

**URBAN CONSERVATION APPROACH TO DEVELOPMENT  
PLANNING OF LOCAL AREA WITH SPECIAL REFERENCE  
TO BATTICALOA MUNICIPAL COUNCIL AREA**

Manna Perumalage Ranatunga

Dissertation submitted in partial fulfillment of the requirement for the degree  
Master of Science

Department of Town and Country Planning

University of Moratuwa

Sri Lanka

March 2011

96821

## ABSTRACT

An urban area is a place with a character which has developed with time. So every urbanity is a place of uniqueness which will have its own inherited properties, identity and a development potential. The conservation of such characteristics and attributes which assist to define its urban character is a specialized skill which should be acquired by development planners. Hence urban conservation in development planning of a local area has been a challenging but an important issue. Many contemporary researches are being carried out to explore conservation potentials within the parameters of prime aspects of urban development, which are economic, physical, social and environmental aspects.

In Sri Lankan context, it is revealed that the urban development plans which are being prepared for the urban areas, are not concerning the potentials of urban conservation. According to the preamble of UDA law 41 of 1978, the preparation of development plans for urban areas should consider the social, physical and economic aspects. Further study on the document reveals that it has hardly any emphasis on urban conservation.

Today historic towns are being threatened and physically degraded, damaged or even destroyed by the impact of unplanned urban development. This can be considered as a result of not realizing the urban conservation potentials. The historic core areas are being protected, but the immediate locality is developed with no consideration given to conservation. So the lack of consideration of urban character conservation is a serious problem in local town planning practice.

Accordingly, the layering proved that Bataloa streets show high association of water fronts. The relationship of built fabric and water body is shaping the cities character. The occurrences of historic buildings in streets are at 3% yet in such a street occurrence of multiple conservable buildings are at 86%. The occurrence of city blocks with conservable buildings is 21%. In such a city block multiple occurrence of such streets are at 73%. Of above 67% of such streets and buildings restricted to Turtle Island. Hence the potential of conservation is high due to condensation of such urban areas. The Dutch fort which was also recognized by public as the best land mark of Bataloa and 2<sup>nd</sup> best place to be conserved is situated in this area. But the objects such as Kalady bridge and light house are in isolation. There for individual objects also have to be recognized for conservation based local area development plan.

## DECLARATION

I declare that this is own work and this dissertation does not incorporate without acknowledgment any material previously submitted for a Degree or Diploma in any Other University or institute of high learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Also, I hereby grant to University of Moratuwa the non –exclusive right to reproduce and distribute my Dessertation,in whole or in part in print, electronic or other medium.Iretain the right to use this content in whole or part in future works( such as articles or books)

..........

.....05.../03.../2011.....

Name of the Student : Ranatunga M.P

..... Date



University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

The above candidate has carried out research for the Maters dissertation under my supervision.

..........

.....09/03/11.....

Signature of the Supervisor

Date

## ACKNOWLEDGEMENT

I am deeply indebted to Dr. Jagath Munasinghe, Head of Department of Town and Country Planning, for the valuable guidance and supervision for the completion of IRP as well as MSc. programme.

Further my sincere thank goes to Professor. P.K.S Mahanama, Dean of the Faculty of Architecture, University of Moratuwa for his valuable guidance in the MSc. Programme.

I must remember Professor Harsha Munasinghe, Head of Department of Architecture, for the guidance and supervision given to me for the fulfillment of this study.

Further I must appreciate corporation given to me by staff members of Department of Town and County Planning, University of Moratuwa.



University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

## TABLE OF CONTENTS

Declaration of the candidate and Supervisor	i
Abstract	ii
Acknowledgement	iii
Table of Contents	iv
List of Figures	viii
List of Tables	x
1.Introduction	
1.1 Background .. .. .	01
1.2 Problem Definition .. .. .	02
1.3 Research Objective .. .. .	03
1.4 Methodology and Study Process .. .. .	03
1.5 Scope and Limitation .. .. .	05
2. Literature Review	
2.1 Introduction .. .. .	06
2.2 Urban Conservation .. .. .	06
2.3 Evaluation of Urban Conservation Concepts .. .. .	07
2.4 Urban Conservation Principles .. .. .	12
2.5 Analytical Tools to Identify Urban Character .. .. .	16
2.6 International case studies .. .. .	19
2.6.1 The Bologna Experience . . . . .	19
2.6.2 Baltic Experience .. .. .	21
2.6.3 Case study 1 (Urban Development Projects)	24
2.6.4 Case study 2 (Urban Development Projects)	25
2.6.5 British water front development plans	27
2.6.6 Kyoto conservation experience	28

2.7	Development plan and Sustainable Development ..	30
2.8	Current Types of UK, Statutory Development Plans	31
2.8.1	Landscape Conservation to Local Plans	32
2.9	Summary of the chapter and outcome	34

### 3 Research Design

3.1	Introduction .. .. .	36
3.2	Research Design .. .. .	36

### 4. Case Study – Baticaloa City

4.1	General Information and Background of the Study Area – Baticaloa City .. .. .	40
4.1.1	Geographical Location .. .. .	40
4.1.2	Baticaloa in the Context of National Development Scenario (national Physical Planning Policies)	41
4.1.2.1	Eastern Regional Level	43
4.1.2.2	Local area applicable for a Development Plan	44
4.1.3	History of City Origin and Evaluation ..	45
4.1.4	Demography population Growth .. ..	47
4.1.5	Housing .. .. .	50
4.1.6	Economy of the City .. .. .	50
4.2	Analysis of Urban Elements of Baticoloa as per Guide line for the elements of Urban character .. ..	51
4.2.1	Monuments .. .. .	53
4.2.2	Symbols .. .. .	54
4.2.3	Urban patters as defined by lots and streets ..	55
4.2.4	Relationship between buildings and green and open spaces .. .. .	56

4.2.5	The formal appearance of a buildings and groups of buildings .. .. .	57
4.2.6	The relationship between the town or urban area Has acquired overtime .. .. .	58
4.2.7	The various functions that the town or the urban Area for all constructions .. .. .	59
4.2.8	Materials commonly used in the area for all Constructions .. .. .	59
4.2.9	The Places .. .. .	59
4.2.9.1	Natural Places .. .. .	59
4.2.9.2	Man made places accounted as monuments And buildings .. .. .	61
4.2.10	Way of life generated in the setting cultural Religious places .. .. .	63
4.2.11	Urban morphology .. .. .	64
4.2.12	The locations .. .. .	65
4.2.13	Quality of life .. .. .	65
4.2.14	Social and Economic Growth .. .. .	66
4.2.15	Areas to be conserved in Batticaloa .. .. .	67
4.3	Analysis of results on public perception survey regarding The Urban Conservation in Batticaloa .. .. .	68
Conclusion	.. .. .	71
Reference List		
Appendix	A: Urban Characteristics in Trincomalee Town	73
Appendix	B: Urban Characteristics in Kalmunei Town	74
Appendix	C: Urban Characteristics in Hambantota Town	75
Appendix	D: Urban Characteristics in Matara Town	76

Appendix	E: Urban Characteristics in Baticaloa Town	77
Appendix	F: Built up Area in Baticaloa Town	78
Appendix	G: Natural Lands and vegetation in Baticaloa Town	79
Appendix	H: Water bodies in Baticaloa Town	80
Appendix	I: Water front roads in Baticaloa Town	81
Appendix	J: Public Perception Survey	82



University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)



## LIST OF FIGURES

Figure	1.1	Study Process .. .. .	04
Figure	2.1	Heritage its properties and its values .. ..	10
Figure	2.2	Three constituents of place .. .. .	18
Figure	2.3	Site before development .. .. .	24
Figure	2.4	Site with conservation design .. .. .	25
Figure	2.5	Sites before development .. .. .	26
Figure	2.6	Site with conservation design .. .. .	26
Figure	3.1	Research design .. .. .	39
Figure	4.1	Proposed spatial structure plan (NPPD) ..	42
Figure	4.2	The location of Eastern Province .. ..	43
Figure	4.3	Batticaloa Municipal Council .. .. .	44
Figure	4.4	Land Manning, steel bridge .. .. .	53
Figure	4.5	Dutch fort .. .. .	53
Figure	4.6	City Entrance .. .. .	54
Figure	4.7	Light House .. .. .	54
Figure	4.8	Singing fish beneath the Kalladi Bridge lagoon	54
Figure	4.9	Definition of the junctions .. .. .	55
Figure	4.10	City Street lay out .. .. .	55
Figure	4.11	Urban Characteristics in Batticaloa town ..	56
Figure	4.12	Colonial schools located in the city center ..	57
Figure	4.13	Land use pattern on Batticaloa city .. ..	58
Figure	4.14	Batticaloa Logoon .. .. .	59
Figure	4.15	Sathurukondan \marsh land and other natural Vegetarion types .. .. .	60
Figure	4.16	Navalady Beach .. .. .	60
Figure	4.17	Buffalo Island .. .. .	61

Figure	4.18	Municipal Council Batticaloa ..	..	..	61
Figure	4.19	Play ground and Webber stadium ..	..	..	62
Figure	4.20	Railway line & Street Line ..	..	..	62
Figure	4.21	Hindu Temple & Church ..	..	..	63
Figure	4.22	Buddhist Temple & Mosque ..	..	..	63
Figure	4.23	Urban Characteristics ..	..	..	64
Figure	4.24	Locations of Buildings ..	..	..	65
Figure	4.25	Mode of Transportation ..	..	..	65
Figure	4.26	Economic Activities ..	..	..	66
Figure	4.27	Areas to be conserved in Batticaloa ..	..	..	67



University of Moratuwa, Sri Lanka.  
 Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)

## LIST OF TABLE

Table 4.1	Growth of population in Batticaloa city	..	48
Table 4.2	Population by sex and age – 2005	.. ..	48
Table 4.3	Ethnic population in Batticaloa	.. ..	49
Table 4.4	Population by religious	.. .. ..	49
Table 4.5	Estimated population by 2025	.. ..	49
Table 4.6	Housing type 2005	.. .. ..	50
Table 4.7	Estimated housing 2025	.. .. ..	50



University of Moratuwa, Sri Lanka.  
Electronic Theses & Dissertations  
[www.lib.mrt.ac.lk](http://www.lib.mrt.ac.lk)