

*DFID Assisted Institute of Development Engineering WEDC
of Loughborough University, UK Executed Research Project
on*

Activity Patterns, Transport and Policies for the Urban Poor : Case Study of Colombo, Sri Lanka

Sri Lanka Country Report

March 2003

Submitted by

**SEVANATHA - Urban Resource Centre
14, School Lane, Nawala
Rajagiriya, Sri Lanka
Tel/ Fax: 94-1-878893**

Contents

1.0	Introduction	1
1.1	Background of the Project	1
1.2	Aim of the Project	2
1.3	Focus of the Project	2
1.4	Research Approach	2
1.5	The Study Context	3
1.6	Working Hypothesis	7
1.7	The Research Process	7
2.0	Historical Overview	9
2.1	Introduction	9
2.2	Background	9
2.3	20 th Century up to 1957	10
2.4	Origin of Public Transport Services in Sri Lanka	11
2.5	A Brief Overview	15
2.6	Development of the Key Activity Patterns in the City of Colombo	16
2.7	Planning History of Colombo	16
2.8	The Key Functional Activities of Colombo	17
3.0	Analysis of the Study Findings	20
3.1	Selection of Urban Poor Settlements for the Study	20
3.2	Profiles of Case Study Settlements	22
4.0	Analysis of Survey Findings	28
4.1	Community Perceptions about the Activity Patterns and Public Transport	28
4.2	Swarna Road Stage II	28
4.3	Badowita Settlement	32

4.4	Bakeriya Watta Settlement	38
4.5	Seevalipura Stage-B	43
4.6	219 Watta	47
5.0	Common Issues Identified with Respect to Activity Patterns and Use of Transport by Community Members	56
6.0	Views Expressed by the Officials of Relevant Government Institutions ..	58
7.0	Common Issues Identified through the Views Expressed by Officials of Concerned Institutions	61
8.0	Recommendations	62

Activity Patterns, Transport and Policies for the Urban Poor

Case Study of Colombo, Sri Lanka

1.0 Introduction

This report presents the findings of the Research Project R 7789 activity Patterns, Transport and Policies for the Urban Poor which was funded by the Department for International Development (DFID) of UK Government. The study was carried out by three UK collaborators and their local partners. These included TRL with University of Zimbabwe, CIDT with COMPTAN, Ghana, WEDC with SEVANATHA Urban Resource Centre, Sri Lanka.

The present report contains the findings of the Colombo case study which was carried out during the period March 2001 to June 2002 by SEVANATHA Urban Resource Centre with the assistance of many institutions and resource persons engaged in the transport sector in Sri Lanka.

1.1 Background of the Project

Empirical evidence indicates that the nature of travel patterns among the urban poor, particularly in many of the developing countries of south, persists in terms of unacceptable travel conditions, high expenditures and risks and long & unreliable journey times. In the mean time it was evident that numerous interventions have been made by authorities concerned to redress these problems and to improve the conditions of public transport services particularly in cities and in urban areas. Although it is important to improve the efficiency of transport sector, there is an equal requirement which has been largely ignored which is to understanding the nature of travel needs of the urban poor and how effectively the current patterns of transport meet these needs. Under the present project, more emphasis was paid on the travel needs of urban poor primarily because they have to depend on the city's public transport system to meet their travel needs, which would influence on their livelihood activities. The present project therefore attempts to examine the mobility and accessibility needs of the urban poor arising due to their activity patterns connected with the livelihood activities. The travel needs of the urban poor is considered to be generated out of some key activities such as employment, health care, education and recreation etc. There may be other decisive factors such as household income, family structure, survival strategies, spatial separation of activities and the accessibility to transport which shape the demand and the choices of transport modes available to the urban poor.

When carefully examined there may exist a strong relationship between the activity patterns of a particular city and the travel patterns of its population. In a way it can be seen as a reflection of spatial organization and urban structure of the society. The urban structure is shaped by policies and strategies relating to location of key sectors such as employment, education, health and other services. These policies may have significant impacts on the transport sector to decide its pattern. Understanding these interaction may after alternative strategies to improve the access mobility of the urban poor through more informed locational and organizational policies in other sectors. Thus, it is eventually help policy makers to develop more user friendly efficient public transport systems in order to overcome the current problems faced by the urban poor in particular.

1.2 Aim of the Project

The aim of the project is therefore to examine the ways in which transport influences how well other sectors (e.g. health, education, employment) operate and deliver benefits which contribute to the sustainability of livelihoods of the urban poor. In order to reach this aim the research questions addressed under the project were;

- i. What were the determinants of activity patterns in the urban sector?
- ii. How does the process of undertaking the research inform the development of policies (in both the transport and other sectors) to meet livelihoods aspirations of the urban poor?
- iii. How can transport be developed to support the objectives of other sectors?

Thus, the research is about both process and product and this is reflected in the outputs from the project which are;

- i. Strengthened capacity of local collaborating institutions' staff for carrying out research into urban travel policy development.
- ii. Process tested and improved for researching the travel related patterns and needs of the urban poor.
- iii. Practical guidelines developed, published and disseminated.

1.3 Focus of the Project

In terms of geographical area, the Colombo case study was concentrated only within the area of city of Colombo. In terms of key actors of the project, the families of urban poor settlements both men and women young boys and girls were interviewed as the primary transport user group. The transport providers, the policy makers, the city planners, academics and the personnel of regulatory agencies were interviewed as being other relevant actors in the sector. The primary target group e.g. urban poor community members were interviewed in order to understand their key activity patterns, the mode of transport they use more frequently, how such decisions were made and how was it creating any impacts on their livelihoods patterns. The other category of interviews was carried out in order to extract information on specific subject areas and or activities they engaged in which influence the operation of transport system as well as the activity patterns in the city.

1.4 Research Approach

Case study based participatory research approach has been adopted in carrying out this research project. Use of secondary sources of data help understanding the context and information gaps and gathering primary data to complement the above was carried out. The research was carried out within the framework of sustainable livelihood approach. That is to say that the focus was on activities of individuals, households and communities and how their livelihood strategies are influenced by both transport provision and the regulatory and institutional frameworks which influence the provision of transport. It is clear that this necessitates undertaking various forms of participatory inquiry in order to identify livelihood priorities, activities and the ways in which transport presents barriers to livelihood strategies. It was also clear that in identifying these attributes, distinction needs to be made between different strata of society. Thus, while the study was primarily focussed on the urban poor it

has identified the specific problems associated with gender , age, disability and family structure etc.

1.5 The Study Context

Colombo the capital city of Sri Lanka is located on the West Coast of the country. The city was first heard of as a small trading port used by merchants mainly from Arabic countries prior to Colombo was invaded by Portuguese in the year 1505. Subsequently, the city was captured by Dutch in 1656 and followed by the British in 1796. During the above periods the city had been developed primarily around the Colombo harbour by the above mentioned European rulers as a commercial and administrative centre. The British who ruled the country for over 150 years had greatly influenced the shape & structure of the city to suit their trading and administrative purposes during the period 1976 to 1948.

Colombo city had a population of about 50,00 people according to the first recorded census at the year 1824. The Municipal Council of Colombo (CMC) was established in the year 1865 under the Municipal Councils Ordinance in order to manage the development activities of the city and to provide civic amenities to the city population.

Colombo is a multi-ethnicity where majority Sinhalese, Sri Lankan and Indian Tamils, Sri Lankan Moors, Burghers, Malays and several other minority groups live together. Thus, the city has a diverse cultural and racial manifestation, which is a significant positive factor in development of the city's functional structure.

Colombo being the capital city of Sri Lanka comprises of the head quarters of administrative, banking, financial, legal and other service sector activities. The city is also function as the main nodel point of rail and road transport of the country as well as the main sea port that connect Sri Lanka with the rest of the world. Colombo's international airport is situated about 32 km north of Colombo city. The city is administered by a council of elected representatives of the citizen based on a multiparty proportionate representation election system of local government, which is being held once in every four years. The present council has 53 elected members including the Mayor who is the chief executive of the Municipal Council. The Municipal functions are carried out by fifteen functional departments headed by appointed officials among them the Municipal Commissioner is the chief administrative officer of the Council.

As per the census of population of year 2001, the city has recorded a residential population of 624,163 people. According to the municipal officials, it was estimated that the city attracts about 500,000 people daily into the city. They consist of the working population and those who visit the city's service sector establishments. The current average population density of the city was about 172 people per hectare. When compared with most of the cities in South Asia, the city of Colombo has always being a slow growing city where annual population growth rate has been below 1.5% during the past 30 year period. It was found that during the period 1981 to 2001 the annual population growth rate has been about 0.45%. The low population growth in the city of Colombo may be attributed to the low level of migration of population into the city, the high land values as well as availability of affordable lands in adjoining suburban areas of Colombo where high concentration of population was evident.

The characteristics of Colombo resemble that it has been developed in an unplanned manner giving rise to many challenges at present. As has been indicated in the City Profile Report of Colombo 2001, the following key urban issues were prominent.

- i. Inappropriate city planning
- ii. Lack of access to urban land by the urban poor
- iii. Lack of access to city's network infrastructure accessible by the urban poor
- iv. Limitations for improving the livelihood assets by the urban poor

According to a city wide survey carried out under a project called Sustainable Township Programme of the Ministry of Urban Development and Public Utilities in 1998/99, 1506 urban poor communities were located in Colombo. The unique character of these settlements are that they are smaller in household size. According to the above survey, 74% of the urban poor settlements were of less than 50 housing units while the large settlements with more than 500 units consist of only 0.7% of the total urban poor settlements of Colombo.

Colombo's urban poor settlements are also called as under-served settlements to identify them as being inadequately serviced with urban infrastructure. In terms of different categories, they include slums, shanties (squatter settlements), low cost flats, relocated housing and old deteriorated quarters. Of these, the slum and squatter settlements are concentrated in close proximity to its town centres. Squatters are usually occupied on reservation lands, canal banks or private lands, which are subdivided into small plots by the occupants themselves over a long period of time along with extended families. Most of these settlements do not have land ownership. Their plot sizes range from 20 m² to 50 m². Some of these settlements were 'upgraded' under the government housing programmes launched since early 1980s, namely the Hundred Thousand Houses Programme and the million houses programme. Under the same housing programmes those settlements, which had already been located on lands suitable for habitation, were upgraded in-situ by providing basic infrastructure and housing loans, thereby encouraging the dwellers to build their houses using permanent building materials. The relocated settlements are the ones, which have been shifted from their original lands, due to various reasons such as road and canal expansions, flooding problems, land acquisition by the government for various development purposes. Even on the relocated settlements the maximum plot area a family gets is 50 m². The legal plot size of a residential plot is 300m² in the city as per the prevalent building regulations. However, the government had taken a decision in early 1980s to relax the above plot size requirement to 50 m² for upgrading the low income settlements identifying such areas as special project areas. This can be regarded as a progressive step taken by the government of Sri Lanka in its efforts to solve the housing problem of the urban poor. The relocated settlements were mostly located few kilometres away from town centres. At the time of relocation (by a government authority) each family was given 50 m² of land lot. Basic settlement layout plan was prepared in consultation with the concerned families by the officials of the National Housing Development Authority (NHDA) providing the access roads and some basic facilities such as common water taps and common toilets.

Thus these settlements with or without planned interventions are still called under-served today, as they do not get the desired service standards in terms of the provision of water, electricity, sewage, and garbage disposal. The settlements, including those, which were subjected to planned interventions fall under the category of 'special projects' by the Urban Development Authority (UDA). The major reason that lies behind this categorization attached to the relaxation of legal plot size, set back requirements and width of road frontage

etc. Accordingly, the reduced plot size is between 20 m² to 50 m² whereas it is 300m² as per the prevailing normal building regulations in the city.

A majority of the inhabitants of these settlements are unskilled labourers and minor employees of public and private sector organizations. As cited earlier, they resort to a variety of informal income generating activities. These include pavement hawking, working at wholesale vegetable markets, running small businesses in the neighbourhoods such as boutiques, mobile vending, working as housemaids, fish and vegetable vendors, collectors of recyclable materials, repair of household items etc. Some of them even resort to selling and trafficking of drugs, selling of illicit liquor and other socially unacceptable businesses.

The cumulative effects of the causes and the manifestation of poverty are clearer within the context 'under-served', which has eventually pushed these people towards a major social 'segregation'. They lack social identity and recognition, as neither these settlements nor the inhabitants are considered as 'respectable' or 'equals' among the mainstream civil society. Locally they are being called "Mudukku or Watta people" which means people from slum communities in the city.

Thus, the plight of the under-served settlements is manifold. First and foremost they do not get the standards of services that exist in other residential areas of the city. Even if they ever make a claim for land ownership that is still much below the standard legal plot size of a residential house in the city. This factor makes these settlements fall under 'special regulations' within the regulatory mechanisms and thus do not gain the same status of other residential neighbourhoods. Therefore, they are not considered 'eligible' to pay rates for the Municipal Council. Consequently, the settlers 'inherit' the lower social ranking both as a group and as individuals and the pressure of this social 'stigma' makes it extremely difficult for them to rise above the situation. However, since about mid 1990s the Municipal Council of Colombo has been seriously discussing the issue of integrating the upgraded urban poor settlements into the main stream housing in the city. As a first step towards this aim, the Council has taken initiatives to collecting property rates from selected upgraded low income settlements on a flat rate basis for all individual housing units. In certain upgraded low income settlements, property rates are being charged on individual property value basis. Therefore, it can be considered such progressive moves would pave the way in the further for gradual integration of urban poor into the main stream of city life and procedures.

The appropriateness of Sustainable Livelihood (SL) Approach is felt within this context to strengthen the life of urban under-served settlers both quantitatively and qualitatively. It is a holistic approach and in application it begins by a careful analysis of what a livelihood has already got as assets: both material and social by a particular group of households or a community. A livelihood becomes sustainable when it can withstand and recover from stresses and shocks and maintain and improve its capabilities and assets both now and in the future (DFID, 1999).

Ashley and Carney (1999:6-7) provide a working definition of sustainable livelihoods and core principles of SL approach, which have been adapted in this study.

Sustainable Livelihoods

A sustainable livelihood is a way of thinking about the objectives, scope and priorities for development, in order to enhance progress in poverty elimination. A livelihood comprises capabilities, assets and activities required for the act of living.

Core Principles of SL

People centred: it is of primary importance to be people-centred in working for them if poverty elimination is to be meaningful. Thus this research focuses on urban under-served communities and on issues related to transport, which influences their livelihoods.

Responsive and participatory: The research takes the key actors as its research base that includes the people themselves who use public transport, service providers and regulatory personnel. It takes into account the **user-perceptions** on the issues related to urban transport.

Multi-level: Elimination of the causes and effects of poverty requires exploring macro and micro factors, which influences the livelihoods of the urban poor. Thus the research explores issues relating both micro and macro levels on policy and operational aspects of public transport. The linkage between policy and practice is one of the key concerns of the research which is concerned in a historical perspective and in the present context.

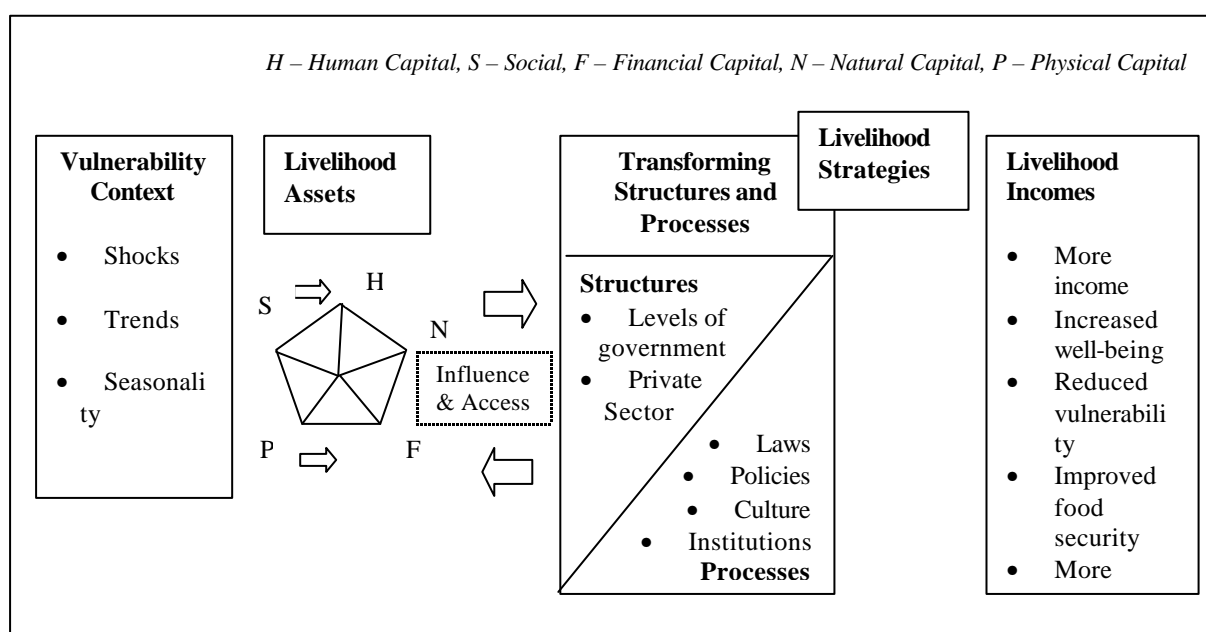
Conducted in partnership: partnerships in public transport are in operation both in the public and private sectors formally and informally (para-transport). Bus transport is operated by both these sectors while rail transport is under the monopoly of the government. Also para-transport modes such as three-wheelers, private school and office vans are in operation.

Thus perspectives from all the key actors under these partnerships are taken into account.

Sustainable: The four key dimensions of sustainability: economic, institutional, social and environmental are envisaged in the study. Evolution of transport policies, their operational aspects and the present context in terms of sustainable development are studied.

Dynamic: The milestones in socio-economic and political spheres that took place over the past and up to the present have direct impacts on the livelihoods of the urban poor and on the provision of urban transport. These were explored in the study to understand what mechanisms might contribute to improve the access to and quality of urban transport, through partnerships.

Sustainable Livelihoods Framework (source: Ashley and Carney, 1999)



1.6 Working Hypothesis

This research project was initiated based on the premise that multi-sectoral policies influence the location of major activities within cities and towns, which are in turn influenced by the ways in which transport policies & strategies operate within a particular city. It is presumed that the above interaction may not provide equal opportunities to the urban poor like other citizens in improving the poor's livelihood strategies for various reasons such as less accessibility to existing transport network. On the other hand, when favourable transport options are available linking the city's activity patterns, the urban poor will have more choices of livelihood activities. Therefore, the present study has investigated the ways in which transport influenced how well other sectors (i.e. health, education, employment etc.) operate and deliver benefits, which contribute to the sustainable livelihoods of the urban poor.

1.7 The Research Process

The research process was organized under different steps, which are indicated below based on the research framework provided in the project inception report.

- Step 1** : Understanding the research premise and developing the research proposal to suit the local conditions in Colombo.
- Step 2** : Identification of the type and depth of information and data required based on the key issues, actors and processes involved.
- Step 3** : Identification of main sources of data and informants for the research through review of literature and personal contacts of resource persons.
- Step 4** : Developing checklists for collection of required data and information.
- Step 5** : Carrying out a literature survey.
- Step 6** : Identification of urban poor settlements for interviews based on the criteria developed under the research.
- Step 7** : Identification of resource persons for the Project Advisory Committee.
- Step 8** : Identification of field research staff and recruiting them for carrying out field data collection.
- Step 9** : Briefing for field research staff on the project and training them for carrying out field data collection.
- Step 10** : Carrying out a historical analysis related to public transport and development of the city's activity pattern using the available literature and interview of resource persons.
- Step 11** : Visit to identified urban poor settlements, familiarize with the communities, briefing the purpose of the research project to the

community leaders and getting their support to identify the required urban poor families for the interviews.

- Step 12** : Preparation of settlement profile for each identified urban poor settlement with the support of community leaders consisting of basic facts about the community, its location & size etc.
- Step 13** : Interview of identified community members (men, women children)
- Step 14** : Filling up of a travel diary for five families for settlement in the six urban poor communities for a period of continuous one week in order to understand the daily travel pattern of the family members.
- Step 15** : Interviews of resource persons of relevant government agencies who are engaged in formulating policies for the activity patterns in the city (i.e. Urban Development Authority, Ministry of Health, Ministry of Education, representatives of major employment centres etc.).
- Step 16** : Use of information already gathered under the research project on Partnership to Improve Access and Quality of Public Transport in Colombo which was carried out just prior to this study.
- Step 17** : Discussion of project progress with the Project Advisory Committee members at review meetings held once in two months time.
- Step 18** : Synthesizing the information gathered through interviews. Translating the information from local language to English language.
- Step 19** : Revisiting the urban poor communities for verification of some of the information.
- Step 20** : Computer processing of information.
- Step 21** : Preparation of the draft research report.
- Step 22** : Presentation of the draft report to the Programme Coordinator at WEDC and to the members of Project Advisory Committee
- Step 23** : Preparation of the final report incorporating the comments received from the above persons.
- Step 24** : Submission of the final research report to the Programme Manager at WEDC.
- Step 25** : Organizing a national workshop in Colombo and presentation of the research findings.
- Step 26** : Producing a proceedings report on the national workshop.
- Step 27** : Submission of the proceedings report to WEDC.

Step 28 : Sharing the research findings with the interested groups in locally as well as in other countries.

2.0 Historical Overview

2.1 Introduction

Historical overview for the purpose of this research study is presented under two major themes i.e. relating to public transport in Sri Lanka in general and the situation in Colombo in particular and in relation to the development of Colombo's main activity patterns i.e. employment centres, health and education sector activities. Based on the scope of this study most of the information gathered under the partnership research project were used to highlight the key issues than carrying out a separate historical analysis for this project.

2.2 Background

Sri Lankan society has been predominantly agriculture based throughout its 2600 years long history. Domesticated agro-crops (mainly paddy and highland crops) were cultivated through a community-based effort and were used mainly for local consumption. The associated accessibility needs of people and the social attitudes to transport thus sprang out of this socio-economic system. Goods were used to carrying bulk on their heads or in makeshift litters, people were used to walking for several kilometers or, bullock-carts were for transport needs. Distances were not long and speed was not a matter of great concern. Accordingly the resultant road network system consisted of footpaths and gravel roads.

A similar socio-economic structure continued during the early days of its colonial era, too, which spanned nearly four and half centuries, from 1505 to 1948. However, especially during the 150 years of British occupation, the last span of the colonial period, a transition in the agro-based socio-economic system took place with the introduction of “plantation-crops” such as tea, rubber and coconut. These crops were not for local consumption, but were to be *sold out* for economic gains. While paddy and other domestic crops remained for local consumption, and were not encouraged to cultivate, every attempt was made to cultivate the plantation crops for over hundreds and thousands of acres. Firstly coffee and then tea was introduced to the central hill-country, clearing its thick forest cover. Rubber was concentrated mainly in the low-country wetlands and Coconut was re-introduced as a plantation crop in the west, southwest and northwest coastal areas.

This socio-economic structure was more significant towards the latter part of the 19th century. “Plantation economy” was creating a subtle change in the social attitudes and value systems on one hand and on the other, a more visible change in the transportation system. More speedy and efficient means of transport were required and thus new roads and railway lines were constructed, primarily to facilitate the production process and to transport the plantation products to Colombo from other major town centres. The basic skeleton of the present system of road and railway network began to appear, as a result of the prevalent socio-economic structure.

2.3 20th Century - up to 1957

The urban and regional physical settings of the country were transformed to cater to the needs of the plantation sector as it got established as the key of the national economy. By early 20th century the road and railway network of the country got expanded further. Major railway lines; Badulla - Colombo, Kandy - Colombo, and the southern coastal line from Matara to Colombo were in operation. The railways were state-owned and were under the purview of the Ceylon Government Railway (C.G.R.), which later was referred to as Sri Lanka Railways.

Road transportation too got expanded, with the construction of many steel bridges, across rivers and waterways. The first passenger car was introduced in 1902 and that paved way to construct an all weather, motorable road system. With the increasing mobility needs of the people, T. W. Collet started the first bus-cum-lorry service from Colombo to Chilaw in 1907, which was later extended up to Puttalam in 1910. This marked the formation of the first bus company in Sri Lanka, known as the 'Ceylon Motor Transit Company'.

The growth of the City of Colombo, at the same time, coincided with the transformation of the socio-economic and physical contexts of the country, based on the plantation sector. Historically Colombo was famed by its port and related trade. Export of plantation crops and the related trade activities, and the growth of light industries, however, created an unprecedented influx of worker population into the city from all over the country in search of jobs. This unplanned growth gave rise to the early forms of slum settlements within the city. At first, they were over-crowded labour quarters, creating severe hygiene problems. Although there were some physical planning interventions by the pre- and post-independence regimes, the city continued to grow with its ever-increasing worker population and transport and other infrastructure networks, which were not well geared to cater to its fast population growth.

Within such national and urban contexts, provision of bus and rail services too continued with hardly any pro-active thinking. From time to time a number of Acts and Ordinances were enacted, Commissions were appointed, which nevertheless were always reactionary measures to a set of preceding issues.

Based on Ranasinghe (1988:04-07), the key events that took place in the transport sector during the pre- and post- independence eras up to mid 1950s and the salient features contained therein, are given in Table I.

It is significant that during this entire period, bus services were under private entrepreneurs while rail services remained under Government monopoly. Private sector dominance in bus services with no direct state intervention had created intense rivalry and malpractices among the private bus companies who operated in the city. Independence from the British in 1948 too had not made any impact on the directions or qualitative enhancement of the transport services in the country.

By mid 1950s, entrepreneurs had formed limited liability companies, within their regions of operation. There were 76 such companies in operation on monopoly route permit basis, which was found to be unsatisfactory. The progression of bus services and the government interventions had finally come up to a stage where recommendations were made by the Sansoni Commission appointed in 1954, to set up a Transport Board to advise and control private operators and establish a joint government-private bus corporation to provide services, starting with Colombo Municipal Council Areas.

2.4 Origin of Public Transport Service in Sri Lanka: Main and Salient Features

	Event	Salient Features
PRE-INDEPENDENCE PERIOD	1891 Ceylon Government Railway Ordinance was enacted	<ul style="list-style-type: none"> • Ceylon Government Railway was formed • Passenger and freight fares were decided, based on this ordinance
	1907 First recorded omnibus operation in Sri Lanka, from Colombo to Chilaw by T.W. Collett	
	1916 Enactment of the Vehicle Ordinance Act No. 4 of 1916	<ul style="list-style-type: none"> • Registration of motor vehicles and drivers by the Inspector General of Police • The licensing Authorities viz. the Government Agents and Chairmen of Local Authorities
	The bus service to Kandy was introduced after World War II	
	1925 A commission, under the chairmanship of J. Strachan, Director of Public Works was appointed.	Purpose of this commission was to report, <ul style="list-style-type: none"> • On the means of transport already existing, and, • To assist the government to formulate a policy for encouraging the economic development of the Island by roads, railways and waterways.
	1927 Motor Car Ordinance No. 20 of 1927	This marked a milestone in the history of road transport legislation. <ul style="list-style-type: none"> • It amended and consolidated the law relating to motorcars and, • Amended the Vehicle Ordinance No. 4 of 1916 • Created the Department of the Registrar of Motor Vehicles on roads including the insurance of vehicles • However, it did not make any change with regard to the Licensing Authorities.
	1936 The number of buses in operation had increased to 2500	<ul style="list-style-type: none"> • Intense rivalry and cutthroat competition among the bus operators were common. This led to unsafe driving practices and assaults. • Unequal distribution of routes, absence of timetables, lack of passenger comfort and safety were quite notable
	1937 A Commission headed by F. D. Hammond was appointed to report on the Island's transport system	<ul style="list-style-type: none"> • Recommended to establish a central authority for all forms of transport.
	1938 Motor Car Ordinance No. 45 of 1938 was enacted	<ul style="list-style-type: none"> • Provided for the Commissioner of Motor Transport with wider powers to be the sole Licensing Authority, Chief Examiner of Motor Cars, Head of Motor Traffic Advisory Board • Provision was made for compulsory insurance against third party risks

PRE-INDEPENDENCE PERIOD	Early 1940s	<ul style="list-style-type: none"> • Increase of passenger traffic and growth of investors in the bus industry led to intense rivalry among operators, poor productivity, break of law and order and unsatisfactory level of services • Thus the Government engaged S.W. Nelson to re-organize the transport system of the Island, which led to the enactment of Omnibus Service Licensing Ordinance No. 47 of 1942
	1942 Omnibus Service Licensing Ordinance No. 47 of 1942	<ul style="list-style-type: none"> • Advocated controlled territorial monopolies • Brought about standardization of buses by way of regulation and control of the use of omnibuses on roads, exclusive road service licences for omnibus services • Made relevant amendments to the Motor Car Ordinance No. 45 of 1938. • Operators had to combine and transform themselves into limited liability companies.
POST-INDEPENDENCE PERIOD (UP TO 1957)	Post World War II period	<ul style="list-style-type: none"> • Was marked by a steady decline in the railway's fortunes and also a disorganized state in road transport. • Thus, D. R. Rutnam was appointed to survey the position of transport in Ceylon with special reference to road and rail. He was expected to make recommendations with a wasteful competition, to formulate a plan of development and to suggest a framework of legislation to implement the recommendations.
	D.R. Rutnam Report	<ul style="list-style-type: none"> • With regard to passenger transport, Rutnam took the view that no coordination of road and rail is necessary. • Suggested to establish a Transport Board. • Recommended to amend the Omnibus Service Licensing Ordinance No. 17 of 1942. • Resulted in the enactment of Motor Traffic Act No. 14 of 1951.
	1951 Motor Traffic Act No. 14 of 1951	<p>Made provisions for,</p> <ul style="list-style-type: none"> • Replacing the Commissioner of Motor Transport by a Commissioner of Motor Traffic, • Placing the responsibility of issuing licences for motor vehicles and the collection of license fees on the Central Government, and, • Forming the Bus Companies into Public (as against Private) Limited Liability Companies before 1st January 1954.

POST-INDEPENDENCE PERIOD (UP TO 1957)	<p>1954 Sansoni Commission</p>	<ul style="list-style-type: none"> • Although the Motor Traffic Act No. 14 of 1951 was intended to ensure successful operation of the Public Companies, this did not happen in practice. Thus the Governor Soulbury appointed a Commission headed by Waldor Sansoni on March 18, 1954 to; <ul style="list-style-type: none"> ➤ Inquire and report on the omnibus companies and the improvements necessary for their proper operation in the public interest, ➤ Investigate and report on the fare structure and recommend any revision considered necessary, ➤ Inquire and report on capital requirements to establish a public omnibus transport system and methods of forming it. • This commission was concerned only with bus operation, studied in great deal the working of the existing system and dealt at length with individual bus companies. The main aspects it examined were; <ul style="list-style-type: none"> ➤ The Nelson Scheme of route operation ➤ The adequacy of buses and services ➤ The organization of bus companies ➤ The management and financial position of bus companies • A technical adviser was also in the team to examine the standards of service, safety, repair and maintenance of buses. • The Commission recommended amendments to the Motor Traffic Act, reorganization of the Motor Traffic Department and the formation of a Transport Board. • The report of the Sansoni Commission stated that between 1948 to 1953 the number of omnibuses licensed increased from 1502 to 2560 and passengers carried per month from 11, 891,000 to 23, 915,000. i. The bus service supplied by 76 public bus companies and other operators on a monopoly route permit basis was not considered satisfactory in the 1950s. The bus operators meanwhile wanted to increase passenger fares. ii. In its report the Commission recommended inter alia, the setting up of a Transport Board to advise and control private operators and the establishment of a joint government-private bus corporation to provide services, starting with Colombo Municipal Council Areas.
--	-------------------------------------	---

	1957 Nationalization of Bus Services	<ul style="list-style-type: none"> • A new government, which took office in 1956, had appointed three committees to study and recommend the ways in which nationalization of transport services be undertaken. • All three committees recommended phased take over of private bus companies under government control. • But the government had decided to nationalize transport industry in one below by introducing the Act No. 48 of 1958 and established the Ceylon Transport Board (CTB). • By 1968 the CTB was transformed into a profit making public sector enterprise. • Escalation of oil prices and management problems had contributed to down turn of its efficiency by around 1973. • By the year 1975, the CTB has become a totally non-viable venture and was not able to meet the passenger demand.
	1977 Formation of a New Government in 1977 and Re-emergence of Private Bus Service	<ul style="list-style-type: none"> • The new government which took office in the year 1977 was favouring the free market economic policies. • During this time the CTB was under serve strain to provide its services due to lack of sufficient fleet and management problems. • The new government after reviewing the situation of CTB decided to de-regulate the operation of passenger bus services and allowed private buses to operate. • The CTB was re-structured to operate as Regional Transport Boards based on the nine regions of Sri Lanka. • Government has permitted private buses to operate on all routes where CTB buses were operating. Thus, by 1980 there were around 5,000 private buses in operation in the country. • Lack of pre-planning for re-introducing private buses has started creating unexpected issues in passenger transport service. • Re-conditioned vans, mini-coaches of small and medium size with no standards were in operation in competing with the Regional Transport Board operated buses.
	1980s Formation of Provincial Councils in late 1980s	<ul style="list-style-type: none"> • The government had decided to devolve planning and administrative powers to the provincial level and thus introduced the 13th amendment to the Constitution. • Under the above, the provincial councils were formed in 1991. Provision of public transport was thus transferred from the centre to provincial council level.

	Formation of Provincial Ministry of Transport	<ul style="list-style-type: none"> • Each province had appointed ministers of transport and the function of public transport within the province was brought under the purview of that Ministry. • Established Provincial Road Passenger Transport Authorities to manage the passenger transport services within the province.
	Establishment of National Transport Commission (NTC)	<ul style="list-style-type: none"> • A National Transport Commission was established by the government of Sri Lanka under the Act No. 37 of 1991. Its principal functions included advising the government on policy, regulating inter provincial buses and guiding & assisting the provincial transport authorities. • Currently the Ministry of Transport, the Department of Motor Traffic, National Transport Commission provide the broad policy & strategies to operate public transport services in the country.

2.5 A Brief Overview

The situation of public transport sector did not seem to improve with the events took place along with devolution of powers and formation of different authorities. None of these had grasped the crux of the issue and had perceived the problems pertaining to the public transport sector in Sri Lanka. The different modes of transport operated in Sri Lanka i.e. the Regional Transport Board owned buses, the private buses, the railways have been operated with mounting problems. The main reasons for inefficient operation of public transport have been due to poor coordination and management of transport services, weak law enforcement and unnecessary political interference.

The private bus owners operating mostly as individually owned business activity operate on profitable routes competing wit government owned buses. In the competition the government buses naturally become the looser.

Devolution of powers under the provincial council provided autonomy for each provincial council to decide on its transport sector. However, in practice it has led to further disintegration of the system as a whole mainly due to lack of coordination and overlapping of certain factions Diandas (1994: 33-43) cites that devolution has made no or little contribution on such aspects as scheduling and over-supply of private buses, enforcement of standards, improvement and maintenance of bus stations & terminals and other passenger service facilities.

Nor has it address the prolonged issues of over crowding, safety and comfort etc. on the part of the passengers. Thus, the public transport system in Sri Lanka in general and the situation in the city of Colombo in particular persist with inefficiency in supply side as well as dissatisfaction on the part of the transport users.

2.6 Development of the Key Activity Patterns in the City of Colombo

Colombo was a city originally built by the colonial rulers who included the Portuguese from 1505 to 1656, the Dutch from 1656 to 1796 and the British from 1796 to 1948. During these periods, the colonial rulers have gradually converted the country's economy from a subsistence agriculture to export oriented plantation and import export trade dominated economy. These changes necessitated creating the infrastructure suitable for transportation of goods and production in and out of the country. The colonial rulers have built the Colombo harbour to facilitate their trading activities along with a road and railroad network connecting the city of Colombo with its hinterlands. Thus, the Colombo harbour had become the main focus of the city's development scenario.

The Colombo Municipal Council (CMC) which was established in the year 1885 under the Municipal Councils Ordinance has been responsible for planning and management of the city affairs. In the meantime, as Colombo being the capital city of Sri Lanka it has begun to accommodate the head quarters of all the government institutions, financial, banking and other service sector organizations.

In addition to the government sector, the private sector organizations and the main markets were located within the Colombo city making it most prominent centre of the country. The Colombo's primacy which was originated during the colonial era continued up to the present times and will continue to exist in the future as well.

2.7 Planning History of Colombo

Though the Colombo's development took an unplanned shape it was evident that several attempts have been made in the past to plan the city by engaging internationally reputed town planners. The first city plan for Colombo was prepared by an eminent British Town Planner, Sir Patric Geddes in 1921. The concept of the plan was to preserve the rural spirit and to make the city of Colombo as the garden city of the east. Due to non-operation of the above plan and after the enactment of the Town & County Planning Ordinance in 1946 the Colombo Municipal Council had embarked on preparing a town planning scheme for the city. Famous British Town Planner, Sir Patric Abercrombie was invited for this purpose. Sir Patric Abercrombie has prepared his plan in 1949 covering the area of Colombo Metropolitan Region as a whole but was unable to translate the plan into detailed proposals. His plan had emphasized the decentralization of the city's activities to suburban areas and creation of three satellite towns around the Colombo city. Unfortunately, Sir Abercrombie's plan also did not get translated into practice.

With the increase of city's functional activities and growth of its suburban areas, the government has sought the assistance of the United Nations Development Programme to develop a plan for Colombo. Thus, the third city plan was prepared under the Colombo Master Plan Project in the year 1978. This plan covered the entire Colombo Metropolitan Region (including the city of Colombo) consisting of three administrative Districts of Colombo, Gampaha and part of Kalutara.

The entire planning area had been divided into two broad sub regions i.e. central sub region and outer region. The central sub region covered the city of Colombo and its immediate urban area and the outer region consisted the towns outside Colombo city. The Colombo Master

Plan Project has provided the basis for all the city planning programmes implemented in Colombo since 1978.

The city of Colombo Development Plan - 1985

The City of Colombo Development Plan was prepared by the Urban Development Authority along with the Colombo Municipal Council in the year 1985 for guiding the development of city of Colombo. This development plan has laid the foundation for implementing zoning and building regulations in the city in keeping with its present and future development needs. The plan has divided the city into 14 planning units for planning and development control purpose. The plan has recommended shifting of industrial and warehousing activities and some of the government offices into the adjoining areas of Colombo city in order to regulate the city's development.

Colombo Metropolitan Regional Structure Plan (CMRSP) - 1988

In response to the increasing pressure of present development in the city of Colombo and its Metropolitan area, the Urban Development Authority (the main physical planning authority of Sri Lanka) in consultation with the relevant government institutions has prepared a plan called "Colombo Metropolitan Regional Structure Plan in 1998". The overall objectives as stated in the plan was to design a strategic physical plan and prepare action programmes for the development of the region with a view to meet the aspiration of people of the Western Province and the people of Sri Lanka.

The plan envisaged the development of capital territory of Colombo as an international financial and banking centre and its adjoining Municipality of Kotte as the administrative capital.

As indicated above starting from 1921 to 1998 several efforts have been made to plan the city of Colombo and its metropolitan area to meet the increasing demand of the people in the area as well as the general population of the country.

2.8 The Key Functional Activities of Colombo

The city of Colombo as being the capital of Sri Lanka accommodates the following key functional activities which provide employment opportunities for the city population as well as for thousands of daily commuter population and businessmen who operate between Colombo and other cities in the country. Some of the key functional activities of city of Colombo are as follows.

<i>Institution / Activities</i>		<i>Approximate Employees</i>
i.	Head quarters most of the government institutions	Over 100,000
ii.	Colombo harbour and its related functions	Over 15,000
iii.	Colombo Manning Market (vegetable & fruit market) and fish market	Over 10,000
iv.	The wholesale and retail market in Colombo Pettah area	Over 50,000
v.	Railway & transport sector	
vi.	Colombo municipal council	Over 10,000
vii.	Banking, hotel and other service sector establishments	Unable to estimate (may be over 50,000)
viii.	Petty traders / pavement hawkers	Over 10,000
ix.	City's markets, restaurants and other trading activities	Over 100,000
x.	Three wheeler drivers	Over 50,000
xi.	Motor vehicle repairs, servicing, private security and cleaning services etc.	Over 50,000
xii.	Hospitals, medical clinics and health centres and health centres	Over 50,000
xiii.	Education institutions	Over 50,000

Source: Researcher's own estimate based on the knowledge & experience with the city

In addition to the above main functional activities, there exist many other activity areas where city population is engaged in. As for the urban poor are concerned, they have access to labour grade and blue collar jobs in all most all the above functional activities. Among them most common places are the city markets, the harbour, the railway, the Colombo Municipal Council and in the hospitals and medical centres. Many of the urban poor men do engage in pavement hawkers activities while the women work as domestic aid in middle and high income residential areas in the city. The Poverty Profile of Colombo which was carried out in the year 2001/2002 has identified the following urban challenge particularly with regard to integrating the urban poor in the city's functional and management system.

Challenges in Colombo for integrating the urban poor with the formal city structure and systems

ISSUE	IMPACT	CHALLENGE
Inappropriate City Planning	<ul style="list-style-type: none"> The planning of city development is handled by a national level agencies i.e. Urban Development Authority and several other institutions with minimum involvement of the city's stakeholder groups Lack of access to city planning process by the poor has direct negative consequences on their settlements and the livelihoods activities Under-utilization of the city's environmental resources 	<ul style="list-style-type: none"> The challenge is therefore to ensure adequate access to the citizens in general and to the urban poor in particular to participate in the city planning process Poor have the fear of removal from their places of living Lack of opportunities to improve their asset base Realizing the potentials of underutilized resources in the city

ISSUE	IMPACT	CHALLENGE
Lack of Access to Urban Land by the Poor	<ul style="list-style-type: none"> • Increasing land values in the city exclude the urban poor entering into the formal city life. Hence, the poor usually concentrate on marginal lands in and around the city • Lack of security of tenure for urban poor have pushed them to a vulnerable situation with eviction threat 	<ul style="list-style-type: none"> • Integrating the urban poor in the formal city planning process by providing access to lands in appropriate locations • Providing security of tenure for the land occupied by the poor to improve their livelihoods
Lack of Access to City's Network Infrastructure by the Urban Poor	<ul style="list-style-type: none"> • Insufficient carrying capacity and limited area coverage of the existing network infrastructure to cater to the city population and the demand of new development • The urban poor being the vulnerable section of the city who have little or no access to the existing network infrastructure • Rapid deterioration of the living environmental of the urban poor contributing to health hazards and economic losses. 	<ul style="list-style-type: none"> • To improve the carrying capacity of the network infrastructure in the city to cater to the growing demand at present as well as in the future • To provide access to network infrastructure for the urban poor • Promoting private sector and local community participation in infrastructure provision and operation & maintenance of services in urban poor settlements
Limitations for Improving the Livelihoods Assets of the Urban Poor	<ul style="list-style-type: none"> • Irregular income and high cost of living hamper the opportunities for accumulating assets by a majority of urban poor • Lack of knowledge about the city's development process by the poor • Increasing negative impacts of antisocial behaviours contribute to erosion of asset base • Lack of organized community efforts by the urban poor to face the current challenges of city development prevent them improving their assets base • Lack of genuine and efficient institutional process to ensure participation of urban poor in the institutions that are operated in the city 	<ul style="list-style-type: none"> • Understanding the barriers of improving urban poor's assets base and assist overcoming such barriers • Provide adequate information to the urban poor and link them up with the city development process • Empower the urban poor groups to make demand for improved services and to enhance their assets base. • To create more informed and reliable channels on service delivery institutions for urban poor to participate in the city development process

3.0 Analysis of the Study Findings

In organizing the primary data collection work for the present study the key words such as activity patterns, transport policies and urban poor were used as guiding themes. The key persons and institutions relating to the above themes were thus identified. They included primarily the urban poor, representatives of service providing agencies and transport providers. Among the urban poor, the men, women and children who are engaged in daily travel and frequently use different modes of transport have been interviewed. Several attributes such as personnel data, livelihood assets, vulnerability aspects, the activities they engaged in, frequency of travel, the mode of transport used, the waiting time, the facilities inside the bus, travel expense, opinion on the location of activities related to their livelihood pattern, overall satisfaction on the transport mode used and the suggestions to overcome the problems they faced were identified in collecting relevant data.

In addition to the above, a household travel diary was used to collect information related to the travel pattern of a particular household within a period of continuous one week. The checklist included the following attributes;

- Basic household data, name of the settlement, address, name of head of household, no. of members of household, no. of members who engaged in daily travel.
- For each member the following information was collected. – month & date, purpose of the trip, starting time, distance to the destination. Mode of transport used and the distance.
- Normal time required to reach the destination, the actual time taken, the waiting time for transport.
- Cost of transport, any problems faced during the travel, how those problems affected the user and user's opinion on the transport mode used.

3.1 Selection of Urban Poor Settlements for the Study

Considering the time and resource limitations as well as the required data for the study six urban poor settlements were identified among the different types of urban poor settlements in the city under the study. In identification of these case study settlements some key considerations such as the type of settlements, location, size and their proximity to city major activity centers and the availability of public transport were used. After identifying the six case study settlements, 20 households from each settlement was chosen for the interview. This number was an arbitrary figure however it generally represents across section of total households of identified settlements.

In identification of these households, the factors such as No. of members in the household (five or more), the number of members engaged in daily travel were considered. Based on the above consideration the following urban poor settlements were identified for detailed survey.

Name and Location of the Settlement	Type of Settlement	Total No. of Household in the Settlement	No. of Households Selected for the Interview	No. of Households Chosen for Travel Diary Information	Distance from the City Centre
1. Swarna Road Stage II	Upgrades squatter settlement	89	20	5	5
2. Badowita, Attidiya	Relocated squatter households	1141	20	5	8
3. Bakeriyawatta, narahenpita	Squatter settlement	190	20	5	7
4. Seevalipura Stage B	Upgraded squatter settlement	200	20	5	6
5. 219 Watta, Ferguson Road, Colombo 15	Squatter settlement	365	20	5	6
6. Nawagampura Orugodawatta Block E&D	Relocated squatter settlement	86	20	5	4

Note: The word "Watta" is a local term used to denote urban poor settlement / community.

Representatives of Planning and Regulatory Agencies who have been Interviewed under the Study

- Representatives of Urban development Authority (03 Nos.)
- Representatives of Ministry of Health (02 Nos.)
- Representatives of Ministry of Education (02 Nos.)
- Representatives of Ministry of Transport (03 Nos.)
- Representatives of National Transport Commission (02 Nos.)
- Representatives of academic and research institutions (03 Nos.)

3.2 Profiles of Case Study Settlements

Some basic facts about the identified case study settlements were listed below in order to give a broad picture about each of the settlement.

Profile of Case Study Settlement : Swarna Road Stage II

1.0	Name of Location of the Settlement	:	Swarna Road Stage II, Swarna Place, Colombo 05
1.1	Year of Origin	:	In early 1950s
1.2	Type of Settlement	:	Upgraded squatter settlement in 1990s
1.3	No. of Households as per Year 2001	:	89
2.0	Land Ownership of the Settlement	:	National Housing Development Authority (Government Land)
2.1	Availability of Basic Infrastructure	:	
	Water supply	:	Individual connection to all the hoses
	• Toilets	:	Individual toilets
	• Access roads	:	Main access road is a gravel road, Inner access roads are concrete paved
	• Storm water drain	:	Paved drains available
	• Electricity	:	Available for individual houses
3.0	Availability of Public Transport to the Settlement	:	Not available
3.1	Distance to the Nearest Public Transport Route	:	About 200m
4.0	Type of Employment of Community Members	:	Skilled workers and labours in the city
4.1	Distance to Workplace of the Majority	:	Men about 04 to 05 km Women about 01 km
5.0	Distance to other Services	:	
	• School	:	1 km
	• Market	:	½ km
	• Hospital	:	3 km
	• Post Office	:	½ km

Profile of Case Study Settlement : Seevalipura Stage B Settlement

1.0	Name of Location of the Settlement	:	Seevalipura Stage B, Borella
1.1	Year of Origin	:	In early 1950s
1.2	Type of Settlement	:	Upgraded squatter settlement
1.3	No. of Households as per Year 2001	:	About 200
2.0	Land Ownership of the Settlement	:	National Housing Development Authority (Government Land)
2.1	Availability of Basic Infrastructure		
	• Water supply	:	Individual connection available
	• Toilets	:	Individual toilets
	• Access roads	:	Main access road is a tarred road, Inner access roads are gravel roads
	• Storm water drain	:	Open masonry drains are available
	• Electricity	:	Individual connection available
3.0	Availability of Public Transport to the Settlement	:	Not available
3.1	Distance to the Nearest Public Transport Route	:	1 km
4.0	Type of Employment of Community Members	:	Skilled workers and businessmen and housemaid working abroad
4.1	Distance to Workplace of the Majority	:	About 05 to 06 km
5.0	Distance to other Services	:	
	• School	:	Within the community and nearby
	• Market	:	1 km
	• Hospital	:	2 km
	• Post Office	:	1 km

Profile of Case Study Settlement : 219 Watta

1.0	Name of Location of the Settlement	:	219 Watta, Ferguson Road
1.1	Year of Origin	:	In early 1960s
1.2	Type of Settlement	:	Squatter settlement
1.3	No. of Households as per Year 2001	:	365
2.0	Land Ownership of the Settlement	:	Sri Lanka Land Reclamation and Development Corporation
2.1	Availability of Basic Infrastructure	:	
	Water supply	:	Common stand posts (02 Nos. only)
	• Toilets	:	Common toilets 04 units for women 04 units for men
	• Access roads	:	Narrow foot paths with potholes
	• Storm water drain	:	Not available
	• Electricity	:	Not available for majority, few people have got illegal connection
3.0	Availability of Public Transport to the Settlement	:	Not available
3.1	Distance to the Nearest Public Transport Route	:	About 500m
4.0	Type of Employment of Community Members	:	Unskilled labours in the city market
4.1	Distance to Workplace of the Majority	:	Most of the men work in the main market of Colombo (04 km). Women work in tea processing factories nearby (1 km)
5.0	Distance to other Services	:	
	• School	:	01 to 02 km
	• Market	:	1 km
	• Hospital	:	01 km (municipal dispensary)
	• Post Office	:	1 km

Profile of Case Study Settlement : Nawagampura Settlement Block E&D

1.0	Name of Location of the Settlement	:	Nawagampura Block E&D, Orugodawatta, Colombo 14
1.1	Year of Origin	:	1983
1.2	Type of Settlement	:	Relocated squatter settlement
1.3	No. of Households as per Year 2001	:	86
2.0	Land Ownership of the Settlement	:	Government Land
2.1	Availability of Basic Infrastructure	:	
	Water supply	:	Individual connection available
	• Toilets	:	Individual toilets
	• Access roads	:	Gravel roads
	• Storm water drain	:	Open drains
	• Electricity	:	Individual connections available
3.0	Availability of Public Transport to the Settlement	:	Not available
3.1	Distance to the Nearest Public Transport Route	:	About 100m
4.0	Type of Employment of Community Members	:	Unskilled labours and informal business in the city
4.1	Distance to Workplace of the Majority	:	About 04 to 05km
5.0	Distance to other Services	:	
	• School	:	1 km
	• Market	:	1 km
	• Hospital	:	04 to 05 km
	• Post Office	:	1 km

Profile of Case Study Settlement : Badowita, Attidiya, Ratmalana

1.0	Name of Location of the Settlement	:	Badowita Settlement in Ratmalana
1.1	Year of Origin	:	1991
1.2	Type of Settlement	:	Relocated Settlement
1.3	No. of Households as per Year 2001	:	1141
2.0	Land Ownership of the Settlement	:	Sri Lanka Land Reclamation and Development Corporation (SLLR&DC)
2.1	Availability of Basic Infrastructure	:	
	Water supply	:	Individual connection available
	• Toilets	:	Individual toilets
	• Access roads	:	20 – 30 ft wide tarred road
	• Storm water drain	:	Available but not functioning properly
	• Electricity	:	Available for individual houses
3.0	Availability of Public Transport to the Settlement	:	Available two private vans but service is not regular
3.1	Distance to the Nearest Public Transport Route	:	About 02 km
4.0	Type of Employment of Community Members	:	Men involve in informal business activities while women do engage in housemaid work in nearby middle income houses
4.1	Distance to Workplace of the Majority	:	About 04 to 08 km
5.0	Distance to other Services	:	
	• School	:	03 km
	• Market	:	02 km
	• Hospital	:	05 km
	• Post Office	:	km

Profile of Case Study Settlement : Bakeriya Watta Settlement

1.0	Name of Location of the Settlement	:	Bakeriyawatta Settlement, Narahenpita
1.1	Year of Origin	:	1980s
1.2	Type of Settlement	:	Squatter settlement
1.3	No. of Households as per Year 2001	:	190
2.0	Land Ownership of the Settlement	:	Urban Development Authority (Government)
2.1	Availability of Basic Infrastructure Water supply	:	Common stand posts (about 02 Nos.)
	• Toilets	:	Common toilets (02 toilet blocks of 04 unit each)
	• Access roads	:	Gravel roads
	• Storm water drain	:	Not available
	• Electricity	:	Available for individual houses
3.0	Availability of Public Transport to the Settlement	:	The settlement is located close to two public bus routes
3.1	Distance to the Nearest Public Transport Route	:	About 50m
4.0	Type of Employment of Community Members	:	Unskilled labours, pavement hawkers, and housemaids
4.1	Distance to Workplace of the Majority	:	About 03 to 04 km
5.0	Distance to other Services	:	
	• School	:	1 km
	• Market	:	1 km
	• Hospital	:	4 km
	• Post Office	:	km

4.0 Analysis of Survey Findings

4.1 Community Perceptions about the Activity Patterns and Public Transport

The analysis of information gathered through household interview was carried out based on each case study settlement in order to identify settlement specific issues and perceptions. After reviewing the settlements specific issues, a set of common issues and perception were identified. The following section presents the settlement specific issues on the six case study settlements.

4.2 Swarna Road Stage II, Colombo 6

Swarna Road Stage II is an upgraded squatter settlement located on the canal bank of Wellawatta Canal in Colombo municipal area. Swarna Road settlement has been in existence since 1950s but were upgraded during the 1990s. The Swarna Road Stage II area has about 89 housing units. The community has currently enjoying individual amenities. There is no direct public transport facilities to the settlement. People have to walk about 200 meters to the nearest bus route.

Twenty households have been identified for the present study to investigate how their activity patterns are located in the city and how do they use transport modes to reach to these activities. The community perceptions on the location of activity pattern was also examined.

Persons Engaged in Daily Travel

It was observed that average household size of Swarna Road community was 05 persons while 03 persons of each household engaged in daily travel. It was found that a majority (about 75%) of those who were engage in daily travel are connected with employment activities while schooling and marketing activities becomes the second category of activities in which the household members involved in travelling.

The Household Assets

Being an upgraded squatter settlement, Swarna Road community was given government permission to occupy on the land lot allocated to them. Because of the sense of permanency, they have invested money in constructing permanent housing units and improving their asset base. The most common assets accumulated by the community are listed below.

- Land lot of 50 sq.m. size given to each household by the National Housing Development Authority.
- Over 95% of households have completed permanent houses in which they occupy.
- About ¼ of them are two storied buildings having room spaces for renting out purposes.
- About 10% of the households do have either a motor cycle, three wheeler or a pedal cycle which can be considered as disposable assets.
- TV sets, cassette radios and household furniture are available for over 75% of the families of Swarna road.

- About 5% of families use part of their house for income generating activities. These included running a boutique, bicycle repair workshop, food preparation on orders, dress making etc.
- Renting out a room for earning a monthly income also being practiced by about 10% of the families.
- About 50% of the households do maintain bank accounts with commercial banks which is an encouraging sign of their development.
- The respondents have indicated that there is no active community organization at present. However, they have been actively engaged in the CBO activities during the past few years.
- The respondents have indicated that there are no any natural resources that provide opportunities for them to improve their livelihood means.

Location of Activity Patterns Used by the Community Members

Main activity patterns considered under the study included place of work (employment) location of health facilities, the schools and market places used by the community members daily. The pattern identified in respect of Swarna Road settlement is described below.

- ***Place of Work (Employment)***

- It was found that two or more members of each respondent family have been engaged in employment activities.
- Around 75% of the employed persons were found to have been skilled workers who were engaged in city's establishments. The balance found to have been working in areas outside city of Colombo.
- Self employed persons and labourers who constitute of about 10% among those who were employed were working in areas around the settlement.
- Self employed persons in the settlement were engaged in running small boutiques, preparation of food items, sewing cloths etc. Their market is mostly within the settlement itself and hence not much depend on transport.

- ***Location of Health Facilities***

- The respondents have mentioned that hospitals and dispensaries are located at convenient distances to their community.
- These included Colombo general hospital, children's hospital of Borella, municipal dispensary at Kirulapone and several other private dispensaries close to the settlement.

- About 75% of the community members have indicated that they use the municipal dispensary for obtaining medicine. While the balance 20% said they visit the Colombo general hospital as well as the children's hospital.

As indicated above, a majority of Swarna Road community depend on the services of municipal dispensary which provides free medical services.

- ***Location of Schools***

- There are several government schools located proximity to Swarna Road settlement. As indicated by the respondents, a majority of children attend the schools located in Havelock Town, Wellawatta and Bambalapitiya, which are with 03 – 05 km distance from the settlement.
- A few students for personal reasons have chosen schools in Nugegoda and Piliyandala towns, which are located outside the city of Colombo. However, over 90% school children attend to nearby schools.

- ***Location of Markets***

- As has been indicated by the respondents, over 90% of the families of Swarna Road are used to visit the market at Kirulapone which is about less than ½km from the settlement. The respondents said that many of them used to walk up to the market due to its closeness.
- It was also observed those members of the families who do engage in employment activities in Colombo city and Borella used to purchase the required items from the city markets.
- As has been mentioned earlier the people of Swarna Road settlement too use the market primarily to purchase their necessities and not to sell any thing they produce.

Hazards and Vulnerability Aspects

As indicated by the respondents there was no major natural hazards that affect the people of Swarna Road settlement. The problems raised by them were mostly related to the deteriorated conditions of the living environment in the area. These refers to;

- The canal, which is running in front of the settlement, is highly polluted due to discharge of liquid and solid waste by the communities and establishments located along the canal.
- Due to blockage of storm water drains in the area mosquito problem has been a continuous hindrance the people.
- The main access road of the settlement, which is running on the canal bank, is a gravel road. It is dusty during the dry season while it becomes muddy and impassable during the rainy season. Poor quality of the access road is thus contribute to poor living environment.

- There are a few illicit alcohol and drug dealers who live in the settlement has drawn some young people into their business. The respondents were worried about possible drug addiction by youth in the settlement.
- As pointed out by the respondents, there was no unity among the residents in the community due to division of families on political and communal grounds.

Mode of Transport Used by those who Work Outside the Settlement

- The responses received from the community members revealed that about 90% of the people who go out of the community daily for various activities use public buses as their transport mode. The unskilled labourers as well as those women who work as housemaids of middle income houses reach their work places by waking. A large majority of school children of the community use public buses to go to their schools.
- The people from the community who use the Kirilapone public market used to walk up to the market.
- The respondents have indicated that they use public buses to reach at government general hospital or children's hospital located in the city. Since there are sufficient buses reaching at these hospitals has not been a problem for them. However, in an emergency situation they normally hire a three wheeler to go to the hospital, which is expensive but can't be compromised.
- As described above, majority of respondents of Swarna Road community use public buses as their main mode of transport to reach at the places they visit.

Specific Problems Related to Transport Mode Used by the Community

- The respondents have indicated that they have no major problems in accessing to public transport route, which is located close to their settlements. However, the following issues were mentioned as their negative experience.
- Difficulty of catching buses during the morning peak hours which resulting late arrival at work place.
- Those who work on night shifts find it difficult to come back home due to non availability of buses. In such instances, they have to hire a three wheeler paying about Rs. 100/-, which is twenty times of the usual bus fare to the city.

Community Perception about the Location of Activity Pattern

The respondents of Swarna Road community have indicated that they were happy about the location of their community in the city because the important activity centres such as schools, hospital, markets and even the employment centres are located within a reasonable distance. They said that maximum distance they have to travel would be less than 10 km to reach any of these facilities. Among them, the market, schools and the municipal dispensary are located within walking distance form the community. They have to depend on public transport for primarily to reach their places of employment. In this context, being located close to public

transport routes Swarna Road community has many advantages in improving their livelihood opportunities.

4.3 Badowita Settlement in Attidiya

Badowita low income settlement which located within the adjoining municipality of Colombo is a large resettlement community where about 1141 families live. This settlement came into being in the area in 1991 as a result of Grater Colombo Canal Rehabilitation Project under which the families removed from canal bank settlements of Colombo were brought into Badowita. The settlement has five stages of planned resettlement communities while stage VI area is a unplanned squatter area which is now included in Badowita. For the purpose of this survey, 20 households were identified from the planned resettlement area as well as from the unplanned squatter area.

Persons Engaged in Daily Travel

On an average, 06 members were there in each household of whom average 04 members were going out daily for different activities. The normal pattern of daily travel of the household members has shown a less diversity where the children go out to attend school, while young and adult men to their work places. A majority of adult women do engage in housemaid activities in middle and high income hoses mostly located close to their community. Many young girls found to have been working in the city. Thus, it was found that over 80% of those who were going out of their houses daily visit places that necessitate use of some transport modes.

The Household Assets

In Badowita settlement two categories of respondents were interviewed i.e. those who are within planned relocation section and those who are in squatter section (Stage VI area). In terms of household assets owned by families there is a clear distinction among these two groups of households.

In the planned relocation area, the respondents do possess the following types of assets.

- A land lot of 50 sq.m. size owned by each household (letter of occupancy given by Sri Lanka Land Reclamation & Development Corporation). Permanent house with individual water, electricity and toilet facilities are available for all the households.
- Almost all the households do have household furniture in their living and bed rooms.
- TV sets and a refrigerator were available only for about 50% of the families interviewed.
- Motor cycles and three wheelers were available only for about 10% households.
- Bank savings were available for less than 10% of households interviewed.
- Over 50% families do not participate in CBO activities. They have indicated that they have no trust in CBO leaders.

- Apparently there is no strong community coherence among the people. The main reason being that the people from different locations were brought to Badowita for resettling.
- There are no specific natural resources available in the area that supports livelihoods of the people in Badowita.
- Therefore, over 95% households will have to depend on activities outside the settlement for their living. The balance do engage in self employment etc. in the settlement.

Household Assets in the Squatter Area

- Almost all the respondents have indicated that they have encroached about 20 to 30 sq.m. land area where they have put up temporary houses.
- They do not have individual amenities such as water, toilet and electricity and have to depend on common water and toilet facilities, which are severely inadequate.
- Due to illegal nature of their occupancy, the people have not being able to construct permanent houses.
- It was observed that there was no noticeable household furniture in the houses of the squatter section of Badowita settlement.

Location of Activity Patterns Used by the Community Members

Main activity patterns considered under the study included place of work (employment), location of health facilities (hospital/clinic etc.), the schools and the market place where people used to buy their daily necessities and sell their products if any. The pattern of identified activities related to above aspects are as follows.

- ***Place of Work***

- It was found that in almost all the households one or more members do engage in employment activities. Majority of them were found to be engaged in work within Colombo city which is about 08 km away from Badowita settlement. The other employment centres are located in Dehiwala town (02 km), Ratamalana (03km) and within walking distance from the settlement. Less than 10% of the households have their members working in places beyond 10 km distance (i.e. in Ekala, Mahara and Katunayake).
- More than 90% of working women do engage in housemaid activities within about 02 to 04 km area from the settlements. Some of them do work in two to three houses per day performing specific jobs such as cooking of meals, washing clothes, cleaning the gardens etc.
- Thus, it was evident that about 90% of the household members who are engaged in daily employment activities have found their work places within a radius of 10 km from the settlement.

- ***Location of Health Facilities (Hospital / Clinic etc.)***

- Over 95% of households in Badowita used to visit the government general hospital in Kalubowila which is located about 05 km away from the settlement. The primary reason was that government hospital provides free medical treatments to the people. It also has modern facilities and indoor patient treatment facilities.
- Less than 05% of households indicated that they used to visit private practitioners located about 01km away from the community because they do not like to wait in long queues in the government hospital. But they have to pay Rs. 100/- as the doctor's fee and about another Rs. 50/- or 60/- for medicine.
- People were also complained about the closure of a dispensary owned by the Dehiwala Mt. Lavinia Municipal Council, which was in operation within the settlement. Due to the retirement of the municipal doctor, the Municipality seem to have shutdown the dispensary.
- Almost all the people who visit Kalubowila general hospital used to go by bus. They have to walk about 02 km to the main bus route and catch up a bus to the hospital. They have shown their dissatisfaction over the lack of a bus service from the settlement.
- However, about 10% of the households have mentioned that in an emergency situation people used to hire a three wheeler and rush to the government hospital for which they have to pay about Rs. 80/- which is (about 16 times of the normal bus fare) expensive but no other option.

- ***Location of Schools***

- Over 90% of the school children of Badowita attend to schools located in Colombo city. Wellawatta and Bambalapitiya are the two most prominent places where they attend to their schools. Since both these locations are about 06 to 08 km away from Badowita the children have to use public buses to reach their school. For the round trip one child has to spend about 08 to 10 Rupees per day.
- It was also found that a large majority of school children of Badowita have to walk about 02 km in the morning to reach up to the main bus route to catch up their buses for the school. Lack of a regular bus service from the settlement to nearby town centre is a major difficulty for the community of Badowita.
- Those families who have more than 02 school going children have indicated that about 1/5 of their monthly income is being spent on bus fares for children.
- Majority of the people have indicated that there were no good schools close to the settlement and therefore they tend to send their children to faraway places in Colombo.

- ***Location of Markets***

- The market where the community of Badowita visit is located about 02 km away from the settlement. It is called Dehiwala town centre and the street market of Dehiwala. It was observed that about 25% to 30% people used to visit Dehiwala market for purchasing their daily needs. A majority have indicated that they do not visit Dehiwala because they purchase most of the necessities from the mobile vendors and small boutiques in the settlement.
- Those families whose members are working in Colombo city used to purchase their daily necessities from the main market in Colombo.
- It was observed that even those who visit Dehiwala market do not use public transport rather they walk up to the market. When they purchase large volume of goods only they hire a three wheeler to come back home.

Thus, it was found that location of the market in close proximity to Badowita settlement has many advantages to the community in accessing to it with low transport costs.

Hazards and Vulnerability Aspects

There were no major hazards or vulnerability aspects highlighted by the respondents.

- The storm water canal, which is running across the settlement which, is maintained by the Sri Lanka Land Reclamation and Development Corporation has become highly polluted due to discharge of industrial waste by nearby factories. It emits an unbearable odour. This canal starts overflowing during the rainy season inundating the houses and access roads. This is a once a year occurrence (particularly the people in squatter section Stage VI are affected by this).
- Mosquito menace is a real hindrance to the people of Badowita. The respondents have said that due to people's negligence and ignorance mosquito breeding places are growing.
- Due to the high water table, the toilet pits in Stage VI area are over flowing, resulting unpleasant odour and health risks.
- The people of Baodwita have the experience of becoming easy victims of communicable diseases particularly due to high density of living. Children are most vulnerable in this context.
- About 30 to 40 young boys (age between 15 to 20 years) have become the victims of drug addiction in Badowita. This has become a real social problem in Badowita. They engage in harmful activities such as stealing household items, street robbery and burglary. The police and other authorities have failed to control drug addiction in the settlement. Because of this problem Badowita settlement has earned a bad reputation in the area as pointed out by many respondents.
- Many adult men too used to drink illicit alcohol and get into unnecessary quarrels with neighbourers, creating an unpleasant environment.

- Excessive noise generated out of radios and TV sets from some houses is a continuing problem in this high density living environment. Many respondents have pointed out that excessive noise badly affect the children's studies at home.

Mode of Transport Used by those who Work outside the Settlement

Analysis of responses of the people with respect to mode of transport used when going out of the settlement indicated the following pattern.

- The adult men engage in employment activities in Colombo city and the nearby town centres such as Dehiwala, Mt. Lavinia and Ratmalana have been using the public transport (buses). All of them used to walk about 1 ~~1/2~~ 2 km from the community to the nearest bus route to catch up a bus due to lack of transport facilities originated from the settlement.
- The unskilled workers who engaged in daily labour activities as well as mobile vendors used to walk about 02 to 03 km daily to their place of work.
- Majority of adult women who do engage in housemaid activities used to walk up to their work places. The rest travel by bus about 04 to 05 km distance.
- About 95% of the school children do walk about 1 ~~1/2~~ 2 km to the nearest bus route and catch up a bus to their schools in Colombo. The respondents said the children will have to spend at least 03 hours daily for up and down traveling.
- As indicated above there was no private modes of transport used by people of Badowita. The main reason given by the people was that they can not afford to buy a motor cycle or other motor vehicle.

Specific Problems Related to Transport Mode Used by the Community

- According to the respondents, the main problem is lack of a reliable transport mode from the settlement to the nearest transport route. Therefore, people have to walk up to the bus route, which is a difficult task particularly for children and women.
- Many school children have pointed out that the buses are too crowded in the morning and after school hours. The children have to spend at least 1 ~~1/2~~ 03 hours daily on traveling.
- The transport expenses are said to be too high when two or more children of a family were attending the schools in Colombo.

Community Perception about the Location of Activity Pattern

Employment

- A majority of people of Badowita work in establishments located in Colombo city. Private sector business enterprises, the main market in Colombo etc. They have not shown any dissatisfaction over the location of work places.

- Unskilled workers usually found work close proximity to the settlement. Almost all of them used to walk up to their places of work. No involvement of transport mode.
- Self employed people (mobile fruit and vegetable vendors etc.) find their market in areas close to the community. Mostly in Dehiwala town centre (2 km from the settlement) or along the beach (02 km from the settlement).
- Majority of women do work as housemaid in high & middle income areas. They have to travel 03 to 04 km from the settlement. They use public transport.
- There was no major issues raised by the community in respect of the location of employment activities except the fact that they do not have a reliable bus services from Badowita to the main road (Galle Road).

- ***Health***

- Over 90% of community members use the government hospital which is called Kalubowila Colombo South General Hospital located about 05 km away from the settlement. The community find it difficult to reach the hospital within a reasonable time since there is no direct transport from the settlement. On an emergency situation they hire a three wheeler for which they have to pay about Rs. 80/- which is 16 times of the normal bus fare.
- People have mentioned that there was a municipal dispensary at Badowita, which is non-functioning at present. If the dispensary was there in operation people would not have to go to Kalubowila.
- There are private dispensaries available in the area but people said they are too expensive. (Doctors channeling fees would be around Rs. 100/- for medicine they have to spend another Rs. 50/- or 60/- which is too expensive for the poor families).
- Therefore, people are worried about lack of a government / municipal dispensary in close proximity to their settlement.

- ***Education***

- Over 90% school children used to attend schools located in Colombo Municipal area (i.e. in Bambalapitiya and Wellawatta) only a small percentage of children go to nearby schools in Dehiwala and Mt. Lavinia. The reason being that many of these people were relocated from Wellawatta canal area where they had their linkages with services in the Colombo city.
- The major concern was the lack of a reliable bus services in the morning and in the evening from and to Badowita. This has necessitated children to walk about 02 km up to the main bus route (Galle Road) to catch a bus to Colombo.
- The other concern was normally about 08 to 10 Rupees per day is needed for a child for transport to go to school which was difficult for the families to bear when compared to their income.

- **Market**

- About 50% of the respondents have indicated that they used to buy their necessities from Dehiwala town centre, which is about 02 km distance from the settlement. Others said they used to purchase their necessities from mobile vendors and the boutiques in the area.
- The location of the market is not a major concern for the community members. The reason may be that they do not produce any thing for sale rather they only buy daily necessities from the market.

4.4 Bekariya Watta Settlement in Narahenpita

Bekariya Watta is a squatter settlement located in Narahenpita Ward of Colombo Municipal Council area. It is located on a government owned land. The settlement has about 190 households at present. Since it is a squatter settlement it has not served with basic amenities. A majority of the people of Bekariya Watta (over 95%) are unskilled workers who are working within the city. The information gathered through interview of 20 households on undertaking their activity pattern, the transport modes they use and their perception about these interactions are present below.

Persons Engaged in Daily Travel

It was found that average household size in Bekariya Watta community was 05 person with maximum 08 and minimum being 04 per household. Among them average 03 persons were engaged in daily travel who were going out of the settlement for various purposes. The primary purposes for going out were for work, for schooling, for seeing a doctor and for purchase of daily necessities. It was found that maximum distance travel by a majority (over 95%) have been within 10 km radius. Only about 02 out of 20 persons were engaged in over 20 km of daily travel to their work places.

The Household Assets

Being a squatter settlement, the community members of Bekariya Watta have limited assets when compared with an upgraded low income settlement like Swarna Road included in this study. About 50% of the households have 50 sq.m size land lot demarcated by themselves on which they have built their houses. The balance 50% do have smaller land lots of than 30 sq.m. in size on which they have put up their houses. Since these were encroached lots by the occupants from time to time there is no proper access roads, shape and spaces between houses etc. Over 90% of the houses were made up of temporary materials such as timber walls, GI sheets. The respondents have indicated that due to insecurity of their occupancy they did not want to put up permanent houses.

A majority of people do not have household assets owned by them. TV sets and radios were available for about ¼ of households interviewed. They do not have individual water, toilet or electricity connection for their houses. Common toilet units (two blocks of four units, one for men and one for women) available in the settlement are not sufficient at all for about 190 families.

- According to the respondents, the main problem for them to improve their asset is the lack of land rights, which always keep them under uncertain condition.
- However, the identified existing assets of the community members are as follows.
 - A land lot of 50 sq.m. size occupied by about 50% families.
 - A smaller land lot of 20 to 30 sq.m. occupied by the balance 50% families.
 - A house made up of temporary materials (timber walls, GI sheet roof, but cement floor etc.)
 - TV sets and radios owned by about 25% of households.
 - About 50% households do have bank accounts for their children.
 - There is no Community Based Organization (CBO) in operation in the settlement.
 - Poor social linkages among the neighbours.
 - No natural resources available within the community or its vicinity to be used by the community.

Location of Activity Pattern Used by the Community Members

The main activity patterns considered under the study included place of work, location of health facilities, the schools and market places where they purchase their daily necessities. The pattern identified in relation to Bekariya Watta community is indicated below.

Place of Work

- It was found that on an average 02 members were engaged in some gainful employment of each household. 95% of them are found to have been working in establishments within the city of Colombo which is about 06 km from the settlement.
- It was also found that some specific locations such as Borella town centre and the main market in Pettah (Colombo central area) were the two places where over 75% people Bakeriya Watta engaged in work. The other nearest towns such as Nugegoda, Rajagiriya, Bambalapitiya have attracted a limited number of people.
- Only about 10% of those who were working included found to have been skilled workers while the balance 90% were minor employees and labourers.
- Majority of women who consist of less than 25% of working members of Bekariya Watta do engaged in housemaid and cleaning jobs. While 03 to 04 number of women engaged as factory workers (tea processing and garment factory workers).
- Most of the men do engaged in business sector activities as shop helpers and minor employees.
- There was no any entrepreneurial activities taking place in Bekariya Watta settlement.

Location of Health Facilities (hospitals / clinics etc.)

- Over 75% of the respondents have indicated that they use the municipal free dispensary at Kirula (about 1/4km distance from community) for taking m edicine for brief illness.

- For major illness the people of Bekariya Watta used to visit the Colombo general hospital which is located about 05 km away from the settlement. However, they have also indicated the difficulties they face in getting treatments at general hospital due to long queues that they have to wait.
- About 10% of families have indicated that they visit the private doctor who is running a dispensary at Nawala junction (about 01 km away from the settlement) without going to the government hospital.
- In almost all the cases, when children fallen ill the parents used to visit children's hospital at Borella which is about 04 km from the community.
- As indicated above, the people of Bekariya Watta community have many choices for reaching health facilities available in the city. The free medical dispensary operated by the Colombo Municipal Council which is located at a waking distance is the most accessible and used facility by the community.

- ***Location of Schools***

- About 50% of school children of the Bekariya Watta attend government schools located in a Narahenpita area (two schools are located at walking distance).
- The balance 50% used to go to the schools located in Bambalapitiya, Wellawatta, Havelock town, Nugegoda and Borella which are located with 05 to 06 km radius from the settlement. The religion and racial differences influenced finding schools away from the area (i.e. the Tamil community prefer sending their children to Hindu schools while some parents send their girls to girls' school only).
- As indicated by the respondents, there was no major problems in finding a school for their children.

- ***Location of Markets***

- It was observed that the markets are being considered by the community primarily for purchasing their daily essentials. Because, the people of Bekariya Watta community do not produce any thing which is being sold at markets.
- The market places used by the community of Bekariya Watta included Narahenpita junction, Borella market, Nugegoda and Kirillapone all of which are within 03 km radius.
- A majority of respondents said that the family used to purchase their daily essentials while they are returning home from work. Hence, no need to make specific trips to the markets for purchase of things.
- Thus, the travel need for marketing was found to have been minimum.

Hazards and Vulnerability Aspects

- Bekariya Watta being a squatter settlement has no proper access roads or drain system. Hence, during the rainy season of the year, the settlement get inundated. Spread of diseases occur due to flood water whereby children are mostly affected. This is a frequent occurrence faced by the people.
- Lack of sufficient toilet facilities is not only poses health risks but also a real human suffering particularly in the morning. The women and children having to wait in a long queue to use the toilet make their life so difficult.
- Due to lack of storm and waste water drains and water logged surrounding areas have provided breeding grounds for mosquitoes. The community has severely affected by mosquito problems.
- About 25 to 30 drug addicted young people of the community and several others who joined them have been a threat to normal life of the community. These drug addicts steal household items - clothes and any vulnerable from the houses. They also used to ask money forcefully particularly from women who stay at home.
- The houses in the settlement are located very close to each other not allowing privacy of households. The respondents were concern about the spread of diseases among children as well as the excessive noise by use of radio and cassette players.
- In addition to the drug addicted young people, most of the adult men who used to drink illicit alcohol start shouting and use filthy words at each other. Many women said that they were worried about raising their children in such a disturbing social environment.
- The people always have a feeling that they would be evicted /relocated from the settlement since they do not have any legal right to their occupancy at the location.
- Apart from above mentioned social problems and insanitary conditions of the living environment, no other major hazards or vulnerability aspects that affect the people of Bekariya Watta.

Modes of Transport Used by those who Work outside the Settlement

- Analysis of responses given by community members with respect to modes of transport used by them indicate the following.
- Over 95% of the community members who go out of the settlement for various activities have indicated that they use public buses for their transport needs. Although the community is located along a railway line, the railway station is located far away from the community. The bus route is located with 50 m walking distance. Hence, the people use public buses.
- The school children too use normal passenger transport buses to reach their school since no school buses are starting from the nearest town centre of Narahenpita.

- The women who work as housemaids also have indicated that they use passenger transport buses reach their work places.
- Many respondents have indicated that they use three wheelers for emergency purposes such as when some one in need of rushing to a hospital.
- The community members who use the municipal dispensary at Kirual used to walked up to the dispensary.

Thus, the community of Bekariya Watta is mainly depend on passenger transport buses for reaching their distinctions.

Specific Problems Related to the Transport Mode Used by the Community

- The community members have indicated that availability of passenger transport has no major problems. However, due to clogging at junction centres lack of a proper time schedule for bus, usually take unnecessary journey times to reach to a destination.
- Due to lack of school buses, school children too have to rush among other passengers in the morning rush. The school children are badly affected in travelling on crowded buses in the morning.
- Many people who work in the city have indicated that there were no buses in the night particularly after 10.00 p.m. Hence, they have to hire a three wheeler to return home which would cost about 15 to 20 times of the normal bus fare.
- Those who engaged in purchasing large volume of goods from the central market of Colombo said that the buses do not have sufficient space to carry them and parcels. They have to hire a three wheeler in such situation paying a large sum of money.
- Due to the traffic congestion, the buses ply slowly in the city streets particularly in the morning and evening peak hours. Therefore, people have to waste 02 to 03 hours daily on travelling a short distance of 06 to 07 km.
- The women who accompany children after the school said that it was extremely difficult for them to travel with children in crowded buses.

Community Perception about the Location

- All the places in connection with work, education, health and marketing are located away from the settlement. Among these, the schools and hospitals used by the community are located within 04 – 05 km radius from the settlement.
- The work places of majority are also located within 10 km radius. In this context, the community feel that they have many advantages attached to their location.
- Considering the transport difficulties and time and many spent on reaching their work places, a majority of respondents have indicated that they would wish to have their work places in and around Narahenpita area where they can reach within ~~1~~ hour time.

- Normal bus fare for reaching to two major hospitals i.e. Colombo general hospital and Kalubowila hospital are Rs. 12 and Rs. 16. But if they need to hire a three wheeler they have to pay Rs. 80 and Rs. 100/- respectively which is far too expensive. Therefore, the community members have indicated that they avoid as much as possible using three wheelers.
- The schools located close to the settlement are not good quality schools. They would not be able to send their children to good schools in Colombo due to poor income as well as poor recognition of people from low income communities.

4.5 Seevalipura Stage – B

Seevalipura – B is an upgraded squatter settlement located near Borella Town Centre within Colombo Municipal Council area. It is part of a large settlement called Seevalipura. This particular section has about 200 households. The National Housing Development Authority (NHDA) which has upgraded the settlement is the land owner of the area. However, the occupants were given leasehold land right by the NHDA so that they have security of tenure. Twenty households were interviewed for the present study in order to identify their activity patterns and the mode of transport they use as well as the people's perception on the interaction between the above aspects.

Persons Engaged in Daily Travel

On an average Seevalipura settlement has about 06 members per household of whom 04 were engaged in daily travel relating to various activities they perform. The security of land tenure, availability of basic amenities as well as established nature of the settlement have contributed each household having 02 or more members engaged in gainful employment activities. It was found that over 75% of those who go out from the settlement are for employment purposes while the balance for schooling and other purposes.

Household Assets

As indicated earlier, the government intervention in upgrading the condition of the settlement has provided opportunities for people to improve their houses and the household assets. This is evident in the assets available with the households.

- Over 90% households do possess 50 sq.m. land lot given to them on a lease by the NHDA.
- 100% houses are made up of permanent materials with two or more bed rooms and a living room.
- Almost all the houses have individual water, electricity and toilet facilities.
- The households possess household furniture, TV sets, refrigerator and some electric items too.
- A three wheeler, motor cycle and peddle cycle was available for about 20% of households interviewed.

- About 50% of the respondents said that they maintain bank accounts in commercial banks and do have own savings.
- Socially, there seem to be a good relationship among the neighbours. About 40% to 50% respondents have indicated that their neighbours do help them when need assistance.
- A majority (over 75%) have indicated that they do not have time to participate in the activities of the CBO. They also have indicated that no specific work to be attended by CBO, since the families themselves can manage their problems.

Thus, the community of Seevalipura seem to have improved their living standards to a point where individual families can manage their problems as in the case of middle income neighbourhoods.

Location of Activities Used by the Community Members

The main activities considered under the study included place of work, health facilities, the schools and markets used by the community members of case study settlements. The identified activities and their location in relation to Seevalipura Stage – B settlement are described below.

- ***Place of Work (Employment)***

- It was found that the working population of Seevalipura is broadly falling into the categories skilled workers, self employed (boutique owners), minor employees of government & private sector establishments. Only less than 10% labour grade people were found among respondents.
- Because of the diversity of their skills their work places were found to have been more disperse within Colombo city and its surrounding area. Within the city the places, included the harbour, the town hall, railway department, business places in Borella, Colombo Fort, Mattakkuliya and Maradana.
- In terms of distances from the settlement over 95% of the work places are located within 06 to 08 km radius. While the balance beyond that.

- ***Location of Health Facilities***

- Seevalipura – B settlement is being located in close proximity to the city centre of Colombo. It has easy access to health facilities located in the city. According to the respondents, there is a municipal dispensary available in Seevalipura about 1/2km distance from the settlement, which they visit for brief illness. When their children fall sick the children's hospital of Colombo, which is located within walking distance is accessible to them. For major illnesses people used to visit Colombo general hospital which is located about 02 km away from the settlement.
- The respondents have indicated there are few private dispensaries located within 01 to 02 km radius from the settlement. However, they prefer to visit the government hospitals and the municipal dispensary because they can obtain free medical treatment.

- ***Location of Schools***

- The respondents have indicated that there are many schools located near their settlement. About 03 of them are at walking distance. However, they prefer to send their children to some good schools in the city. Thus, some parents send their children to schools in Town Hall area and in Kotte.
- According to the respondents, over 75% of the school children do attend near by schools in Borella and in Dematagoda while the balance chose to attend schools located in other parts of the city.

- ***Location of Markets***

- The main markets for purchasing their daily necessities included Borella and Dematagoda. Both these places have a large street markets as well as grocery stores where people purchase household items.
- Apart from the above places, it was found that about 20% to 30% of households purchase their necessities from mobile vendors who visit the settlement daily.
- The household members who work in Colombo city too purchase things when they return home.
- Similar to other case study settlements in Seevalipura too the people use market primarily to purchase the items that they require and not to sell any thing they produce.

Hazards and Vulnerability Aspects

- The storm water drainage system is not functioning properly in the area. Therefore, the settlement gets inundated during rainy season.
- The overflowing of sewer lines running from the prison premises has been a major environmental hazard, it emits an unbearable odour.
- Over crowded living conditions in the settlement creates a noisy and busy environment, which is particularly bad for the school children. Because their studies are affected.
- The young people who have become drug addicts create problems for the innocent people in the area. Stealing of household items, street theft etc. have contributed to stressful life in the settlement.
- Some adult men who are after illicit liquire create unnecessary problems for the people in the community.
- The main storm water canal running across the settlement is highly polluted with solid waste as well as various liquids discharged into it. The living environment has thus become unpleasant and unhealthy.

Mode of Transport Used by those who Work outside the Settlement

- Over 95% of the people who go out of the settlement do use passenger transport buses for their travel. The train station is far away from the settlement hence no train users were found among the respondents.
- The people have to walk only about 200 – 300 meters to the main bus route to catch up a bus to Colombo city. The Borella town centre located within walking distance too has many bus connections to the city.
- Nearly 50% of the school children found to have been walking up to their schools.
- Thus it is clear, a majority of the people of Seevalipura B settlement use passenger transport buses to reach to their work places and other destinations such as hospitals and markets.
- In an emergency they used to hire a three wheeler which they do not consider as a major issue.

Specific Problems Related to Transport Mode the Community Use

- One of the main issues raised by the respondents was that there were no buses late in the night particularly after 10.00 p.m. Therefore, those who work on shift work find it difficult to come back home. In such instances, they have to hire a three wheeler for which usually they have to pay more than 10 times of normal bus fare.
- In the morning and in the evening hours the buses are usually overcrowded. School children girls find it difficult to travel in crowded buses.
- Those people who were running small boutiques as well as mobile vendors find it difficult to carry their goods parcels in the buses. Hence, they have to spend more money to hire a three wheeler in such situations.
- The respondents have shown their dissatisfaction over the waste of time when travelling in public buses due to unnecessary clogging.

Community Perception about the Location and Activity Pattern in the City

- The respondents were concerned about the lack of employment opportunities within Borella town centre where they can reach without much troubles.
- The respondents have pointed out that a large proportion of their money as well as more time have to spent in reaching to work places in the city.
- They were more happy about the location of hospitals, schools and markets near their community.
- They also have made a point that easy accessibility to main bus routes from the settlement is a big advantage for the community.

4.6 219 Watta

219 Watta is an unplanned squatter settlement located in Colombo North area. The settlement is located on a government owned land which found to have been originated since 1960s. There are about 365 households living in the settlement at present. The families do not have sufficient basic amenities and have to depend on two toilet blocks of 04 unit each and 02 street stand posts. There is no legal provision of electricity for the settlement but it was found that people have got illegal connection of electricity for about 75% of the houses. Due to lack of basic amenities the people face severe difficulties in their day to day life.

Persons Engaged in Daily Travel

Twenty households have been identified for the present study in order to examine the activity patterns of the people and the transport mode used by them. It was found on an average 07 members were living in each household of whom about 04 persons were going out daily for various activities. Among the people who were going out about 70% were found to be men about 20% school children and the balance 10% women who engage in daily earning activities.

The Household Assets

Since the settlement has been growing as a squatter settlement, there was no systematic pattern of plot allocation and access road exist in the community. Irregular shaped housing lots mostly smaller than 30 sq.m. were encroached by families. They have built temporary houses (mostly with timber planks and tin sheets) with leaving only narrow foot paths. Due to lack of a properly planned plot allocation, the storm and waste water discharge has already become a major issue in the settlement.

In this context, the assets owned by the households have been identified as below.

- Each family claim for an encroached land lot of 20 to 30 sq.m. size.
- The families do have a temporary house mostly with a single room and some basic furniture and implements.
- TVs and radios were owned by about 25% of the families interviewed.
- Bank accounts were available for less than 5% of families.
- The people have said that due to lack of a proper postal address and lack of permanence in their occupancy they can not communicate with formal sector institutions such as banks and government offices.
- No other noticeable assets owned by the people of 219 Watta.

Location of Activity Pattern Used by the Community Members

The main activity patterns considered under the study included, place of work, location of hospitals, location of schools and markets which are used by the community daily. The activities and their location used by the community of 219 Watta are as follows.

- ***Place of Work***

- It was found that in almost all the families about 02 to 04 members were engage in daily employment activities. About 90% of them were found to have been engaged in work within the central area of Colombo (the main city market and shopping area).
- The balance 10% people work in other centres such as Kotahena, Kribathgoda and Wellawatta.
- It was observed that a majority of women workers engage in employment activities located close proximity to the settlement (walking distance).

- ***Location of Health Facilities***

- About 50% to 60% of the respondents have indicated that they used to visit the municipal dispensary located at Henamulla camp about 01 km away from the community) as the most convenient place. At this dispensary they can get free medical service.
- About 10% of households have indicated that they used to visit a private doctor since they can afford to pay and no need to stay in long queues for seen the doctor.
- Many households have mentioned that when their children fall sick and when the household members become badly ill they used to visit the children's hospital and the government general hospital located in the city. The respondents have indicated both these hospitals are too crowded and they have to spend one whole day to get medicine from these government hospitals.

- ***Location of Schools***

- It was observed that a majority of school going age children are not being admitted to school in many of the families. When inquired about this situation the respondents have indicated that they do not see much benefits of sending their children to schools. Lack of a regular income for many families has been seen as the main reason for not sending their children to school.
- The few member who attend the school were enrolled in nearby school in Henamulla and Mattakkuliya areas. Both these places are within 02 km distance from the settlement.

- ***Location of Markets***

- It was observed that location of a market is not a major concern for the community of 219 Watta. The reason being that the family members who work in the Colombo main market usually purchase their daily necessities from the city market.
- About 25% of households who need to use a market visit, the street market at "Totalanga" where they buy all their daily necessities. It was also interesting to note that due to lack of wide enough access roads in the settlement no mobile vendors visit their community.
- As has been noticed in other case study settlements in 219 Watta too there was no noticeable community production activities taking place except two or three families engaged in making paper bags and preparing meal parcels. Therefore, location of a market is primarily for purchasing their households necessities only.

Hazards and Vulnerability Aspects

- The respondents have said there was no major natural hazards that affect the community but the man made problem such as lack of storm & waste water discharge system creates disturbances to their life particularly during rainy season of the year. Almost all the houses go under water (about 1 to 2 feet level) for 02 to 03 days causing damages to their houses as well as creating health problems.
- The community has a greater uncertainty of their occupancy at the location since they were given warning to vacate the site by the land owning institution. Therefore, the community feel that they would be evicted once day which is a major hindrance to improve their living condition.
- Along with the storm water drainage problem, the mosquito problem has arisen in the area. Children and women who used to stay most of the time at home were found to have been the frequent victims of mosquito menace.
- Due to indiscriminate throwing of garbage by the community members (since no municipal garbage collection is available) the foot paths and the water logged areas have become unhygienic places.
- About 30 to 40 young boys who have become drug addicts create real nuisance in the community. They steal all the valuables and even clothes from houses when ever there was a slightest chance. Therefore, the community has to take extra care to protect their belongings.
- Due to lack of sufficient toilet facilities people have to await in long queues particularly in the morning for hours to use the toilet. Women and children and elderly people have to go through a real suffering in this situation which the people seen as a major problem in their settlement.
- Most of the adult men have got used to drink illicit alcohol particularly in the evening and start shouting and quarrelling with each other. Raising children in such an unpleasant environment is a problem as indicated by the respondents.

- Since the houses are built too close to each other lack of privacy as well as disturbing noises (when some people use their TV sets and cassette players are continuous problem in the living environment.
- As indicated above, though there was no major natural disasters that affect the community poor social and physical environmental quality in the settlement provides no opportunities for the people to improve their livelihoods activities.

Mode of Transport Used by those who Work Outside the Settlement

- The responses received from the community members' reveal that almost 95% of the members who were going out from the community travel by passenger transport buses. In order to catch up a bus, they have to walk up to the main bus route at Totalanga, which is about 1km away from the settlement.
- Few women worker who are employed in tea processing factories close to the settlement walk up to their place of work. No other forms of transport modes were used by the community members while engaging their normal daily activities.

Specific Problems Related to Transport Mode Community Use

- The respondents said that they do not face major problems in using public transport for their daily activities. Because their settlement is located close to a main transport route to Colombo city on which regular bus service is available.
- The time required to reach to the Colombo central market where a majority of community members are working was 15 minutes by bus but they have to spend five Rupees per trip, which they feel expensive.

Community Perceptions about the Location of Activity Pattern Employment

- Over 75% of the members of respondents' families do work as labourers of the city's main market. They feel that their work place is conveniently located which is about 15 minutes bus ride.
- Since the community is located near a main bus route to the city, the community members find it easy to catch up buses to their work place.
- The others who work outside the city's market have indicated their dissatisfaction over the time they spent on traveling by buses. No major concerns raised by the community with respect to their work places.

Location of Hospitals

- For the community of 219 Watta most important place for taking medicine is the municipal free dispensary at Henamulla camp. They praise about the service provided by the municipal dispensary.

- For major health problems people always have the option of government general hospital in Colombo or children's hospital at Borella both are located within half an hour to one hours reach by bus. If they hire a three wheeler they can reach at both these hospitals within 30 minutes. Therefore, the community members have not mentioned major problems with regard to the location of health facilities in the city.

Location of Schools

- The community members have indicated that there are government schools available in the area where they can enroll their children.
- However, the problem raised by a majority of respondents relates to the negative attitudes of the parents in sending their children to school. The aspects of poor income, uncertainty of their occupancy etc. have contributed not sending children to school by many of the families.

Location of Markets

- It was understood that the location of market was not so significant factor for the community of 219 Watta. Because majority of the households members who work in the main city market purchase their necessities. The nearby street market called Totalanga market has been used by the members of other families. The Totalanga market is located just about ½km away from the community. Since the community members do not produce any product which is sold at the market, the market place is being mainly used by them for purchase of their daily necessities. Therefore, the community members of 219 Watta have not raised any problem related to the location of the market place.

4.7 Nawagampura Settlement, Block E&D

Nawagampura settlement located in Orugodawatta area is a relocated squatter settlement by the National Housing Development Authority during 1980s. The community identified for the study consists of 86 houses identified as Block E&D areas. It is a planned low income relocation settlement with individual service connections. Twenty households have been interviewed under the present study in Nawagampura settlement.

Persons Engaged in Daily Travel

Average households size in the community was 06 persons of whom average 03 persons were found engaged in activities requiring going out of the house daily. In almost all the families 02 or more members were going out for employment activities while others were going out for schooling and for obtaining health services.

The Household Assets

- Since the Nawagampura is a relocated squatter community each household has got a demarcated housing lot of 50Sq.m. size.
- Over 95% of the households have completed construction of a permanent housing unit on the land allocated to them by the government.

- The nature of permanency of their occupancy seem to have motivated the community to invest their housing and accumulation of other household items. Over 75% of the respondents do have TV sets, refrigerators and household furniture in their house.
- The other noticeable improvement was the owing of bank accounts by one or more members of almost all the households in Nawagampura.
- Three wheelers and motorcycles were also available for about 10% of respondent families.
- In terms of natural resources, there was no significant natural asset that is available to be used by the community in the area.
- About 50% of the respondents have indicated that they maintain a strong relationship with their neighbourers. However, a majority has pointed out that they do not participate in any Community Based Organization. The CBO, which was in operation at the early days of the settlement, has become inactive at present.
- A majority of households seem to have been managing their activities mostly by themselves.

Location of the Activity Patterns Used by the Community Members

Main activity patterns considered under the present study included place of work, location of hospitals, schools and markets used by the community. In the case of Nawagampura community where diverse skill workgroup live in seem to have their work places spread around a larger area of the city and beyond.

- ***Place of Employment***

- It was found that in each household consist of 02 or more members who are engaged in gainful employment activities. In terms of location of their places of work, majority work in town centres within the Colombo city i.e. Colombo Fort, Bambalapitiya, Pettah, Mattakkuliya, Borella, Town Hall, Kollupitiya and Narahenpita.
- The skilled nature of he work force of Nawagampura, enabled them to find employment opportunities in the formal sector establishments.

- ***Location of Hospitals***

- The respondents have indicated that a majority of community of Nawagampura used to consult a private doctor who is running a dispensary within the settlement. Also some families used to visit their family doctors who operate in Colombo city.
- Use of Colombo general hospital and the children's hospital was said to be only when the family members face serious illness. Because of the time they got to spend overcrowding conditions in these hospitals the community members prefer to visit private doctors.

- ***Location of Schools***

- The respondents have indicated that a majority of their children attend to schools in Orugodawatta and Kotaheana where some good schools are located.
- Some of respondents have raised the issue that they can't find a Tamil school close to their settlement which is a major problem.

- ***Location of Market***

- The respondents have indicated that there is no market located in close proximity to their settlement. However, the mobile vendors who visit the settlement regularly sell most of their daily necessities. Some of the respondents have pointed out that the members of their households who work in the city used to purchase their necessities almost daily and hence location of a market close to the community has not been a major concern for them.

Hazards and Vulnerability Aspects

- As indicated by the respondents there were no any natural hazards that affect the Nawagampura community.
- However, some manmade problems and social issues have given rise to increase in vulnerability of the community life.
- The drug addiction by some youths in the area has already created insecure conditions at home for the people.
- The storm water drainage system has been neglected for many years resulting in blockage of drains and inundation of the area during rainy season.
- Mosquito problem has been a continuous threat to the community health. Children fall sick regularly due to mosquito bite.
- The living environmental in the settlement is not pleasant and pose danger due to above conditions.

Mode of Transport Used by those who Work Outside the Settlement

- Over 95% of the respondents said that they and their members use passenger transport buses for their daily transport needs. The Nawagampura community is located at a walking distance (about 100 m) to the main bus route from where the people can catch up buses to the city centre and towards Borella town.
- There is no nearby railway station for the community and therefore buses have been the sole transport mode used by the people.
- The school children too found to have been using the passenger transport buses to go to their schools.

Specific Problems Related to Transport Mode the Community Use

- The respondents have indicated that the availability and accessibility to public buses have not major problem.
- Overcrowded condition of the buses in the morning and evening hours make it difficult to travel on buses. Though in terms of distances the community members travel only a few kilometers, it takes longer time than usually required due to clogging at junction centres.
- Lack of buses in the night too has created problems for those who are working on night shifts.

Community Perception about the Location of Activity Pattern in the City

- ***Location of Employment Activities***

- The respondents have not raised any issue with respect to the location of their work places in the city. It appears that the community members are satisfied about the location of their employment activities in the city.

- ***Location of Hospitals***

- The respondents have indicated that they prefer to visit a private doctor for brief illnesses primarily to save their time than visiting the government general hospital.
- The community members have appreciated the value of being located in close proximity to Colombo general hospital as well as the children's hospital at Borella which they approach for major problems. About 50% of the respondents indicated that they would prefer if the Colombo Municipal Council can establish a municipal dispensary in the area so that they can benefit much from it.

- ***Location of Schools***

- Lack of a Tamil school in the area has been a major concern by a majority of Tamil respondents in the community. They have pointed out that they need to send their children to the Tamil school in Mattakkuliya which is about 05 – 06 km away from the community.

- ***Location of Markets***

- Location of market has not been a issue of concern by the respondents. A majority of them have indicated that they purchase their necessities from mobile vendors who visit the area almost daily basis.

Illustration of Activity Centres Used by the Communities of Case Study Settlements

Name of Settlement	Location of Main Activity Centres																			
	Employment					Health					Education					Markets				
	1 Centre	2 Centre	3	4	5	1 Muni. Disp.	2 Govt. Hosp.	3 Pvt. Disp.	4	5	1 Centre	2 Centre	3 Centre	4	5	1 Public Market	2 Mobile Vendor	3 Bouti que	4	5
Swarna Road Stage II	●	●	●	●		●	●	●	●		●	●	●			●	●	●		
Badowita Settlement	●	●	●	●			●				●	●	●	●		●	●			
Bakeriya Watta Settlement	●	●	●			●	●	●	●		●	●	●			●		●		
Seevalipura B Settlement	●	●	●	●	●	●	●				●	●	●	●		●	●	●		
219 Watta Settlement	●	●	●			●	●	●	●		●	●				●		●		
Nawagampura Block E&D	●	●	●				●	●			●	●	●			●	●	●		

Note: Size of the circle denotes the importance of the activity centre for use by the community centre (Not to a scale)

5.0 Common Issues Identified with Respect to Activity Patterns and Use of Transport by Community Members

This section summarizes in brief the common issues identified with respect to the activity patterns and transport modes used by the community members of case study settlements and the issues raised by them. The issues are present under the broad themes used for presenting the case study information.

Persons Engaged in Daily Travel

- Average household size of a majority of household was 06 members of whom 03 to 04 members were engaged in daily travel. Among them, 60% to 70% were going out for employment activities while the balance for schooling and other purposes.

Location of Activity Patterns Used by Community Members

- It was observed that around 90% of those who engaged in employment activities have their activity locations within 10 km distance from the community. The balance 10% have been engaged in employment activities spread over several places beyond the above limit.
- It was revealed that the sense of permanency of their occupancy has greatly influenced in constructing permanent houses and accumulating household assets by a majority of the urban poor. In those squatter settlements (Bakery Watta, 219 Watta) where the people do not have security of tenure, no improvements in housing or accumulation of household assets were evident. Therefore, apart from the locational factors of activity patterns and the transport, the security of tenure has had notable impacts on livelihood improvements of the urban poor in those case study settlements.
- It was observed that a large percentage (around 60% to 70%) of working women were engaged in housemaid activities mostly within walking distance (01 to 02 km) or places up to maximum of 04 to 05 km distance. The rest of the women workers were engaged in factories, shops and other institutions located beyond 05 km distance.
- It was found that the community of Badowita has been mainly depend on Colombo South General Hospital (Kalubowila hospital) for their health services. All other communities except Nawagampura settlement were primarily depend on municipal dispensaries. These communities including Nawagampura have been visiting the Colombo general hospital and the children's hospital at Borella in addition to the municipal dispensary for their media needs. Visiting a private doctor has been insignificant for all the settlements except Nawagampura where there is no municipal dispensary.
- It was revealed that over 95% of school children of the case study settlements attend the schools located in different parts of Colombo city. These included places such as Bambalapitiya, Wellawatta, Havelock Town, Borella, Town Hall area, Mattakkuliya and Modara. The balance 5% have found schools located outside Colombo city such as Nugegoda, Dehiwala, Kotte etc. Among the six case study settlements only in 219 Watta community that the parents have not seriously considered enrolling their children to school due to poor income as well as their negligence.

- For almost all the case study settlements there exist a nearby market place (within 01 to 03 km distance). Therefore, many household members used to walk up to the market without using any transport mode. It was significant to note that the market place has been used by a majority of household members for purchasing their necessities and not for sale of any items which they produce. Because in these case study settlements no significant community production activities take place. The primary livelihood activities of a majority have been working in the city's establishments. Extremely limited number of persons engaged in self employment activities which are limited to making paper bags, preparation of food items, running small boutiques, mobile vendors, small repair shops, sewing of clothes etc. which really do not need a market place for selling such items. Therefore, the members who were engaged in skilled and unskilled work move about within the city using public buses or walking near by places.
- The transport mode used by a majority (over 90%) found to have been public buses operating in the city. Use of three wheelers was said to be primarily in an emergency situations. A significant number of household members found to have been reaching at their places of work and service centres by walking since such activities were located close proximity to the settlement.
- Except in Badowita settlement where the community members have to walk about 02 km to the nearest bus routes all others have the benefit of being located within less than 01 km distance to the bus route. None of the settlement has direct public bus route connection.
- The users of public buses have pointed out that during the morning and afternoon peak hours it was extremely difficult to catch up a bus due to heavy crowded condition. Particularly the school children and women have experienced the difficulties in travelling in public buses during peak hours.
- The other significant issue raised by the respondents was waste of time by travelling in public buses due to clogging at junction centres and unnecessary waiting time by the buses. The respondents have mentioned the delays by referring to the time they got to spend by travelling on buses (for a journey of 15 minutes, the buses used to take about 45 minutes). Because of this delay respondents have mentioned that they used to hire a three wheeler to go to government hospital by spending more money in order to avoid the waste of time by travelling by buses.
- Lack of school buses for school children particularly in a place like Badowita was highlighted as a major concern of the community members. The children find it extremely difficult to walk about 02 km in the morning to the bus route to take a bus to their school.
- Lack of buses during the night (particularly after 10.00 p.m.) has been a major problem for those people who work in the city on shift duties. They have to spend more money to hire three wheelers to get back home (ten or fifteen times of normal bus fare).
- No specific issues were raised by the respondents about the location of the activity patterns in the city except the following.

- The people of Badowita community have emphasized the issue of lack of a regular bus service from their community to the city particularly in the morning and afternoon for the benefit of school children.
- Some of the respondents of Badowita community as well as community of 219 Watta have mentioned about their preference for locating places of employment near their settlements.
- The community members of Badowita and Nawagampura have mentioned the need for a municipal dispensary within or near their community so that even for a brief illness they do not have to go to a private doctor or a government hospital.

6.0 Views Expressed by the Officials of Relevant Government Institutions

In addition to the members of urban poor communities, some officials of relevant government institutions as well as the academic & research institutions were interviewed in order to obtain their views particularly with respect to their roles and responsibilities in deciding the operation of transport and activity patterns in the city. The issues highlighted by the officials are present below.

Views Expressed by the Officials of the Urban Development Authority (UDA)

- The main role of the Urban Development Authority is to guide the development activities by planning and management of urban areas of Sri Lanka in order to ensure optimal utilization of land and other resources.
- Improvement of urban infrastructure and orderly development of human settlements are considered important aspects of UDA's interventions to make urban areas accessible for all the categories of inhabitants in urban areas and those who visit urban areas.
- Coordination of the activities of transportation authorities and urban local authorities aiming at improving the efficiency and accessibility to transport modes by the citizens. It is also aimed at linking the activity centres of the city with the suburban centres and neighbourhood areas to provide efficient transportation links for the people.
- The Urban Development Authority provides planning framework for improving the condition of urban poor settlements, which involves improving transportation linkages with the city.
- The UDA believes that a majority of the urban poor in Colombo enjoy a reasonable level of accessibility to the city's activity centres due to their locational advantages as well as availability of reliable transport service in the city.

Views Expressed by the Representatives of Ministry of Health

- The Ministry of Health decides on national level policies for improving the health sector of the country. The provincial and local level authorities carry out the implementation of health sector programmes and activities. Location of hospitals is a decision taken by the government based on the recommendations of the Minister In-charge of the subject of health.

- The city of Colombo, which is the Capital City of Sri Lanka, has the country's national hospital equipped with modern facilities. The national hospital has an outdoor patients department, accident ward, eye hospital, cardiology unit and facilities for indoor patient treatments.
- The especial hospitals such as Lady Ridgway Children's Hospital, the Castle Street Maternity Hospital, De-Soyza Maternity Hospital are some of the important hospitals located in the city of Colombo.
- In addition to the above, the Colombo South General Hospital (Kalubowila hospital) which is located at the Southern boundary of Colombo city too provides outdoor and indoor patient treatment facilities to the population of Colombo and its suburbs.
- Apart from the hospitals located within the city the capacities of hospitals in suburban areas of Colombo as well as in the district hospitals and local hospitals are being improved in order to meet the demand of the local population for health services.
- The office of Medical Officer of Health (MOH) located at local levels primarily engaged in carrying out preventive health care programmes, health education and child and maternity health care activities.
- In the city of Colombo, in addition to the government hospitals, the Colombo Municipal Council too provides an extensive health service to the city population through municipal dispensaries and field officials. The Public Health Department of the Municipality provides both preventive and curative health services to the city population.
- The major government hospitals which are located in Colombo have been established long time ago (over 100 years). They are located at centres, which are better served with public transport facilities.
- Since all these hospitals are meant for the public irrespective of their income, race or religion, all the citizens of the city and the people from other parts of the country do have the rights and opportunity to obtain the services of government hospitals located in the city.

Views Expressed by the Representatives of the Ministry of Education

- The Ministry of Education formulates national policies on education, which are being implemented by provincial offices, zonal and divisional offices of the Ministry. The Ministry aims at providing equal and fair opportunities for education by all the children of Sri Lanka.
- There are three categories of schools i.e. national schools, secondary schools and primary schools operated in the country. In the city of Colombo too these three categories of government schools are in operation.
- In enrolling children to primary level the distance criteria and proof of occupancy at the given address is used to ensure that the children from the vicinity are given priority in enrolling in a particular school.

- These government schools provides equal opportunities for children of all the residents in the area who satisfies the criteria for admission.
- In the city of Colombo where many schools are located close proximity to residential areas, many children find it easy to reach school just by walking.
- The existing transport facilities in the city including the private school vans provide transport facilities for school children.
- The transport may not be a barrier for the city population to access to schools located in the city.

Views Expressed by the Officials of the Ministry of Transport and Highways

- The Ministry of Transport and Highways is responsible for road and rail passenger transport services in Sri Lanka. The Ministry takes decision on national policies with respect to above, which are being implemented by provincial level and divisional level authorities.
- Railway and road passenger transport services are two important areas concerning the passenger transport in Sri Lanka. Department of Railway operates as a government monopoly in meeting the demand for railway transportation. The road passenger transportation has been handled by the Sri Lanka Transport Board and the private bus companies and bus owners.
- The government policy is to operate the Sri Lanka Transport Board buses and private buses on a competitive basis in order to provide an efficient transport service to the passenger population.
- Organization of transport operation at provincial and divisional levels involving the above two major parties and the general public is being carried out by the Ministry of Transport and the National Transport Commission.
- Organizing public transport routes at local level has been a responsibility of respective bus deports under the guidelines provided by the National Transport Commission based on the demand created by the people and their representatives in respective areas.
- As far as the city of Colombo is concerned, it is the nodel point of road and rail transportation in Sri Lanka. The Colombo Central Bus Stand and the Colombo Fort Railway Station connect the major provincial and districts towns with Colombo. The Colombo Metropolitan area is too well connected primarily by road transportation system with Colombo. Therefore, Colombo experiences a heavy traffic congestion particularly during the morning and evening peak hours of the day.
- The need for reducing the traffic congestion of the city of Colombo has been raised by many and relevant policy initiatives will be introduced in the near future.

Views Expressed by the Officials of National Transport Commission

- The National Transport Commission is primarily responsible for operational controlling of road passenger transport services in Sri Lanka. Deciding on route permits, allocation bus routes, fare structure, the policies related to inter provincial road passenger transport operations are being handled by the Commission.
- The National Transport Commission provides the necessary guidelines and broad framework on the above aspects to the provincial transport authorities to manage road passenger bus services within their respective provinces.

Views Expressed by the Representatives of Academic and Research Institutions

- Academic and research institutions such as Traffic and Transport Study Centre of University of Moratuwa, the Road Safety Secretariat at Road Development Authority and research personnel attached to the universities were engaged in carrying out research studies on different aspects of road passenger transportation system in Sri Lanka.
- Projection of demand for passenger transport, the aspects of affordability, increasing the mobility and efficiency of public transport system, reducing road accidents etc. were the main subject areas on which research have been carried out. However, it was realized through the interviews that the user perceptions on existing transport systems have not been addressed sufficiently.
- Most of the researchers have emphasized the need for improving public transport modes instead of encouraging private transport modes to minimize the traffic congestion in the city of Colombo and other towns in the region.
- It was realized that the transportation needs of the urban poor has not been studied as a significant issue by the personnel engaged in the transport research in Colombo.

7.0 Common Issues Identified through the Views Expressed by Officials of Concerned Institutions

- i. It appears that the government institutions responsible for providing transport services and the key activities such as health, education and employment, formulate their policies based on broad national issues. In such a broad exercise, the issues concerning the urban have not been considered adequately.
- ii. The above situation implies that the issues of urban poor are primarily to be addressed by the local and city level programmes and strategies within the broad framework of national policies.
- iii. The representatives of the national level institutions believe that the urban poor in Colombo do have or enjoy sufficient level of accessibility to essential services and the city's major activity patterns due to their locational advantages. This may be due to most of the urban poor settlements in the city of Colombo are located within 10 km distance from the city centre of Colombo thereby the problems of accessibility for the poor was not perceived by the officials of national level institutions. Therefore, the findings of the research study would be useful in informing the officials and policy makers on the issues concerning the urban poor.

- iv. It was revealed that most of the activity centres of the city have been located at places where transport services are available. However, it was realized that when locating urban poor settlements such as Badowita resettlement site, the availability of transport was not considered at all. Instead, the prime consideration has been the availability of land for resettling the people.
- v. Therefore, there is a serious lack of concern for providing transport facilities to urban poor communities who require transport facilities. Hence, the issue is that service activities and employment activities in the city are located close to transport routes, however, these centres are not sufficiently connected with the villages and neighbourhoods by an efficient transport network. As a result, people have to find their way to bus routes to reach to work places and service centres by spending excessive money and time, which affect their income and efficiency.

8.0 Recommendations for Policy Consideration

- i. When improving or relocating urban poor communities, in addition to basic amenities, they should be provided with public transport facilities either to their community or at a convenient walking distance (preferably within ½ to 1 km maximum). Because when people have to walk far too long for a bus route, the school children, the elderly and disable person as well as those who fall sick will be affected. Particularly the poor can't afford to pay for private transport modes to reach to their activity centres.
- ii. Location of market places and dispensaries within 01 to 02 km distance from an urban poor neighbourhood seem to have been acceptable to the poor provided there are access roads of reasonable conditions.
- iii. Location of work places particularly for women workers needs to locate within 03 to 04 km radius from their communities. The time and money that they have to spend for such a distance have not been a problem for many workers.
- iv. Location of work places for other members within 10 km radius from their community seem to have been acceptable to a majority of the urban poor.
- v. Public buses should be operated on a fixed time schedule and measures should be introduced to stop unnecessary clogging at junction centres. School buses should be provided to urban poor communities so that it would be an encouragement for the children of urban poor communities to attend schools.
- vi. It was clearly seen that the perceptions of the poor have not been considered in formulating policies for providing the public sector services. Therefore, public forums and opinion pools must be organized by service delivery organizations in order to obtain the people's perceptions on the services they provide in order to better serve the needs of the people.

Details of the Households interviewed

Name of settlement	No. of Households interviewed	Male & female members of the Household	
		Men	Women
Swarna Road stage II	20	59	53
Badowita Settlement, Attidiya	20	51	67
Bakariya Watta, Narahenpita	20	64	47
Seevalipura Stage II	20	61	75
219 Watta	20	45	34
Nawagampura Block E & D	20	70	54
Total	120	350	330

Activity Patterns, Transport and Policies for the Urban Poor-Case study of Colombo, Sri Lanka

Checklist for Household Travel Diary

(used for continuous 07 day period only)

Background information

Name of the settlement: _____

Address of the settlement: _____

Name of head of household: _____

Household identity number: _____

No. of members in the household: _____

No. of members in the household: _____

No. of members who are engaged in daily travel: _____

(one sheet must be completed for each identified member)

Serial No.: _____

Relationship to Head of HH: _____

1 Month / Day	2 Trip	3 Purpose	4 Start Time	5 Distance to Destination (km)	6 Mode of TP & Distance (km)	7 Usual Time Required (Hrs/min)	8 Actual Time Taken (Hrs/Min)	9 Waiting Time (Hrs/Min)	10 Amount Spent (Rs.)	11 Problems Faced during the Trip	12 How were you affected	13 Overall Satisfaction of the TP Mode
1												
2												
3												
4												
5												
6												
7												
										1. Bus broken down 2. Traffic congestion 3. Delay of bus arrival 4. Accident 5. other	1. trip got delayed 2. Time lost 3. Waste of money 4. Distress 5. Not severe	1. Fully satisfied 2. Satisfied 3. Indifferent 4. Not satisfied 5. Frustrated

Travel Diary Information of Household Members

Introduction

In the six case study settlements, five households each were identified for collecting information on a travel diary of the members of the household. In identification of these families, some basic criteria such as number of members in the household, number of members engaged in daily travel, the transport mode they used etc. were used. Accordingly, about 93 members were interviewed in 27 households (03 households in Seevalipura did not respond properly due to some family problems).

In the 27 households, a total of 93 members have provided the travel diary information as per the format developed by SEVANATHA. The travel diary information were processed using Excel package and some basic findings are as follows.

Findings of Travel Diary Information

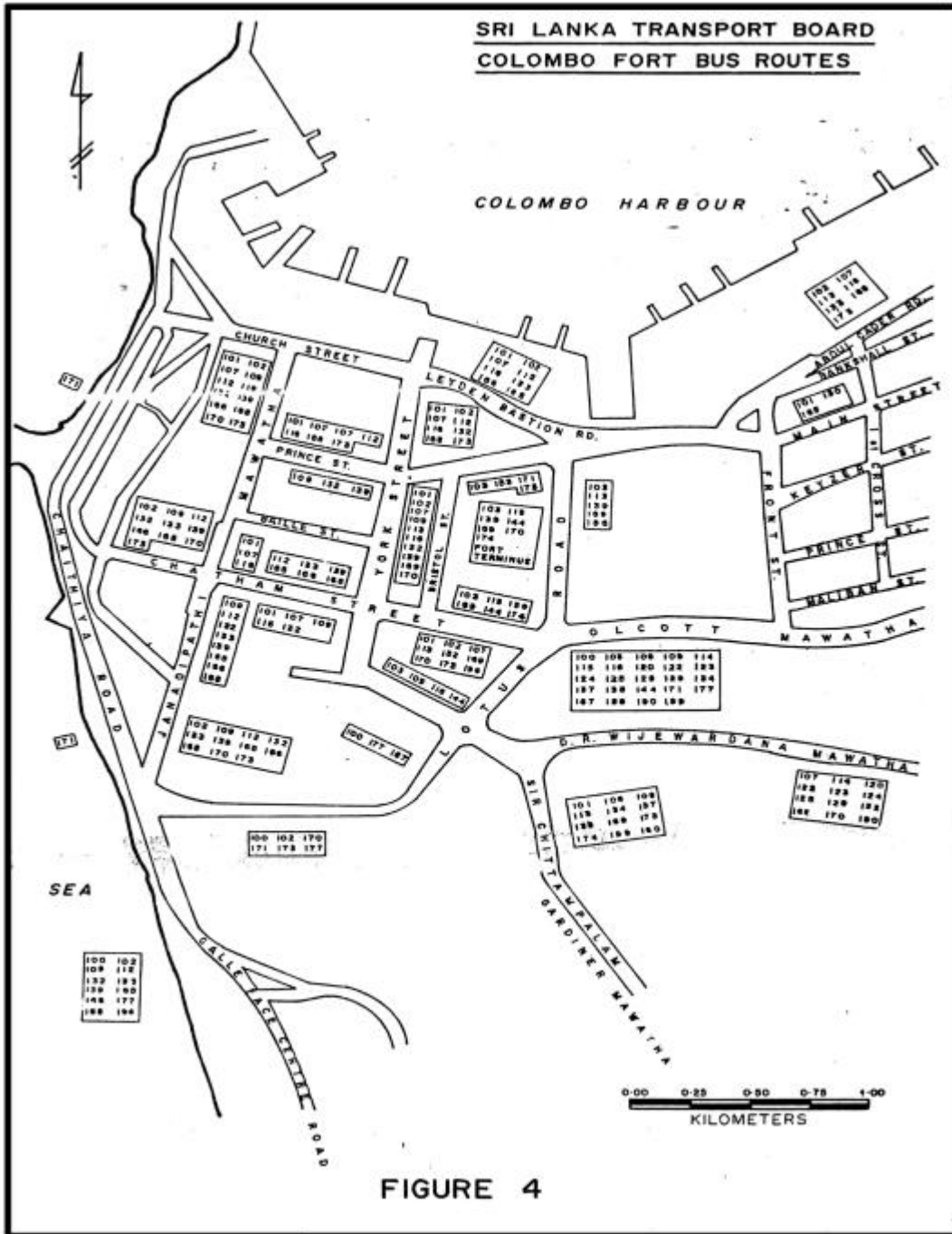
1. Average number of trips made by a family member in each settlement were between 2.0 to 2.5 per day.
2. Average distance traveled by a family member was minimum 7.11km and maximum 16.09 per day.
3. The average cost spent per km distance was found to have been between 75 Cents to Rupees 1.37 per person per day. Thus, on average Rupees 15 per day per member was spent on travelling which would be about Rupees 300 to 315 per month (excluding Saturdays and Sundays) per member of a household. When two members are of regular travelers this would be about Rs. 600 to 630 per month per household, which may be around 10% of average household income of the respondent families.
4. It was also observed that there was a significant difference between the average normal travel time, which people expect and actual time spent for their travelling. The minimum time difference was recorded in the case of Bakeriyawatta settlement, which was about 12 minutes, but in the case of Seevalipura settlement people have spent about 25 minutes than what they normally perceive as required travel time.
5. It was also revealed that Seevalipura and Badowita settlements have relatively less advantages since the community members have to spend more time and money on their daily travel. In all other settlements there were no much variations in terms of the distance traveled, time and money spent by the community members.
6. About 52% of the responses received in respect of problems faced while travelling in the buses were related to traffic congestion, 28% relating the delays of bus arrival while 15% related to accidents.
7. The respondents feeling as to how were they affected due to the problems they faced while travelling revealed that about 47% relating it to loss of time about 40% waste of money and about 13% delays in reaching their destinations.
8. When inquired how satisfied they are with the transport service they use, about 48% respondents stated that they were unsatisfied with their travel conditions. Another 32% stated indifferent. While 8% of the respondents stated that were frustrated with their transport mode.

Conclusions

- i. A majority of household members who responded to the travel diary questionnaire travel within the city primarily for education, employment and marketing purposes.
- ii. Their travel within the city for seeing a doctor and recreational purposes were irregular.
- iii. A majority of the respondents spend more time for their travel than normally expected to reach their destinations.
- iv. A majority of the respondents were facing problem while travelling which result in delaying their journeys. The delays seem to have affected in terms of loss of time and money.
- v. Over 50% of the respondents seem to have been unhappy about the transport mode and condition of transport operated in the city they use for their daily travel.

Thus, it is clear that the present transport pattern operated in Colombo does not cater properly to satisfy the travel needs of the urban poor.

Map of Bus Routes in Colombo



Map of Transport Network in Colombo

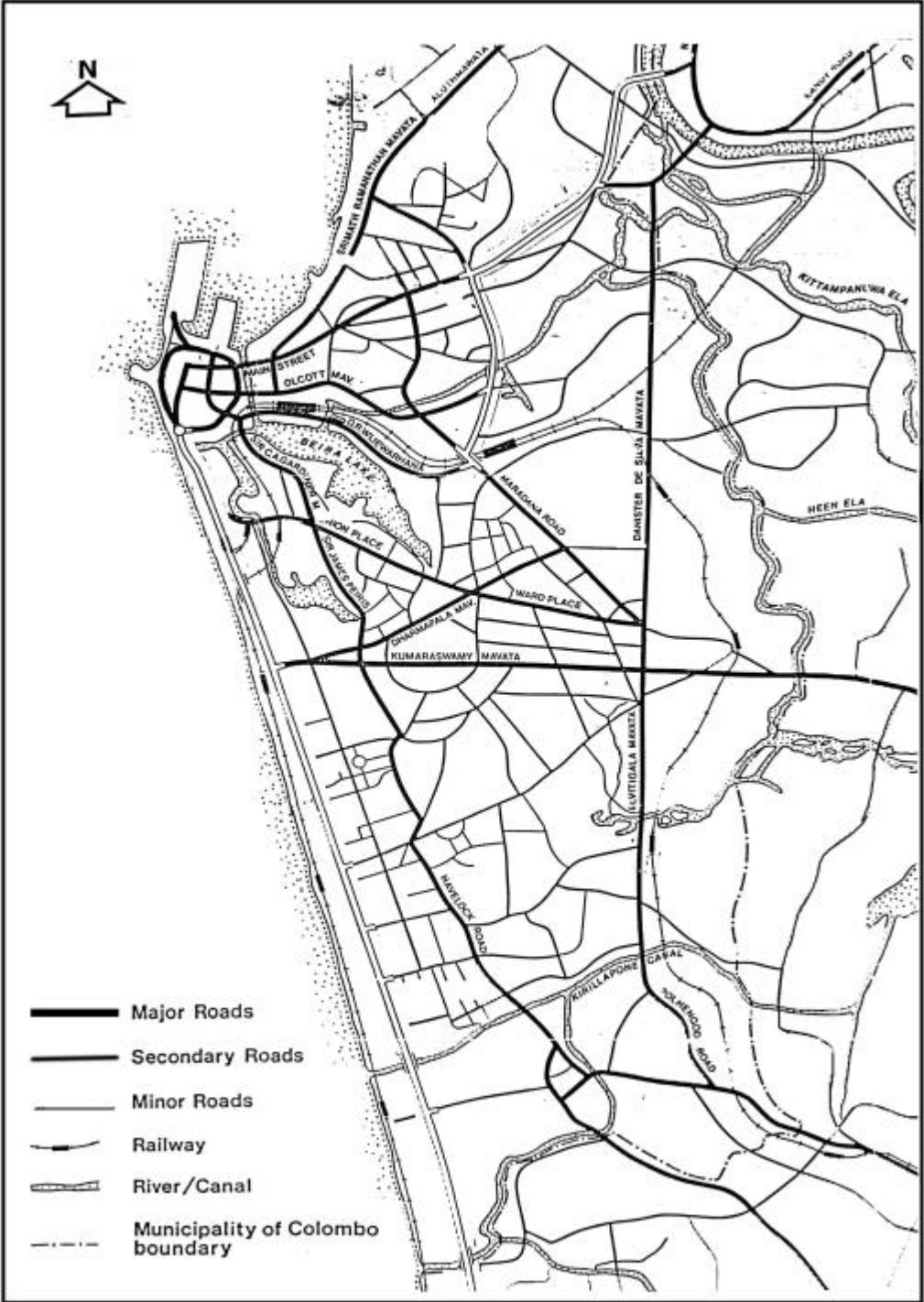


FIGURE 5