

## Biodiversity conservation in Kandyan Forest Garden

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Sri Lanka is one of the smallest but biologically most diverse countries in Asia. The increasing population on limited land area leads to rapid degradation of bio diversity which may continue if unabated. The home garden is a typical example of biodiversity conservation. 60 house holds were selected in Kandy district to study the species richness and species diversity index of Kandyan forest garden. The total number of species and individuals were counted in each forest garden and species diversity index were calculated using Shannon-Wiener index (H). More than 237 useful species were identified in the forest garden including threatened species like the ebony tree (*Diospyros ebenum*) and honey tree (*Madhuca longifolia*). The total number of species per garden ranged from 32 to 88 with a mean of 56.9 and the species density (number of species / ha) vary from 63.3 to 900 with mean of 254.4. The species density declined with increasing garden size. The species diversity index of the forest garden in the study area is 3.93. The high floristic richness and diversity index of forest garden help to conserve species from extinction. Species density increased with decreasing land size and this shows that most gardeners try to optimize their land by conserving many species. Thus forest gardens conserves many species and reduces the species extinction. Therefore development of this type of garden conserves species and reduce the species from extinction.

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