

STRATEGIES FOR ENHANCING PERSONAL COMMITMENT TOWARDS BIODIVERSITY CONSERVATION AMONG URBAN DWELLERS IN THE GAMPAHA DISTRICT

J.K.W.N. Subashini^{1*}, K. Yakandawala¹ and E.S. Minor²

¹*Department of Horticulture & Landscape Gardening, Wayamba University of Sri Lanka, Sri Lanka*

²*Department of Biological Sciences, University of Illinois, Chicago, USA*

**subashini@wyb.ac.lk*

Urban nature is considerably less valued. Nevertheless, as cities grow larger and denser along with environmental degradation, the importance of urban biodiversity conservation has been increasingly recognized. Hence, perceiving conservation as a social and people-centred approach would be highly successful in meeting both ecological and developmental needs. For this, the urban residents play a key role since their choice of practices will directly affect the conservation of biodiversity in urban landscapes. Further, the success of any related action heavily depends on the attitudes and socio-economic behaviours of urban dwellers. Therefore, this study attempted to identify the motivational drivers of urban residents on biodiversity enhancement in residential neighbourhoods in the Gampaha District. Hundred and fifty households were selected randomly. A pre-tested, self-administered questionnaire was used to acquire the socio-economic details and the perceptions of residents on different methods that could be adopted for biodiversity enhancement in urban settings. The respondents were predominantly females (72%), with a mean age of 51-65 years. The highest education level was G.C.E. A/L (53%), followed by degree/diploma level qualification (35%). Retired household heads accounted for a higher fraction of the sample (27%), followed by private sector employees (26%). 36% of respondents received a monthly income ranging from LKR 81,000-120,000. Most respondents strongly agreed that government rules/policies could influence gardening towards biodiversity conservation in urban landscapes (Mean Score [MS]=4.89), while 55% of the respondents strongly opposed imposing a taxation process to enhance conservation practices. The implementation of a rewarding system was ranked as the second-best motivational mode (MS= 3.95) in place of gardening for biodiversity enhancement, followed by the provision of incentives (MS=3.85). According to behavioural economics, 85% of the study population was willing to pay a fee for enhancing the biodiversity in their residential neighbourhood, whereas around 37% agreed to a monthly payment of LKR 500, based on the stated preference approach. The impression that the conservation of biodiversity is the sole responsibility of the government and therefore should be funded through municipal revenues was the main reason for rejecting the contingent scenario by the respondents. The age, education level, employment and income were significantly associated ($p < 0.05$) with the perception of the motivators for biodiversity enhancement. The results of the present study delivered the antecedents of the motivational factors of urban residents towards biodiversity conservation. This behavioural information of public valuation on biodiversity enhancement could help society to make sensible and socially-inclusive choices in implementing urban biodiversity conservation strategies.

Acknowledgements: Authors would like to thank the support from the Wayamba University Research Grant-SRHDC/RP/04/19-02 and AHEAD grant- AHEAD/PhD/R3/Agri/448 for the financial assistance.

Keywords: Biodiversity enhancement, Urban landscapes, Urban dwellers, Willingness-to-Pay