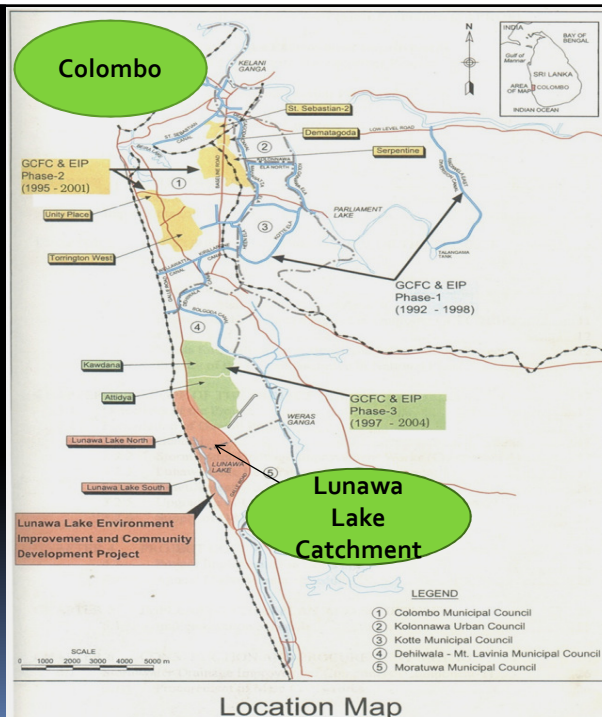


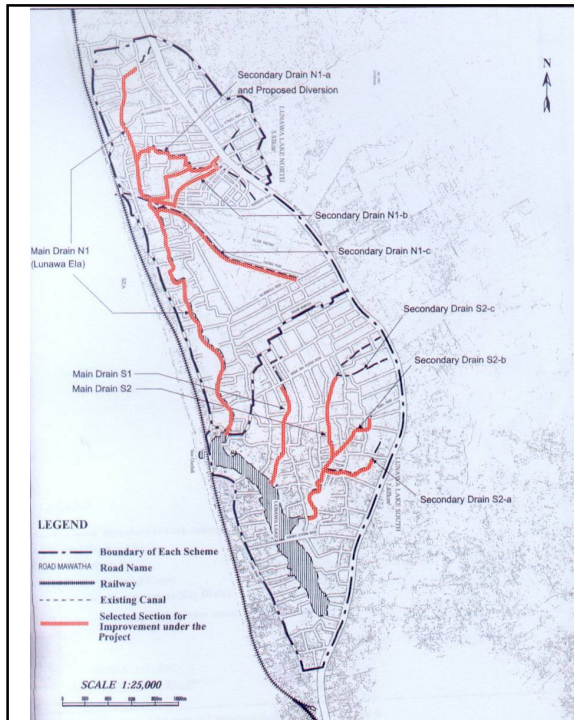
# COMMUNITY AS PARTNERS TO IMPROVE DISASTER RESILIENCE: THE "LUNAWA" EXPERIENCE

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Location Map



Location Map



**The Project Area:  
Densely populated  
Ratmalana and  
Moratuwa  
Urban  
agglomerations**

## PROJECT AREA

**○ Catchment Area - 6.15 km<sup>2</sup>**

(Parts of Dehiwala Mt Lavinia  
and Moratuwa MCs)

**○ Affected Population - 18,000  
families**

**○ Lake Area - 20 ha**

(WL = 0.5 m MSL)

## Lunawa Catchment: Status prior to 2002

**'Biologically Dead' Lake-**

**Environmentally Degraded Area-**

**Habitual flooding- 4 to 6 times annually-**

**Contaminated with 'Toxic Waste'-**

**Directly affected around 18,000HHs-**

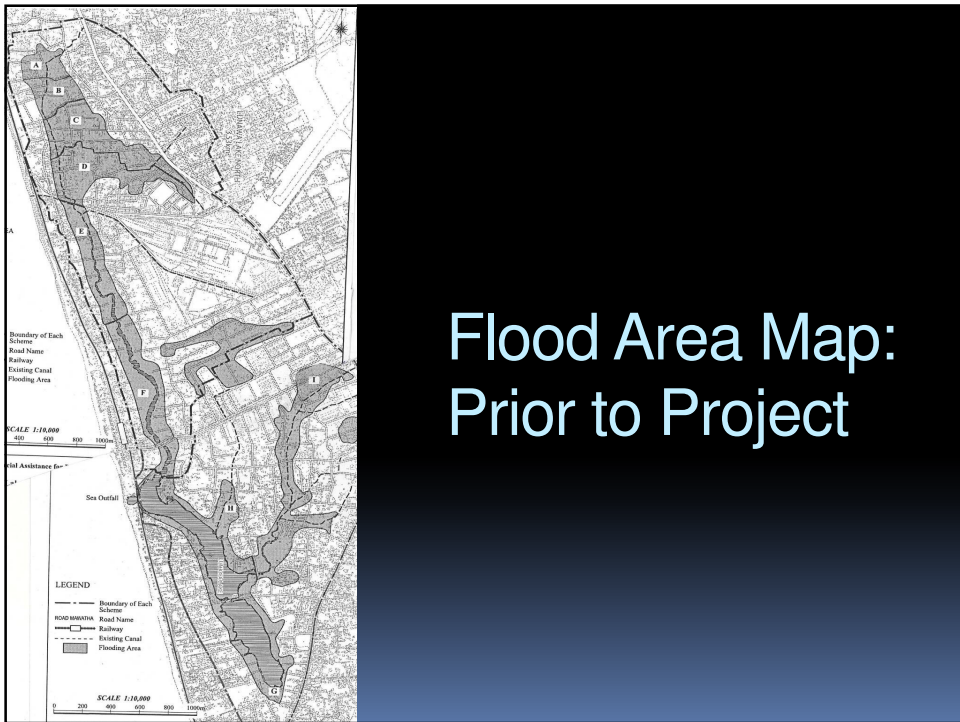
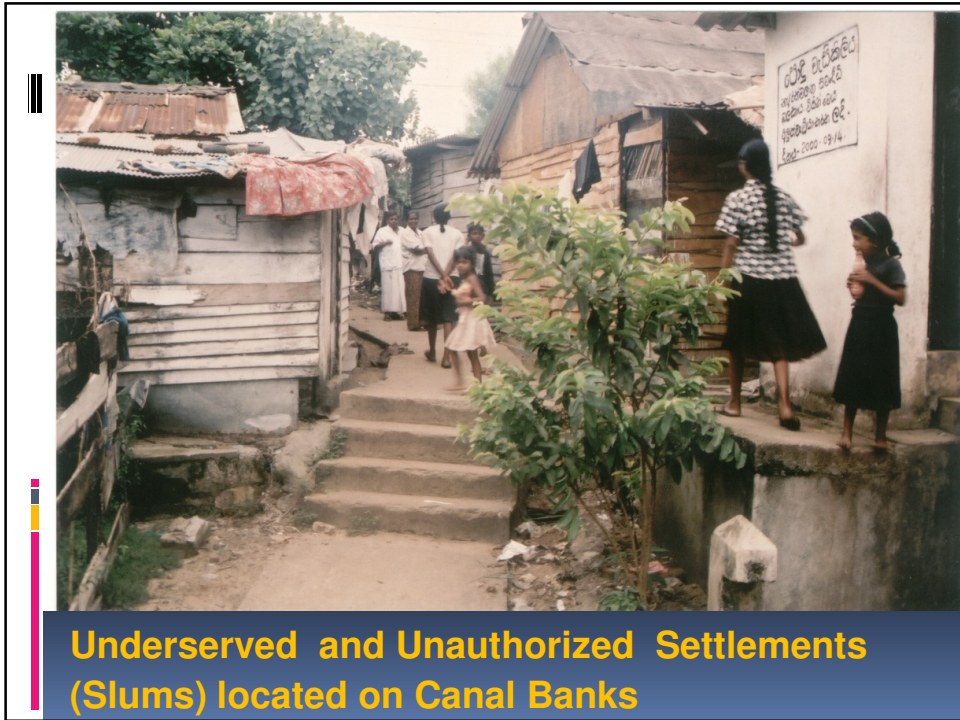
**Unhygienic surroundings with Water stagnation,  
polluted water & Mosquitoes-in Canals and the Lake-  
A "health hazard"**

**Due to indiscriminate human activities  
(Industrial & Domestic Pollution) that had  
taken place during last 3 decades**

## A few Glimpses '**Before**' the Intervention of the Project







**Impassable Roads During Rainy days...**



**Habitual Flooding contaminated with Toxic Waste...**

**S.Mahinda Mawatha-  
Ratmalana**



**Streams or Canals than roads !**

- Consequently, It was necessary for the Government to intervene and arrest further Environmental Degradation and prevent Flash Flood Damages and rescue one of the finest Residential and Economically Vibrant urban area just south of the Colombo City.
- The Government through a Credit Facility from the Govt of Japan (JICA) implemented Lunawa Lake Project (2003-2010)

### **LEI&CDP MAIN OBJECTIVE:**

to Improve the **Living Conditions/ Quality of Life** of people in Lunawa catchment by **mitigating flood damage** through an **integrated programme** of improvement of urban drainage and canal systems, including **Social and Community Development** within the catchment **on a sustainable manner.**



## Technical Performance:

- **Length of Canals:**
  - Main Canals - 6.8km
  - Secondary - 7.4 km
  - Tertiary Drains - 50.4 km
  - O&M Side Drains - 20.0km
- **Length of Roads:**
  - Canal Bank Roads - 15.7km
  - Peripheral Roads - 4.0km
- **No of Bridges** - 06
- **Culverts** - 105
- **Road Reinstatements** - 40.9km
- **Lake Dredging** - 36,500 cu.M

## Resettlement Performance:

- Has successfully implemented a **participatory Resettlement programme** for around **900 PAPs** as per the **Principles of NIRP**.
- Acquired around **25 Acres of Private Lands** in the Catchment for the Canal & Road works and for other ancillary development activities.
- **More than 2000 land parcels** had to be **acquired**.
- **99%** of the **PAPs Voluntarily participated** in the Development Programme and established a '**win-win**' situation.

## What is so special of Lunawa Project?

- The Project was designed as a **'social'** and **'Technical'** Integrated Initiative.
- It was **'planned'** and **'implemented'** through **participatory and partnership approaches** with all relevant **Stakeholders** (MMC/DMMC/Communities/Govt. Institutions)
- It was a **'Community Based'** Development Exercise from the inception.
- The **Community** (both Project Affected and Benefitted) have been **in the centre of the decision making process.**



## Lunawa...

- There was a strong **Community Development Focus** which is **key to the sustainability of the Project**.
- **'Active'** participation of people (on one-to-one basis) with equal rights as against the **'passive'** participation of people in a **Technocratically driven conventional development programmes**.
- **Regular Consultations** and **Dialouge** have refined the development process to eventually achieve the required **comprehensiveness**.

## Guidelines adopted in new development initiative...

### Overall Planning:

- The new settlement Planning was done as per the Special Project Guidelines of the UDA Act.
- They are high density G+1 Town Houses.
- UDA Planning Committee approvals have been obtained for all new resettlement and Community Upgrading sites.

## Guidelines adopted...

- The **Sites** have been **prepared** to the **best Engineering Standards** as per the Guidelines set forth by the SLLRDC- (the State Agency responsible for regulating the reclamation and Land development activities in Low lying areas).
- The **Houses** were **designed** through a **Community Housing Information & Advisory Service** with the assistance of Community Architects.
- **Every House** is at least **slightly different** from the other.

## Guidelines adopted...

- **Variations** to the houses that came up on a 50M2 plots were accommodated/incorporated **as per the aspirations** of the **Beneficiaries**
- The **National Level Technical Guidelines** for **Disaster free Housing** was prepared by the NHDA after the Tsunami devastation.
- The **structural designs** for all the **buildings, Houses** and other **Infrastructure Components** were done by the NHDA professionals **as per those Guidelines**.

## Lunawa...

- The current focus is on '**consolidation**' of development activities with continuous attention on **Operation and Maintenance** through **NDFs**, of the **services installed** and **facilities provided**.
- It was a **Social Engineering project**
- A **Meaningful Investment** in **Environmental Management and Disaster Resilience**.
- A **Hazard free** and **Disaster mitigated** Lunawa Catchment

## What Happened in Lunawa during Laila Cyclone?

With the highest rainfall data (**177mm**) recorded for the month of **May 2010**, the Project area was **safe and spared of flooding**.

## What happened during the months of November 2010...

- **Highest Rainfall** ever recorded (**382mm**) in the **Catchment Area** (Ratmalana)
- Yet **No Flooding** in **Lunawa**

## A FEW BEFORE AND AFTER SCENARIOS







**Aponsu Mawatha-  
Laxapathiya,  
Moratuwa**



**The Main Canal in Ratmalana area during Laila**



**Dewata road downstream**



**Dewata road downstream**



## **O& M Works:**

Contracts have been given to  
Communities for small O&M of the  
canals

## **How to Sustain Flood free Catchment with Improved Environmental Quality ???**

An Effective, easy to manage  
Community based Operation &  
Maintenance Strategy is being  
tested with Specific roles of  
Stakeholders clearly spelled out



Thank You