

**Cost Benefit Analysis of Urban Regeneration Projects:
A Case Study of Mihindusenpura Housing Scheme
Dematagoda**

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Degree of Master of Science in Project Management

Department of Building Economics

University of Moratuwa

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Thesis/Dissertation submitted in partial fulfilment of the requirements for the degree
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DECLARATION

I declare that this is my own work and this thesis does not incorporate without acknowledgment any material previously submitted for a Degree or Diploma in any other University or Institute of higher 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 acknowledgment is made in the text.

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.....
R.M.H.L.K. Rathnayake

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The above candidate has carried out this research for the Masters Dissertation under my supervision

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Dr (Mrs.) Thanuja Ramachandra

...../...../
Date

ABSTRACT

Economic appraisal is an important step in any investment project. Although various appraisal techniques are adopted in decision making related to investment projects, it is found in many instances that expected outcomes at the initial project planning have not been achieved at the completion of the project due to unforeseen changes. Various appraisal tools are used in investment projects to assess the feasibility of a project. Cost Benefit Analysis is an appraisal tool used to evaluate a decision related to investment of projects specially with social costs and social benefits.

Urban regeneration in underserved settlement areas is a major investment project initiated by the Urban Development Authority (UDA). This project is initially developed with an expectation of liberating 450 acres of valuable urban lands for commercial developments. Hence the project seems to be a financially feasible project. However proper economic feasibility is yet to be done to evaluate this nationally important project. In the view of foregoing, this research is aimed to assess the economic feasibility of the urban regeneration project done by the UDA, using Cost Benefit Analysis (CBA) technique and thereby identify the cost and benefit components of the project and evaluate the issues related to economic feasibility of urban regeneration projects implemented in Sri Lanka.

Mixed method approach was adopted in this research where qualitative and quantitative data were gathered through semi-structured interviews and document review were used for the final appraisal. Quantitative data was basically used for financial and economic appraisal of the project and qualitative data was used for sensitivity analysis and risk assessments. The research was carried out in two steps. The first step involved comprehensive literature review which provided the base for the primary data collection and guidance for subsequent procedure of inquiry. During the step two primary data was collected through Key Informant Interviews (KIIs) and documentary review. The data analysis and economic appraisal were done using the CBA Guide developed by European Union and NPV and ENP techniques.

The case study revealed that although the project is financially feasible, its financial and economic feasibility is highly sensitive to the income and expenditure predictions. A marginal change in the cost of the project severely affects the overall feasibility of the project. Therefore, if the proper economic appraisal was done using CBA technique for this project possible project risks could be identified beforehand and proper risk management plan would have been adopted to this project.

Thus, this research recommends the incorporation of CBA technique in evaluating urban regeneration projects and other investment projects implemented by the government to properly appraise the investment decisions.

Key Words: Cost Benefit Analysis, Urban Regeneration, Sensitivity Analysis, Financial Appraisal, Economic Appraisal

DEDICATION

*I dedicate this piece of work to my beloved
parents, husband and all teachers...*

ACKNOWLEDGEMENT

This research is achieved with the encouragement, ideas and readily support from all the devoted people whom I have met. Sincere gratitude must acknowledge them for the remarkable support given.

My heart filled gratitude is extended to Dr. (Mrs.) Thanuja Ramachandra, my dissertation supervisor, for her gentle guidance, advice and encouragement to make this research a success. Madam, your words of wisdom and wealth of experience was a driving force for this research.

Dutiful appreciation is paid to Prof. (Mrs.) Yasangika Sandanayake, Head of the Department and also Ch. QS Indunil Seneviratne, and Ch. QS Vijitha Disaratne, Programme Directors of the Project Management Programme in the Department of Building Economics, for their keen interest and guidance. All other lecturers conducting the Project Management Programme in the Department of Building Economics are remembered for their generous support. I would like to convey my sincere gratitude to all the individuals I came across during this research for their whole-hearted assistance, encouragement and guidance discharged to me in the great feat of completing the case study survey.

I wish to express my greatest appreciation to all the professionals in UDA who contributed to this study by actively participating in the data collection process, despite their busy work schedules. Without their valuable ideas, assistance, and commitment, this study would not have been possible. I also thank and acknowledge with gratitude the assistance offered to me innumerable ways by non-academic staff members in the Department of Building Economics.

Last, but not least, I express my whole-hearted gratitude to my parents, my batch mates and many others, for willingly giving me their utmost support, advice and motivation.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
B/C Ratio	Benefit /Cost Ratio
CBA	Cost Benefit Analysis
CMC	Colombo Municipal Council
DRR	Disaster Risk Reduction
EC	European Commission
EIA	Environment Impact Assessment
ENPV	Economic Net Present Value
ERR	Economic Rate of Return
EU	European Union
FM	Facility Management
FNPV	Financial Net Present Value
FNPV (C)	Financial Net Present Value on National Capital
FNPV (K)	Financial Net Present Value of Investment
FRR (C)	Financial Rate of Return of the Investment
FRR (K)	Financial Rate of Return on National Capital
GDP	Gross Domestic Product
LKR	Sri Lankan Rupees
MOSAIC	Measurement of Social and Asset Investments in Communities
NPV	Net Present Value
NRW	Non-Revenue Water
NSW	New South Wales
NWS&DB	National Water Supply & Drainage Board
OP	Operational Programme
PMU	Project Management Unit
PPP	Private Public Partnership
REEL	Real Estate Exchange Private Limited
SDR	Social Discount Rate
UDA	Urban Development Authority
UK	United Kingdom
US	United State
VAT	Value Added Tax