

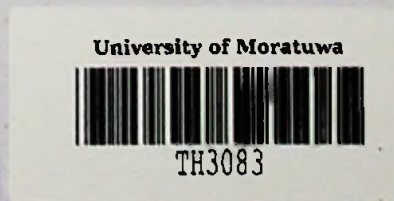
**CONCEPT OF ECO² CITIES AND ITS RELEVANCE FOR
URBAN LANDSCAPE PLANNING AND MANAGING THE
URBAN GREEN SPACE
WITH SPECIAL REFERENCE TO THE CITY OF COLOMBO**

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W. M. D. D. Ranasinghe



A dissertation presented to the University of Moratuwa, for the Master of Science Degree in Landscape Design 2013

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DECLARATION

I hereby declare that this dissertation represents my own work, except where due acknowledgement is made. It has not been previously included in a thesis, dissertation or report submitted to this university or any other institution for any degree, diploma or other qualification.

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ABSTRACT

Many of the policies, plans and programs related to the environmental conservation, greening the cities, balancing the carbon foot print and sustainable environment and economic development by planning and management of urban green space.

The institutions directly or indirectly and individually or collectively responsible in planning and management of urban green space are engaged in frequently change new concepts in relation to:

- **Sustainable environmental development**(by the Ministry of Environment and Natural Resources by “Sri Lanka Strategy for Sustainable Development (February 2007)”, National Plan for Haritha Lanka Programme” (2009) and National Physical Planning Policy & Plan, Project Proposals, Sri Lanka 2030, January 2011 (NPPP2011))
- **Establishing environmental friendly modern / beautiful green cities** (‘Mahinda Chintana – A Brighter Future 2010’.
- **Maintaining bio-diversity and Balancing Carbon Foot Print.**

Many of these concepts although adapted by various institutions responsible in planning and management of urban green space its trickledown effect has not significantly impacted the conservation and development of urban green space in urban areas.

The main reason for this became that many of these urban areas in the country consists of its lands in combination of open space elements such as urban, natural and agricultural requires to effective incorporation into the city life with its ample opportunities was available for visual and functional realization. The assessment of the actions so far being made by the authorities as well as Landscape professional indicated that their involvement in planning of urban space is done in piecemeal and in isolation manner. However the new way of thinking on the planning of urban landscape is that it creates economic opportunities through protecting and nourishing the local ecology and global public goods such as the environment, for future generation.

In the context of increasing the world population for the first time in history more than half the world's people live in cities and over 90 percent of urban growth is occurring in the developing world, adding an estimated 70 million new residents to urban areas each year (World bank) a new strategy is inaugurates for recognizing cities at the core of growth and human development. It is committed to promoting sustainable cities and towns that fulfill the promise of development for their inhabitants -- in particular, by improving the lives of the poor and promoting equity -- while contributing to the progress of the country as a whole which is developed as Eco2 Cities – a Guide for Developing Ecologically Sustainable and Economically Viable Cities.

Issues facing the provision of open space and how to enhance the landscape in areas where:

- uneven distribution of public open space and recreational facilities in terms of population catchment
- Sub-standard provision of open space and recreational facilities when compared to international best practice highly inadequate statutory requirement and protection for public open space.

The Ecological Cities as Economic Cities Eco² Cities book introduces some powerful and practical methods and tools that can further enable sustainable and integrated city planning and decision making.

The dissertation on “ Concept of Eco² Cities and its relevance of: Planning and Managing Urban Green Space in achieving Sustainable Environment” is addressing the present issues connected with urban landscape for greening the cities as well as how to landscape designs could be done to make an integrated effort to have environmental and economic development:

- Develop an appropriate landscape design criteria in construction of buildings, communities and infrastructure to utilize green building practices that promote improved environmental performance including energy efficiency covering vertical landscaping, greening the buildings, urban agricultural practices,

maintaining micro climate, integration of green and blue areas etc hoping to facilitate for establishing Eco² Cities that create economic opportunities for their citizens in an inclusive, sustainable, and resource-efficient way, while protecting and nurturing the local ecology and global public goods, such as the environment, for future generations.

- Design principles for urban, natural and agricultural areas located in urban centres by analyzing their ecological and bio-diversity – that will provide the visual and functional realization.
- Planning for greening the Open Space to provide a community facility for recreation that ranges from children's playgrounds through town parks for all ages, to sport venues.
- Encouraging vegetated private open spaces are quite extensive and contribute to the Green Infrastructure necessary for a healthy environment, including provision of visual amenity/relief where visible and not degraded by waste dumping, while affording a natural drainage network and flood protection when measured against international standards for provision of open space, landscaped areas and recreation facilities.