

Project No 1

DEVELOPMENT OF WATER TRANSPORT SYSTEM COLOMBO METROPOLITAN AREA

1. Project implementation agency: Sri Lanka Land Reclamation and Development Corporation
2. Estimated project cost; US \$ 125 million
3. Method of procurement: By open tender.
4. Development model: Joint Venture under PPP system
5. Implementation period: 3 Years

The Project

Due to heavy traffic burdens on main road corridors within the Colombo Metropolitan Region it has proposed to identify the potential uses of waterways which can be used as inland water transport system. As the first step the Kirulapone canal and the Kotte canal which connects Wellawatte to Battaramulle will be considered as an inland waterway and passenger boat service with many facilities to the passengers to be introduced.



Since this is a new experience to the present day Sri Lankan public it is necessary to study the potential uses of the canal transit and estimate the demand for the new transit mode for public transport, leisure activities and other social activities.

The study area is the surrounding area of the Kirulapone and Kotte canals within Colombo Metropolitan Area (CMA) which consists of around 20 Gramaseva Niladhari Divisions in both Timbrigasayaya and Sri Jayawardhanepura Kotte Divisional Secretariat Divisions (DSD). The main roads which runs through the study area are Galle Road, High Level Road, Sri Jayawardhanepura Kotte Road and Baseline Road that categorize as A-Class Roads. Other major corridors namely Havelock Road, Nawala Road, Bauddhaloka Mawatha, Park Road and W. A. de Silva Mawatha, within City of Colombo, are categorized as B-Class Roads. The population in the study area is around 200,000. They live in around 50,000 housing units including single housing units, flats and underserved settlements.

Available information on passenger transport patterns prove that more than 50% of the traffic in most of the roads consists of cars, vans and jeeps. This indicates the higher tendency of private vehicle

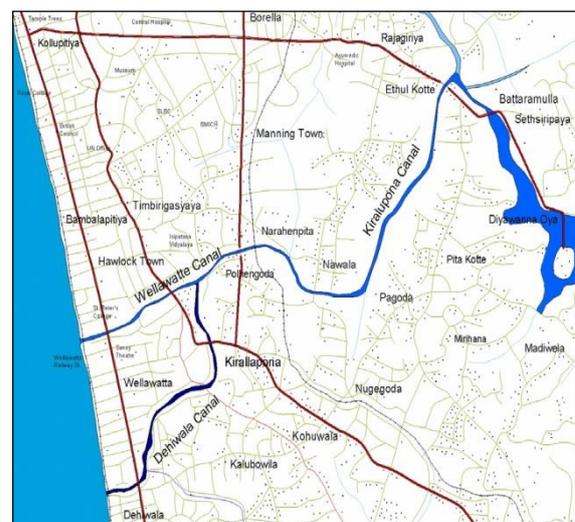


Figure 1.2: Study Area

usage due to inefficient public transport system in the study area. Percentage share of buses on roads that runs along the canal is less than 5% of the total. This shows the potential of the canal transit system developing as a public transport mode provided affordable, faster and comfortable service which is not available at present. The public presently have to lose their effective working hours by spending more time on road. The second highest percentage of transport accounted by three wheelers from 13 – 33 % depending on the traffic of the area. As the three wheeler usage is high we can expect people to use boats as a transit mode even though the travel cost is more than the normal bus fare. At the same time the private vehicle owners would prefer the boat transit since their travel cost will be reduced. The freight transport vehicle usage along the canal corridors is not available and there is no potential to develop the boat system for freight transport.

Public attitudinal studies on the canal transport system cannot be explained correctly because there was no system available in the study area in the past. This would be introducing for the first time along the Kirulapone Canal and it will be a new experience to the public. It is difficult to explain to the public about the advantages and facilities available in the canal system. People generally think that they would use this new service for leisure and recreation purposes. However, people in Borrella, Rajagiriya and Welikada areas like to use it as a public transport mode for work due to high traffic congestion experience on roads in these areas during the peak time. There will be less demand in the day time and high demand in the night time for leisure activities which will demand more recreational activities along the canal banks.

Presently, there is no proper connecting mode in the East-West direction in the Colombo region, unless the prevailing bus services cater to that necessity. The use of available canal network could provide this facility and has the potential to reduce the travel time drastically on these and other travel corridors. By using the existing canal systems, strong east-west transport connectivity can be generated for the commuters' convenience.

A feasibility study on waterborne transport in the Wellawatte - Battaramulla corridor was carried out in 2004. The study concluded that many people would prefer to use canal transport for leisure and recreational activities. Moreover, the study indicates that passenger vehicle users would be willing to shift to canal transport even at a moderately high fee. Therefore, it can be deduced that the implementation of the water transport system would significantly reduce the traffic congestion on the Wellawatte - Battaramulla corridor.

Implementation of the water transport system will also benefit travellers in other ways. Comfortable air conditioned boats will ensure a smooth comfortable ride for passengers. At the off peak periods, especially at night time this system can be used to promote ecotourism around the Colombo city making this city an active and an attractive area during night time as well. This will add a facet to the city's transport infrastructure. Boat jetties can be placed at main linking points where the canals cross the main roads and in other places where necessary improving the accessibility and the inter connectivity between other modes.

The following three inland water transport lines have been identified by the Megapolis Transport Committee as potential routes,

1. Wellawatta – Battaramulla Line
2. Fort – Union Place (along Beire Lake)
3. Mattakkuliya – Hanwella (along Kelani River)
4. Any other lines proposed by the project proponent.

In addition to these, any other routes (including ocean connectivity), if found to be feasible by the Investor, will be considered subject to the presentation of a feasibility study on the same.

The Wellawatta-Battaramulla route has the most potential to provide an urban transport solution. It intersects 6 main roads including Marine Drive, Galle Road, High Level Road, Baseline Road, Nawala Road and Parliament Road out of which 3 of them are main 7 corridors. This is one of interventions identified under the Megapolis plan that can come in to action immediately. The detailed feasibility study for this line, conducted in 2004, has to be updated to reflect current conditions, and also to determine whether the route can be linked or extended to the surrounding ocean.

The shuttle boat service proposed in the Beira Lake from Fort to Union Place route will save a lot of time for passengers who have to use bus service to connect these points especially during peak time. The feasibility of the line has to be conducted.

The line along Kelani River from Mattakkuliya up to Hanwella route has high potential to provide an alternate mode for the low level corridor where the public transport is poor. The feasibility of the line has to be conducted, including determination of whether the route can be linked or extended to the surrounding ocean.

The total cost for the project is estimated at USD 125 million. Each route of the project will be treated as a separate mini-project, and will be implemented via a public-private partnership mechanism (PPP), on a design-build-operate basis. The updated feasibility study for the Wellawatte-Battaramulla route, as well as the detailed feasibility studies for the Fort – Union Place route and the Mattakuliya - Hanwella route, will also be conducted separately by the investors chosen to design, build and operate the relevant route.

There are two main activities to be completed prior to commencement of water transport in the three routes. These are:

- i. Manufacturing and supply of boats – It is estimated there should be at least 30 boats to be deployed in all the three routes. Time required for the manufacturing and supply of this number of boats will require approximately two years.
- ii. Construction of Jetties for embarking and disembarking of passengers in the three routes. Depending on the passenger traffic the number of jetties to be constructed in each route should be determined and a prospective commuter survey have to be undertaken for such determination. The construction period of jetties and connected infrastructure needs will require another one to two years, where I and ii could be implemented simultaneously.