

TCP 09/49

"LAND POOLING" AS A TECHNIQUE FOR LAND PLANNING AND
THE PROMOTION OF URBAN DEVELOPMENT

ප්‍රවෘත්තිය
මොරටුව විශ්ව විද්‍යාලය, ශ්‍රී ලංකාව
මොරටුව.

A DESSERTATION

PRESENTED TO

THE DEPARTMENT OF TOWN & COUNTRY PLANNING

UNIVERSITY OF MORATUWA

SRI LANKA

B Y

K. S. M. WEERAKOON

University of Moratuwa



52153

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE

MASTER OF SCIENCE IN TOWN AND COUNTRY PLANNING

52153

AUGUST - 1985

52153

711 "85"
711 (043)



A C K N O W L E D G E M E N T S

This Work has been made possible through the generous help and cooperation extended to me by many individuals and institutions to whom I am most grateful. Owing to lack of space, I am unable to mention everyone by name.

My special thanks are due to Mr.A.L.S.Perera, Head of the Department of Town and Country Planning, Moratuwa University, for continuous guidance and assistance he had given me throughout the period while sacrificing his valuable time.

I would like to thank Professor M.W.J.G.Mendis, Vice Chancellor, Moratuwa University, for his advice and suggestions.

I am grateful to Mr.B.Tai, and the Members of the Staff of the Department of Town and Country Planning, University of Moratuwa, for their kind assistance at all times.

I wish to express my sincere thanks to all my friends, who helped me in numerous ways which made it possible for me to complete this work.

My thanks are also due to Mr.Shirley Fernando who extended his services by typing this volume within a short space of time, which I gratefully appreciate.

Last but not least I offer my sincere thanks to my dearest parents who brought me up to this position, and also to my beloved husband Vijitha, and my son Nuwan, who enlivened me through this task.

SYNOPSIS

Recently developed land management and land planning techniques such as the 'Land Pooling Technique' have been adopted and successfully practised in a few developing countries such as Korea and Taiwan. Nevertheless it is still not practised widely in the South Asian Region. It is the prime objective of this study to examine the feasibility of applying this land development technique, to the urban situation in Sri Lanka. For this purpose a study of the under-developed areas in the city of Colombo was undertaken.

This study consists of 7 Chapters. Chapter one deals with the problem of land, such as undesirable land utilization high land values created by unmanageable growth of urban centres. It also examines the present land policies and their adequacy to deal with problems that arise in urban areas.

The Second Chapter deals with the prospects of urban growth in the Colombo Urban area and the demand for urban land. It deals with the natural topographic situation, the rate of population growth and concentration of economic activities. It specifically deals with the magnitudes in terms of land values consequent to the new economic policies introduced after 1977. It further discusses the development trends in terms of data regarding development activities in the city and its immediate suburbs since 1977.

The Third Chapter discuss some land planning techniques, explain in detail the Land Pooling Technique. This entails a comparative study of the countries which are practising the land pooling technique, and why they have adopted this particular technique for urban development.

The Fourth Chapter categorises the various agencies involved in land planning and their role in promoting urban development.

The Fifth Chapter discuss the methodology of selecting the study area. It also examines the patterns of subdivisions and other factors which act as constraints towards the development of the area.

Chapter Six of the study analyses the suitability of applying the Land Pooling Technique in Sri Lanka. To provide serviced land for urban housing a sample area of ten acres, within the pilot project area was chosen, as the basis of study. It shows the working of a new lay out on a Cost Benefit Analysis, and it concludes with the findings of such a study.

Chapter Seven gives the conclusion arrival at and the recommendations.

1.30 - Land use control measures.

Chapter 21- The prospects of Urban Growth in Colombo Urban Area and the demand for urban land.

2.1 - Introduction.

2.2 - The definition of Colombo Urban Area.

2.3 - The Impact of new Economic Policy on Economic Development.

2.4 - The Urban Development of the City.

2.5 - The trend of increasing land values.

2.6 - The Growth of Colombo as a Commercial Centre.

2.6.1 - The demand for business premises.

2.6.2 - The Conversion of residential for commercial use.

2.7 - The development trend of the city and suburbs.

2.8 - The Industrial Development of Colombo Urban Area.

2.9 - The Capital City Development.

2.9.1 - The change of physical structure of the area.

C O N T E N T S

	I
List of Diagrams	II
List of Maps.	
	III
Acknowledgements.	IV
Synopsis.	
Chapter I - Urban land and need for planning.	
1.1 - Introduction.	01
1.2 - Supply of Urban Land.	02
1.3 - The demand for Urban Land.	03
1.4 - Urban growth and urban concentration.	04
1.5 - The land market.	05
1.6 - Land Values.	06
1.7 - The problems of Sri Lanka and the need for land planning.	07 08
1.8 - The Supply, Demand and Price of land.	11
1.9 - Pattern of Land use and growth of settlements.	12
1.10 - Land use control measures.	15
Chapter II- The prospects of Urban Growth in Colombo Urban Area and the demand for Urban Land.	
2.1 - Introduction.	
2.2 - The definition of Colombo Urban Area.	21
2.3 - The Impact of new Economic Policy on Economic Development.	23
2.4 - The Hotel Development of the City.	26
2.5 - The trend of increasing land values.	28
2.6 - The Growth of Colombo as a Commercial Centre.	31
2.6.1 - The demand for business premises.	32
2.6.2 - The Conversion of resident for commercial use.	35
2.7 - The development trend of the city and suburbs.	36
2.8 - The Industrial Development of Colombo Urban Area.	36
2.9 - The Capital City Development.	43
2.9.1 - The changes of physical structure of the area.	

Chapter III	- Theory of Land Planning Techniques, experience and Importance.	
3.1	- Introduction.	49
3.2	- Need for Planning.	49
3.3	- Some Land Planning Techniques.	51
3.3.1	- Zoning as a Planning Technique.	51
3.3.2	- Land Taxation Techniques.	52
3.3.3	- Land Banking Techniques.	53
3.4	- What is Land Pooling ?	55
3.5	- Practical Success of Land Pooling Technique.	59
3.6	- Advantages and Disadvantages of Land Pooling Technique.	61
Chapter IV	- The Institutions and Agencies Involved in Land Planning, Marketing and Development.	
4.1	- Introduction.	67
4.2	- The Urban Development Authority.	69
4.3	- Sri Lanka Land Reclamation and Development Corporation.	71
4.4	- The National Housing Development Authority.	72
4.5	- The Greater Colombo Economic Commission.	73
4.6	- The Coast Conservation Advisory Council.	74
4.7	- Local Authorities.	74
4.8	- The Role of Private Property Development Agencies.	76
Chapter V	- Selection of an appropriate case study area.	
5.1	- Introduction.	79
5.2	- Selection of a Study Area.	83
5.3	- Patterns of subdivision in the Study Area.	88
5.4	- General characteristics of the study Area.	92
5.5	- Land Values of the Study Area.	94
5.6	- Availability of Services of the Study Area.	98
5.7	- The Analysis of the field survey in the Study Area.	
5.8	- The suitability of Application of land pooling technique.	

LIST OF MAPS:

- Map No.1 - Colombo Urban Area - Page 22.
Map No.2 - Colombo Central Business District - Page 24.
Map No.3 - Land Value Map - Page 30.
Map No.4 - Land Use - Conversion of Urban Fringe Area - Page 39.
Map No.5 - The Location of the new Capital City - Page 44.
Map No.6 - The Land Use in Colombo Urban Area - 1971 Page No.81.
Map No.7 - The undeveloped land in Colombo Urban Area - Page 82.
Map No.8 - Location of Study Area - Page 86.
Map No.9 - Residential Densities in Colombo Urban Area - Page 106.
-

LIST OF DIAGRAMS:

- Dia. No.1 - Explanatory Diagram of Land Polling Page 65.
Dia. No.2 - The Research Process Methodology Page 84.
Dia. No.3 - The Layout Map of the Sample Area Page 110.
-