

SURVEY OF THE PRESENT STATUS OF STREET TREE PLANTING IN COLOMBO MUNICIPAL COUNCIL AREA & SOME RECOMMENDATIONS FOR IMPROVEMENTS

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Urban Forestry embraces parks, avenue planting or street trees, boulevards, cemeteries, parking places etc. It plays an important role by providing aesthetic beauty and environmental pollution by absorbing vehicular emission. Colombo, which is the commercial capital of Sri Lanka, is plagued with high population density and high commercial activities. Urban forestry has a significant potential in improving aesthetic & environmental aspects of the city.

Objectives of this research project were to identify the existing situation of the street tree planting in the 15 sub divisions of the Colombo Municipal Council Area and to give some recommendations for improvements. 2 trunk roads were selected per division randomly and the status of trees in these roads was recorded. Measurements of crown size, height, diameter at breast height, height of the first branching, widths of roads, sidewalks, and center medians were measured and recorded. Observations done in status of maturity, pest-disease attack, root pattern, foliage characteristics such as whether easily decayable or moderately decayable and small or large leaves, land use patterns such as commercial, service & administration, residential and recreational land use & recorded.

According to the results, a difference in the status of street trees in the 15 sub divisions in the Colombo Municipal Council Area was identified. The sub divisions can be ranked according to the total crown area per kilometer as follows: sub divisions 7, 14, 3, 11, 1, 2, 5, 10, 6, 13, 12, 15, 8, 9 & 4. The sub divisions can be ranked according to the number of trees per kilometer as follows: sub divisions 7,10,14,1,13,2,5,6,12,11,3,15,8,9 & 4. The sub divisions can be ranked according to the number of species diversity per kilometer as follows: sub divisions 7,13,12,14,1,5,2,11,15,8,10,6,3,4 and 9. Terminalia Catappa (Kottang), Polyalthya longifolia (Willow), Samanea Saman (paramara), Delonix regia (Maimara), Casia fistula (Ehala) & Plumeriya spp. (Araliya) represent 5 or more than 5 % in the sample survey. 56 tree species were identified in the study area.

Out of 30 selected street sites, 7 were identified as sites, which need immediate planting programs and another 17 sites needs planting program. 9 street sites need immediate pruning operations as they have trees with first branching height of less than 2.00 meters, which may interrupt the traffic flow. 6 street sites were identified as sites, which need immediate removal and replacement operations as they have over-matured trees, which may become hazardous trees if necessary actions are not taken. Out of 15 sub divisions surveyed, 7 were identified as affected with pest-disease attack. Further, some recommendations are identified as to improve the existing situation of the street tree planting in the study area and a draft action plan for 5 years was drawn. Further scientific studies such as species, which can reduce soil erosion, pollutants absorbers, etc. are needed for better management of urban trees.