


**PRINCIPLES OF ENVIRONMENTALLY SUSTAINABLE DESIGN (ESD);
AN INDEX TO EVALUATE ESD AND ITS APPLICABILITY IN
SRI LANKAN CONTEXT**

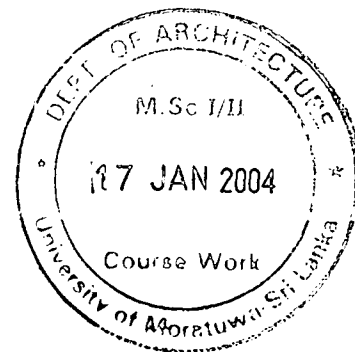
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A Dissertation
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DECLARATION

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

 University of Moratuwa, Sri Lanka.

Signed: ... ***UOM Verified Signature***



K. K. Samaratunga.

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Principles of Environmentally Sustainable Design (ESD); An Index to Evaluate ESD and its Applicability in Sri Lankan Context

CONTENTS

	<u>Page</u>
Declaration	i
Acknowledgements	ii
Contents	iii
List of illustrations	vi
Abstract	viii
CHAPTER ONE – INTRODUCTION	01
1.1 Preamble 	01
1.2 Justification	01
1.3 Intention of the study	03
1.4 Scope and Limitations	03
1.5 Method of study	04
CHAPTER TWO - ENVIRONMENTALLY SUSTAINABLE DESIGN (ESD)	07
2.1 Preamble	07
2.2 Defining the Study Area	07
2.2.1 Sustainability	07
2.2.2 Sustainable Design	09
2.2.3 Environmentally Sustainable Design	11
2.3 Principles and guides on ESD in Global Context.	14
2.3.1 The Green Principles	16
2.3.2 The Environmental Principles of RAIA	16

2.3.3	The "Hannover Principles"	17
2.3.4	The BDP Ecologically Sustainable Development Editorial Principles	19
2.3.5	The 8 CO (8 Components) Rules	20
2.3.6	Principles of Sustainable Design (Kim & Rigdon)	22
2.3.7	Checklist for Environmentally Sustainable Design and Construction – Colorado	23
2.4	Concluding Remarks	27

CHAPTER THREE – PRINCIPLES OF ENVIRONMENTALLY SUSTAINABLE

	DESIGN AND THEIR STRATEGIES	29
3.1	Preamble	29
3.2	Principles of sustainable design	29
3.2.1	Principle one-Economy of Resources	31
3.2.2	Principle two- Life Cycle Design	32
3.2.3	Principle three- Humane Design	35
3.3	Strategies to achieve sustainable design	36
3.3.1	Economy of Resources	37
	3.3.1.1 Energy Conservation	38
	3.3.1.2 Water Conservation	40
	3.3.1.3 Material Conservation	41
3.3.2	Life Cycle Design	43
	3.3.2.1 Pre-Building Phase	44
	3.3.2.2 Building Phase	45
	3.3.2.3 Post Building Phase	45
3.3.3	Humane Design	47
	3.3.3.1 Preservation of Natural Conditions	48
	3.3.3.2 Urban Design and Site Planning	48
	3.3.3.3 Design for Human Comfort	49
3.4	Concluding Remarks	50

CHAPTER FOUR -CASE STUDIES; APPLICABILITY OF ESD PRINCIPLES

	IN SRI LANKAN CONTEXT	52
4.1	Preamble	52
4.2	Sri Lankan Tradition for Shelter	52
4.3	Formulation of the 'Evaluation Index' for ESD Principles	55
	4.3.1 The ESD Scorecard	55
4.4	Case Studies	58
	4.4.1 The Selection Criteria	58
	4.4.2 Case Study 1: Basnayake House, Ganemulla	59
	4.4.2.1 Location and Climate	59
	4.4.2.2 Background	59
	4.4.2.3 ESD Objectives	60
	4.4.2.4 Research Sheet for Basnayake House	67
	4.4.3 Case Study 2: Maulie de Saram House, Pelawatte	70
	4.4.3.1 Location and Climate	70
	4.4.3.2 Background	70
	4.4.3.3 ESD Objectives	71
	4.4.3.4 Research Sheets for Maulie House	78
4.5	Research and Analysis	81
	4.5.1 Strengths and Weaknesses	84
	4.5.2 Possible Remedies	85
	4.5.4 Directions for Future studies	85
4.6	Summery of the Study	86
	Conclusion	89
	Bibliography	91

LIST OF ILLUSTRATIONS

Figure	Page
01. Concept of Sustainable housing development	08
02. Complex process involved in creating dynamic relationships between the input and output from an inclusive sustainable development.	11
03. Wide variety of issues to be integrated in order to produce goals of sustainability.	12
04. Model for Architectural Design.	13
05. Correlations between per-capita incomes and per-capita energy consumption levels of selected industrialized and developing countries	14
06. Correlations between per-capita incomes and per-capita water consumptions of selected industrialized and developing countries	15
07. Correlations between per-capita incomes and per-capita pollutant production of selected industrialized and developing countries	15
08. The 8 CO (8 Components) Rules	20
09. The Method holistic Participation MHP	21
10. Conceptual framework for Sustainable Design and Pollution Prevention in Architecture	22
11. Conceptual framework for Sustainable Design and Pollution Prevention in Architecture	30
12. The input and output streams of resource flow.	31
13. Conventional model of the building life cycle.	33
14. The sustainable building life cycle.	33
15. Ecological elements of Site and Building associated with the building life-cycle phases	35
16. "Economy of Resources" methods of application.	37
17. "Life Cycle Design" methods of application.	43
18. "Humane Design" methods of application.	47
19. Typical section through traditional rural dwelling	53
20. Evolution of a courtyard house	54
21. Score Card for Principle One: Economy of Resources	55
22. Score Card for Principle Two: Life cycle Design	56
23. Score Card for Principle Three: Humane Design	57
24. Climatic data for Colombo	59
25. Plan of Vijitha Basnayake House, Ganemulla	60
26. Section showing the new Entrance and Extended Verandah.	61
27. The Entrance	61

28. Central courtyard converted in to a pond	62
29. The interior	62
30. The exit to the rear garden.	62
31. Reuse window frame as a structural support	63
32. The exterior	63
33. The verandah	63
34. The exterior view of the verandah	64
35. The garden leaved to grow as a natural forest	64
36. The Dry ponds	64
37. Roof details	65
38. Columns and arch of old house leaved as elements	65
39. Doorframe and use of colour	65
40. The Architect's Studio	66
41. The entrance to the studio	66
42. Detail of the roof of the Studio	66
43. Research Sheet on Principle One – Economy of Resources	67
44. Research Sheet on Principle Two – Life Cycle Design	68
45. Research Sheet on Principle Three – Humane Design	69
46. Climatic data for Colombo	70
47. The Front façade	71
48. Plans of Maulie House, Pelawatte	72
49. Section through Site	72
50. Section through Main Space	73
51. the use of Natural Contours and Preservation of Natural vegetations	73
52. A Perspective Expression of the use of natural conditions of the site	73
53. A Perspective Expression of integration of courtyards to the design	74
54. Construction Details	74
55. Details with Re-used Materials	74
56. Entrance to the main space	75
57. Entrance to the main space from master bedroom	75
58. The Main Space	76
59. The bedroom	76
60. Careful use of Natural Lighting	76
61. Some Perspective Expressions of re used materials and interior	77
62. Research sheet on principle one 'economy of resources'	78
63. Research sheet on principle two 'Lifecycle Design'	79
64. Research sheet on principle three 'Humane Design'	80
65. Research Analysis for principle one 'economy of resources'	81
66. Research Analysis for principle two 'Lifecycle Design'	82
67. Research Analysis for principle three 'Humane Design'	83

ABSTRACT

'Sustainability' has become a very famous global topic in the last few decades. As a concept dealing with economics and management, 'Sustainability' applies in conservation of the environment and its scarce natural resources

As a Profession which always deals with space, material and energies, Architecture has much more to contribute in 'Environmental Sustainability'. Therefore it is vital to carryout studies on 'Environmentally Sustainable Design (ESD).

Various Principles and Strategies on ESD have been developed by scholars, as they were adopted by Professional Bodies and Institutions in policy formulation all over the world. Most of them happened in the Developed Countries with advanced technology, having investments to conduct research. Such implications therefore are not frequently happening in the Developing Countries.

This Dissertation which is a Research Study was prepared with such a background investigates the Applicability of such Principles of ESD in Evaluation of ESD in Sri Lankan Context. This constitutes a study of various ESD Principles, development of an 'Evaluating Index' organized as an 'ESD Scorecard' and a Research study on the 'Applicability' of such internationally developed Principles of ESD under Sri Lankan Conditions.

Two Residences which are assumed as Environmentally Sustainable have been evaluated using the developed 'ESD Scorecard' as Case Studies. The results of the analysis of the research have proved that the Internationally developed ESD Principles would have to be modified accordingly with the 'Regional Conditions' as well as with the 'Nature' and the 'Scale' of the project.

Key Words: Environmentally Sustainable Design (ESD), ESD Principles, ESD Scorecard.