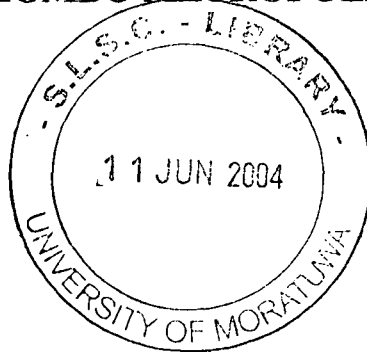


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**IMPACT OF CANAL RE-VITALIZATION PROJECTS ON LIVING ENVIRONMENTS OF INFORMAL SECTOR COMMUNITIES
AN EXAMINATION OF THE CANAL ENVIRONMENTS OF THE COLOMBO METROPOLITAN REGION**



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A Dissertation

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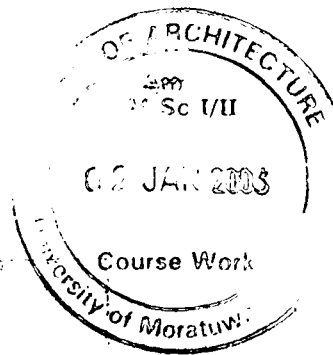
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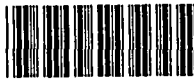
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ABSTRACT

Is an environmental and Architectural approach in looking at a canal bank development as a solution of current housing issues and the impact of that development on the informal sector communities are the major scope of this book. It is essential to study the current use of local canals and feasibilities for finding more effective ways and sustainable ways for developing them as well as the impact of that development.

Water has had a social and cultural importance from earliest times. It has acted as a powerful medium to create relationships between human beings and their nature. It also plays an important part in the human activities from birth to death. When looking at Canals in various ways as potentials to development possibilities in the future rather, than a history activities related to the canal banks they play vital part in the urban context and also the suburban context. For these reasons this influence of the canals banks on development of the informal sector settlement are undeniable.

Like wise this study takes in to account the history of water in man-made world. Water bodies in Sri Lanka and the canal system in Colombo is remarkable for the settlement of human beings and the transport of goods the items for trade from early history, because water has a close relationship with humans and their settlement. While examining the certain developments of canals in world history, most of the early great cities had been developed with or along the waterfronts as river cities and port cities. But most canal banks acted as an unpleasant built environment area due to many reasons.

Therefore when we consider about our Capital city Colombo was no exception. It consisted of neglected canal network too. It also caused to various un authorised encroachments various type of communities. These communities were upgrade and restructured by Sri Lanka Land Reclamation and Development Corporation.

This study then intended to identify the impact of the canal bank development and the informal sector community encroachments .It has also identified several design strategies and objectives and methods which are useful to crate redevelopment in the canal bank area using existing potentials.



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Stop polluting the canal

Introduction

0.1. Background to the Study

The urban poor have become increasingly more marginalized as the rising value of land over the last 50 years has pushed them further and further to the edge of the urban areas and least favourable land. In early history canal banks were inhabited by the low-income communities. The reason of that selection was that a land value was rising very fast. And canal is one considered as a low-lying marshy land. Earlier these lands were given to the people who were engaged in green leaves cultivation. Then the cultivators had built temporary houses illegally on the canal reservation in order to facilitate their economic activities and this trend will continue to develop at a higher rate. Government neglected of the issue resulted illegal transformation of these settlements likewise, In India, Bangkok China, Vietnam and Sri Lanka low income communities developed their housing settlement on canal reservations.

However under the urban city improvement projects every country in the world started the canal Revitalization project as a solution to the polluted canal and encroachments of the informal sector communities in to the urban areas. Due to that development the social impact on the communities was upgraded even though these communities resented a change in their living environments and their behavioural patterns brought about by such developments.

Most countries have developed canals to enhance the built environment and to shape out the new cities .Apart from that urban canales were used for inland navigation The Grand Canal. In China is one of the better examples which are still in use. The Canal age 1760 – 1840. In Britain canals formed a part of early industrialization period Canals in the towns are very interesting, attractive and something unique in any country. As per Moore, 6

“The canal or man made river is also an important connector and communicator canals can physically connect cities to bodies of water, lace together neighbourhood or districts, or link several cities in one line”.

(Moore, 1995; 23)

But the canals in the towns are not just a dirty waterways, they also be can used for a particular function. St. Helen's canals in Britain and Manchester canal were the first in land waterways linking industrial centres. The city of Venice is famous for its versatile canal system. Whereas the Venice of the East, Bangkok has a widely functional canal system. Dutch canal towns are more popular for the commercial activities and mutual dependence from the early history.

In some countries, canal reservations are used as a "Towpath". Rural and urban canals give a distinguished image. In rural areas, canals are used the Roman image without any buildings at all, which in urban canals is often elaborately fenced off, or beside recreation grounds and playing fields. The main use of canal side lands were for industrial factories and warehouses; but occasionally in Cities like London, Manchester and Birmingham, land value become very high and in the 19th century housing industry became popular canal side lands. As per Gorden Cullen

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Gordon Cullen Townscape (Architectural Press 1961) gives urban canals a special heading "Secret Town".¹

"Two worlds exist side by side: the busy shopping and traffic route full of bustle, which is carried by the bridge over the canal, whose basin is silent and deserted, a secret town".

"Redevelop existing urban areas rather than build new on good farming land to have greater social mix of housing in city areas "

(Braitwaith ,1976;20)

Most of the canal lands are marshy and is a good potential for developing farming or cultivation of paddy supply of water and draining system are easy to get in canal banks and is major factors reasons to develop cultivation in marshy land. Likewise; history shows that water provided utilitarian, recreational reflection in the built environment. Water is a valuable source for life in a geneses social life pattern. Because there is no any hindrance.

In the Sri Lankan context the use of canal reservoirs and lakes, rivers and canal banks were utilitarian in many eras, not only to enhance the built environment but for social and commercial purposes for a instance, Anuradapura Polonnaruwa cultivations .In recent times Colombo contract it using particularly recreation, relaxation and low income re generation.

In Sri Lanka urban Canals were arteries of new urban areas during the Dutch and British regime, and Canal sides provided ground for social life with adjoining work places for markets Warehouses, Repair yards and housing for the Informal sector communities.

Today most of the canal banks are used for buildings facing their back side to the canals. All the garbage and storm water are directed to the canals. In some places they it becomes dumping grounds. As a result, low income shanty dwellers and squatters have encroached the canal banks. Hence with these this settlement, polluting of canals increased at a high rates. Due to floods and its effect upon the urban life very rapidly. However, in Colombo urban context canals reservation pollution will become a critical environmental issue in near future.

The purpose of this study is to investigate the Social impact of the living environments of the informal sector community life resulting from the improvements to canal banks.

0.2. SCOPE OF STUDY

Urban canals in the vicinity of Colombo were carefully designed with reservations on either bank. Canals were designed to carry away storm water of the city to the sea. However these canals were not maintained and were left out as neglected water bodies and detached from the urban fabric. Thus gradually low-income communities found their makeshift housing settlement along the reservation of the canal banks. They have no proper accommodation and no infrastructure facilities such as clean water and garbage or storm water

cleaning system, causing pollution of canals thus affecting urban life and health. This has become a critical environmental issue.

Having realized the issues and further disastrous results SLLRDC (Sri Lanka Land Reclamation Development Corporation) launched the Greater Colombo Flood Protection and Canal Rehabilitation Project as an Environmental Improvement Project. This came under the canals and maintenance division to develop the canal banks of the Colombo Metropolitan Region.

This development improved the canal bank living communities in many ways and helped them to upgrade their way of living parallel to the Canal development of Colombo.

In order that the resettlement and upgrading housing programme of the low income settlement of this canal Re-vitalization project could be effected their normal existing life patterns were changed in many ways physically, socially and environmentally.



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The Intention of this study is to investigate the impact of canal bank development project on the enhancement of the pattern of the living environments (way of life) of the informal sector community.

0.3. JUSTIFICATION

Basically urban canals were considered as neglected water bodies before starting the canal Re-vitalization project. As an environmental improvement project canal bank Re-vitalization became an approved solution to create a good environment and to provide a stock of usable land.

As estimated, 7000 families (40,000 people) live in communities along the canals and retention areas and many of these communities have become well established in these locations. This has resulted in the formation of stable communities with permanent structures and community facilities. Relocation of these settlers seems to be an impossible task. They maintain their social activities as a group in settlements which are located with easy access to the activity centres of the city. Therefore project objectives emphasizing improvements to way of living of communities as part of the environmental improvement programme the purpose of this study is to identify the following:

1. Effect of canal bank development project on living style of informal sector Community.
2. Evaluation study of changing pattern of their physical environment.

Further it is intended to investigate,

1. Living patterns before development of canal bank.
2. Merits and demerits of that development.

0.4. Methodology

The overall study is specifically focused on the use of urban canal bank reservation housing social environment, as a sustainable development approach.

1. Investigation of documentary/literary sources to determine the Living style and conditions of informal sector communities in Canal banks.
2. Identification of behavioural pattern of communities by analysing The Document/Research data

1. A field survey on five different categories of settlement to understand the way of Living after improvements, spaces of the canal banks, etc.

- Resettlement
- Upgrading
- Remains original Shanty
- Newly constructed housing scheme.

At least one different and specific example will be selected for the above.

Comparative analysis of original project objectives and results as identified in the field survey.

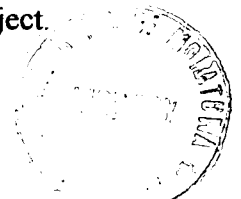
Identification of shortcoming (fault/defects) of the strategies and to propose desirable methods for improvements in living environments.



0.5. Out come of the Study,

To day, due to the abandonment of canal banks, low-income shanty dwellers and squatters have encroached the canal banks. They have begun using canals as dumping grounds. The result of starting an environment improvement is that project settlers are shifted from the banks and given new types of living conditions. In order to sustain there life many types of settlements methods are used in these developments. Then the history of those dwellers settlements are examined before giving habitable spaces .this is good method when examining a shanty setter's life pattern. Because their life patterns are completely different from the general public.

As a result of that study they begin a new life style according to their usual life pattern which is given to them after the new developments. The socio economic activities are developed by using canals so that the canal system can earn extra money to cover the cost of the project.



The rapid increase of population density is a critical issue in providing housing. Lack of lands for accommodating people is a basic issue when solving many types of social issues in the world. The aim of this study is to identify the strategies of housing along the canals for the shanties without disturbing the canals to develop the canal bank living conditions; to stop canal pollution and allow low income people to mix with the urban public because they are considered a neglected community in every country in the world, examination reasons on the impacts in order to the develop the shanty dwellers living along the canals and giving them better living conditions on their own .

The first chapter mentioned about the canal bank development since early history in a world situation and local situation. Second chapter include the local situation only .The Third chapter was Case studies which influence the canal bank development housing schemes and fourth chapter analysing the case study.