

ACTIONS TAKEN BY THE COLOMBO MUNICIPAL COUNCIL FOR REDUCING THE RISKS OF NATURAL DISASTERS IN COLOMBO CITY

PRESENTED BY
OMAR KAMIL
CHIEF CITY ADMINISTRATOR
COLOMBO
08 June 2010
New Delhi

LOCATION OF SRI LANKA IN INDIAN OCEAN





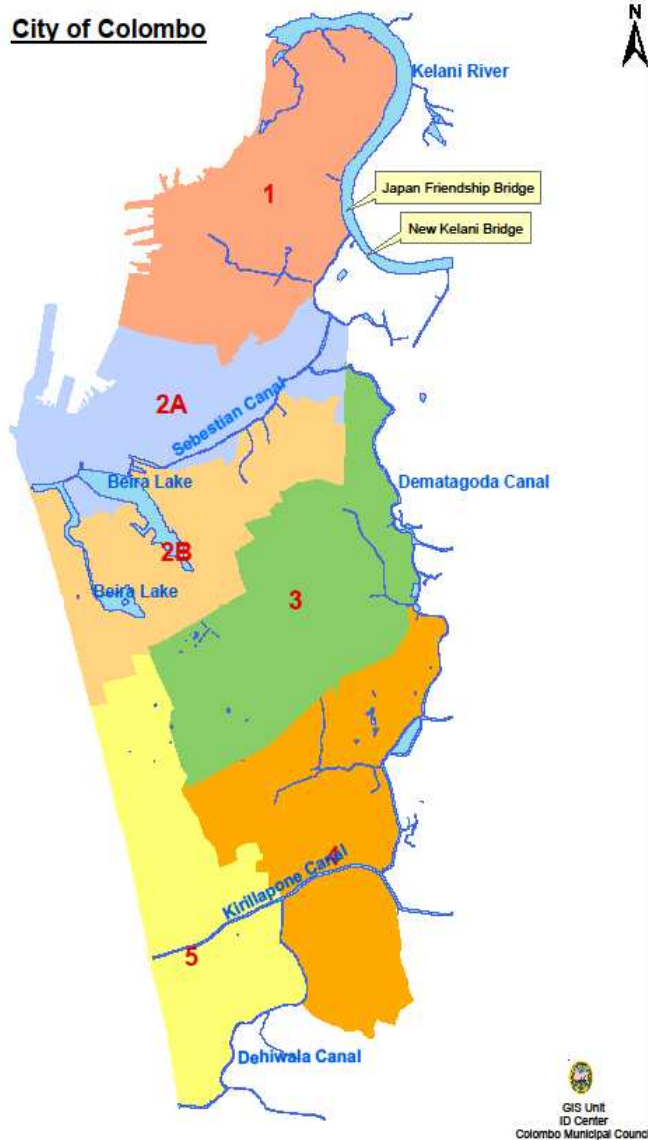
Sri Lanka is a country with less natural disasters in common when compared to other countries in Asia.

TYPES OF DISASTERS

- Floods
- Cyclones/Typhoons/ Tornado
- Earthquakes
- Land Slides / Earth Slips
- Fire
- Tsunami
- Epidemics

STORM WATER DRAINAGE NETWORK OF THE CITY OF COLOMBO

City of Colombo



Storm water drainage system of Colombo is a gravity system which connects to a canal network.

Colombo Municipal Council is responsible for Operation and Maintenance of 350 km of underground and surface storm water drains which are connected to the canals and the Beira lake with final disposal to the sea.

Canal network is vested with the Sri Lanka Land Reclamation and Development Corporation (SLLRDC) and the Beira lake with the Sri Lanka Ports Authority (SLPA)

Estuary of the one of the longest rivers of the country “Kelani River” is located bordering the northern part of the city.

CAUSES OF FLOODS

Colombo is a coastal city with very low altitude (1.5 m above MSL) resulting in a reduced flow rate in the canal system. City network was commissioned in the year 1910 for a population of 100,000 which has now increased to 650,000.

Illegal developments in canal reservations has caused difficulties in canal maintenance and thus reducing the carrying capacity.

Retention areas of the city have been reduced due to legal and illegal constructions.

Less open areas and more paved areas due to rapid development has resulted in faster surface runoff.

Therefore Floods are common in low lying areas of the city during heavy rainfall.

RECENT FLOODS IN COLOMBO



Flooding near to a canal bank



Unauthorised slum on a drain



Unauthorised structures on a canal reservation

ACTIONS TAKEN TO MINIMIZE FLOODS

- Regular maintenance of storm water drains.
- Construction of new drains with improved capacities.
- Removing unauthorized structures on drains.
- Removing encroachments into canal reservations.
- Dredging of main canals and lakes .

CYCLONES AND TYPHOONS

Colombo is frequently affected by climatic disasters created in Bay of Bengal since Sri Lanka is close to the Bay.

Most common disasters are cyclones and typhoons resulting in falling of huge trees on road sides as well as within residential and commercial premises. These trees grow rapidly since Colombo is located in the wet zone of the country.

DAMAGES DUE TO HEAVY WINDS



ACTIONS TAKEN TO MINIMIZE DAMAGES DUE TO HEAVY WINDS



A tree maintenance unit is operating under the Lands and Environmental Development Division of the Colombo Municipal Council.

To avoid falling of trees during heavy winds and rains this unit conducts a continuous program for balancing trees on road sides by pruning and trimming .



During recent storms very few occasions of fallen trees and branches were experienced.

RELIEF ASSISTANCE



Centre to accommodate
affected persons

The public assistance department of the Colombo Municipal Council provides relief services to those affected citizens during disasters and calamities.

All other departments support them to carry out their services during disasters by means of providing additional resources.

DISASTERS DUE TO FIRE



Fire in a congested slum area

Fire Services Department of the Colombo Municipal Council plays a major role during a disaster.

Sudden fires occur in a disaster are controlled by this department. They have ability to reach the place affected within 05 -10 minutes time.

During such calamities Fire Brigade together with their paramedics are able to respond to emergencies providing medical attention etc.

They further assist the lands division to remove fallen trees along side roads during times of emergency.

ACTIONS TAKEN TO MAKE THE CITY RESILIENT

- Formation of a Task Force under the Ministry of Defence which consists of all organisations having the responsibility of mitigating floods.
- Setting up of a Disaster Management Committee to establish a system with preparedness to act immediately, efficiently and effectively after a disaster.
- Improvements to risk information and early warning systems to help establish escape routes, locating evacuation centers etc.
- Building a culture of safety and resilience to make sure that public consciousness on disaster preparedness.
- Reducing the risk of the key sectors by minimizing unplanned urban developments to ensure that critical infrastructures and services are always operational.
- Inclusion of a disaster fund in annual budget of the council.

ACTIONS TAKEN TO MAKE THE CITY RESILIENT

- Programmes in schools to make school children disciplined in Solid Waste handling (To avoid local flooding due to unplanned disposal of solid waste)
- Prevention of destroying environmentally sensitive land use, particularly water retention areas.
- Discouraging investments in human settlements and developments in environmentally sensitive and disaster prone areas.
- Encouraging investments based on sustainable urban development principles, in areas free or less vulnerable.
- Prevention of unauthorised constructions and taking steps to plug the loopholes and strengthening the existing procedures.

Thank You

