economic and knowledge-related drivers responsible for residential garden management in the Gampaha Divisional Secretariat (DS). A pre-tested questionnaire was administered to collect the socio-demographic details and garden management practices of 50 randomly selected households located within a 2 km radius from the city center. The physical conditions of the surveyed gardens, garden design characteristics, maintenance level of soft and hard landscape materials were evaluated through a garden survey, which was conducted during July to December, 2020. The Chi-square test of association was used to identify the significant socio-economic factors that influenced the quality of home gardens. The majority of respondents were 51-65 years old (41.7%), followed by >65 years (25%) and 36–50-years old (25%). Around 45.8% of the study population had completed a degree, while 41.7% had completed Advanced Level. Retired household heads dominated the sample (37.5%), followed by people occupied in the private sector (29.2%). Most families resided in privately owned houses (95.8%) for more than 20 years (75%). A high fraction of home gardens was either self-designed (37.5%) or non-designed (37.5%), while a professional landscape designer had designed only 16.7%. Nearly 66.7% of the gardens were maintained by the family members, while 29.2% of the gardens were maintained by skilled labourers. The majority (54.7%) of families spent only one day per week to maintain their home gardens. Interestingly, only 8% of residential gardens were of “high quality”, in terms of the design, plant composition, and maintenance, while 11% were “poorly designed”. According to the Chi-square test, only occupation, number of family members, number of residential years, designer of the home gardens, and time spent on garden maintenance were significantly associated ( $p < 0.05$ ) with the overall quality of the residential gardens. Residential landscapes have a high spatial heterogeneity with a complex suite of factors. Therefore, understanding the socio-economic drivers of urban residential garden maintenance is critical to ensure successful implementation of policies to conserve urban biodiversity, as residential landscapes make up a significant percentage of urban spaces.

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