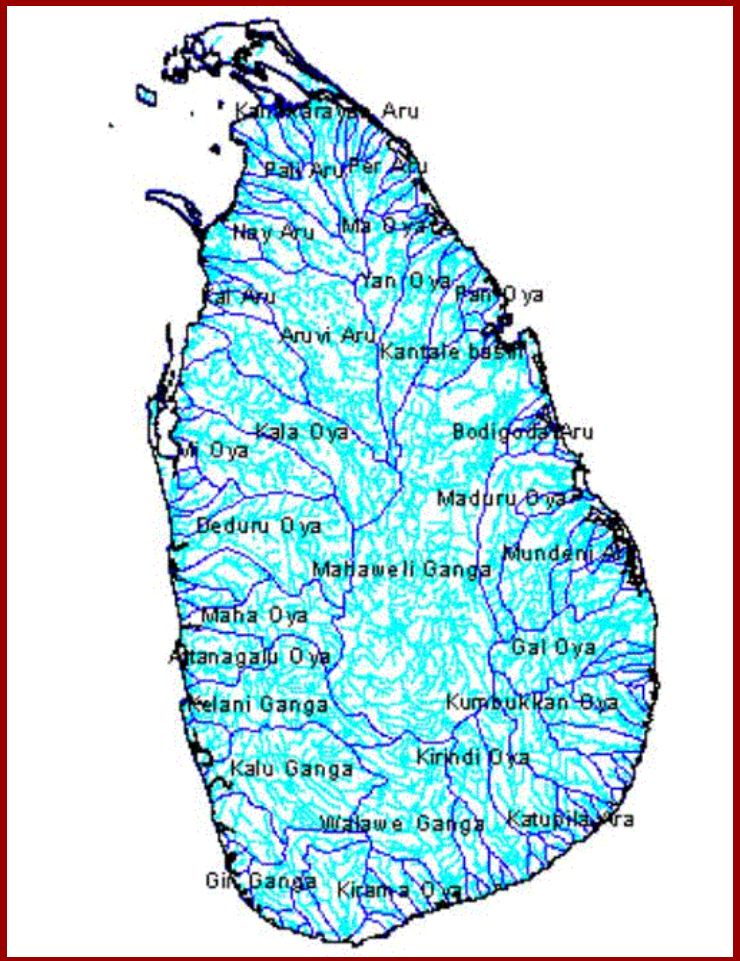
Introduction to Kala-Oya Basin Organization (Pilot Project)

Vital Statistics – Sri Lanka

- Land extent - 65000 sq km
- River Basins - 103
- Rainfall received annually - 12 m ha. Meters of water
- Evaporation Loss - 50% of Rainfall
- Seepage Loss - 20% of Rainfall
- Available as stream flow - 30% of Rainfall

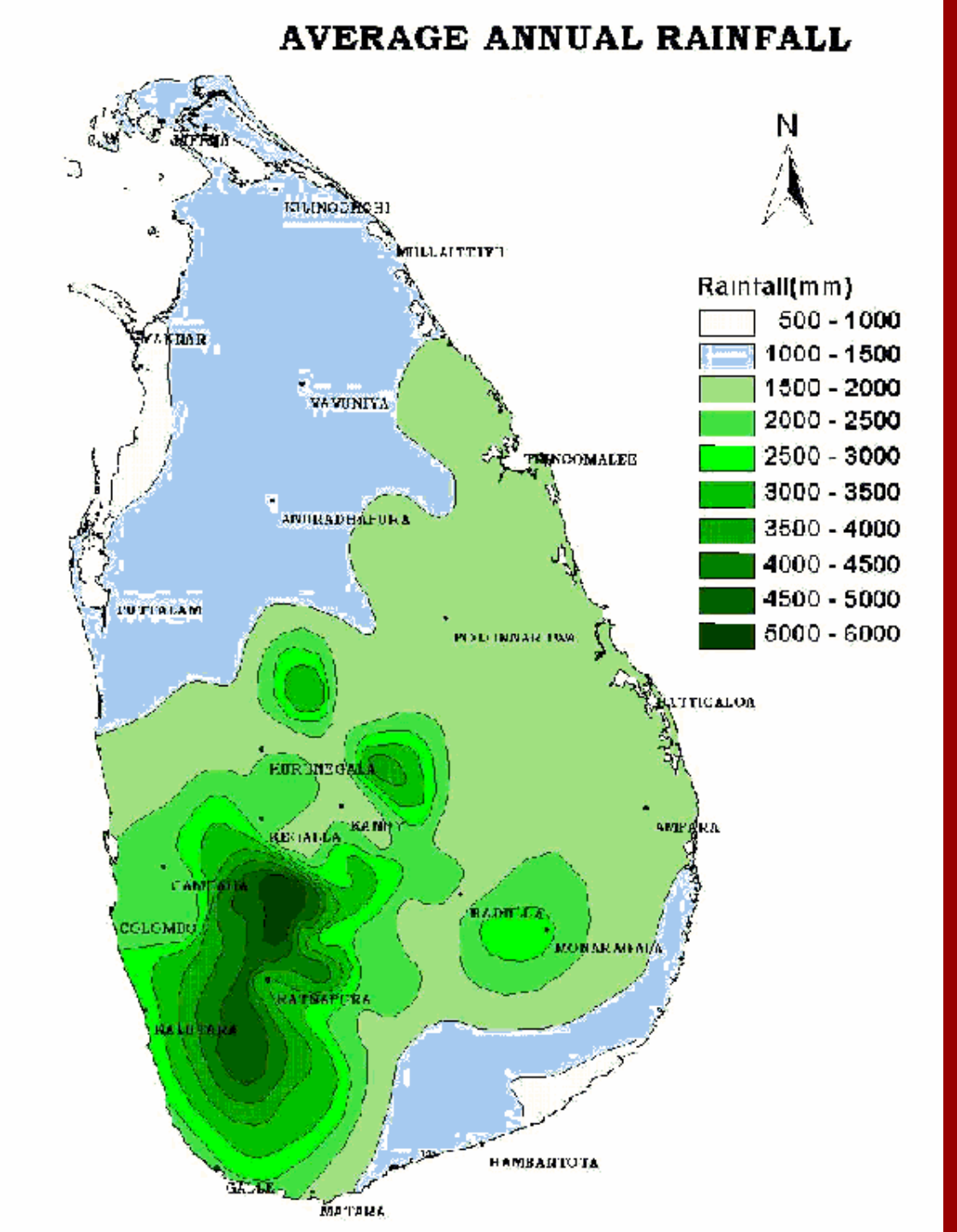


River Basins in Sri Lanka

Available water for use – 30% + 20%

- For Agriculture and to meet all Human, Animal and Plant needs.
- For Drinking
- For Bathing and washing
- Energy
- Others

Dry and Wet zones of Sri Lanka with average annual rainfall



Mahaweli Development Project its Goals and Achievements

- Mainly for the irrigation purposes in the Dry Zone.
- It is a multi-purpose river basin development project.
- Project cost was about Rs. 92 billion (as at 2004)

- Increased Power Generation capacity by - 137%
- Paddy Cultivation Area of Mahaweli - 16%

Total Paddy Cultivation Area of the Country.

- Mahaweli Paddy Contribution - 25% of National Production
- Mahaweli Power Contribution - 55% of National Power Generation (1994 - 95)
- Mahaweli has already recovered the cost.

After completion of the project, several new issues/problems were identified in the project area which need early attention

- River Basin environment being increasingly threatened
- Erosion , destruction of vegetation , solid waste dumping, riverine encroachment etc.
- Increasing water pollution.
- Problematic allocation of water for competing demands, (agriculture and hydro-power competition , Drinking water, Environmental requirement etc.)

- Problematic allocation of land served with Mahaweli waters. (Second and third generation problems)
- Maintenance of a large network of main canals, Distribution canals , Field canals.
- Aging of large structures built on different technologies.
- Possible threats from natural disasters – earth slips and earthquakes as well as possible threats of floods.
- Dam safety.

- Insufficiency and out - moded methods of our collection, processing, dissemination and use of hydro - meteorological data.
- Insufficient knowledge of our ground water status and its effective use.
- Under - utilization of our reservoirs from non - agricultural but effective other economic persuits such as inland fisheries and tourism.
- Economic use of water.

KOBO is an outcome of Mahaweli Rehabilitation and Restructuring Project (MRRP) (1998 – 2003)

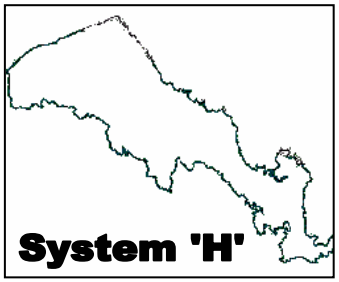
- The River Basin Planning and Management Division (RBP & MD) of MASL - 2000
- Preparation of comprehensive River Basin Plan for KOB - 2001
- Formation of KOBO - 2002
- Completion of MRRP - 2003
- Draft comprehensive plan completed - Sep 2003

SUB CATCHMENTS OF KALAOYA BASIN

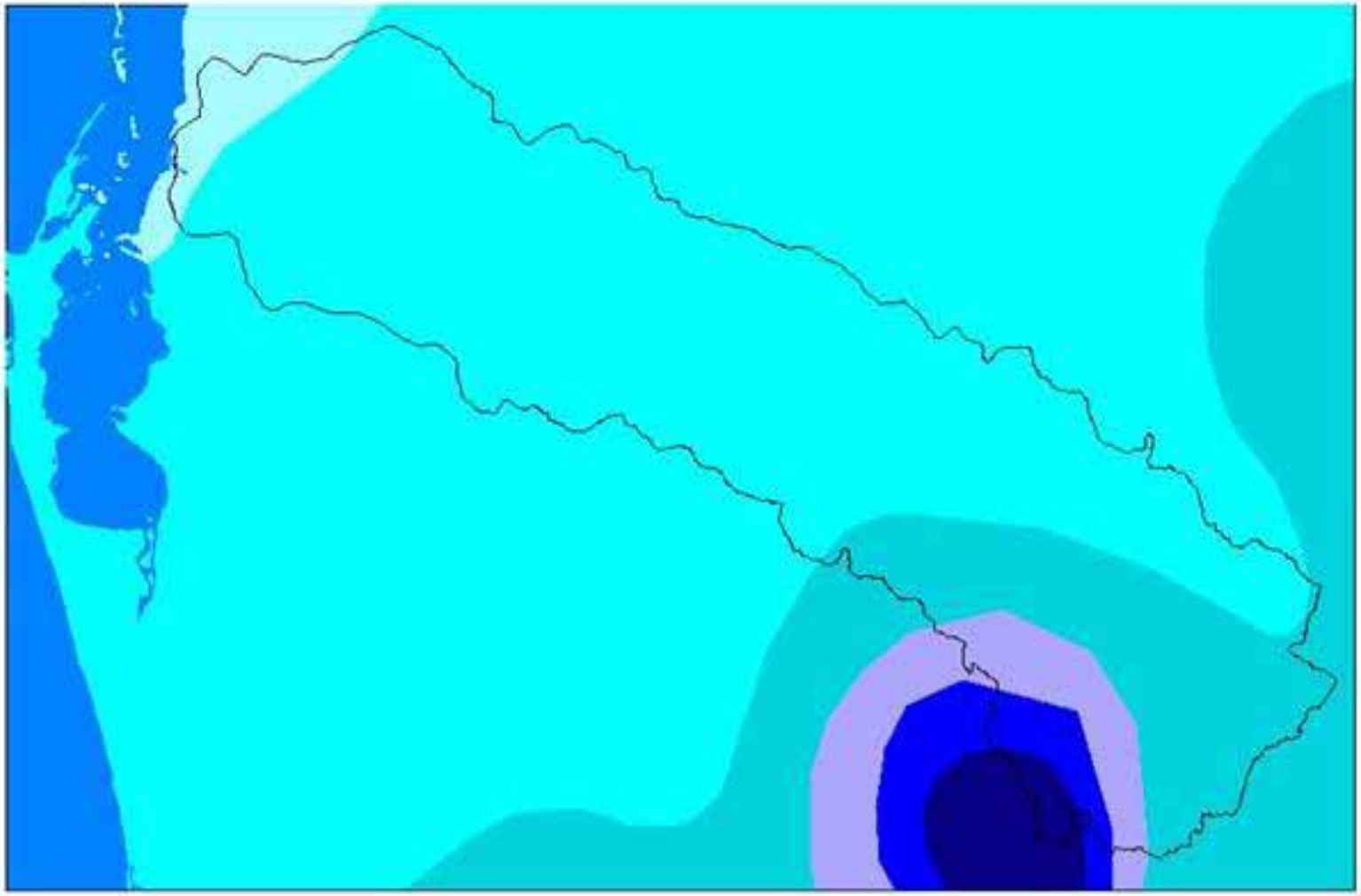
KALA OYA BASIN (MAP)

LEGEND

- SEA OUT FALL CATCHMENT
- RAJANGANAYA/ ANGAMUWA CATCHMENT
- USGALA -SIYAMBALANGAMUWA CATCHMENT
- KALA WEWA/BALALU WEWA CATCHMENT
- DEWAHUWA CATCHMENT
- DAMBULU OYA CATCHMENT
- KANDALAMA CATCHMENT



Annual average rainfall - Kala Oya basin



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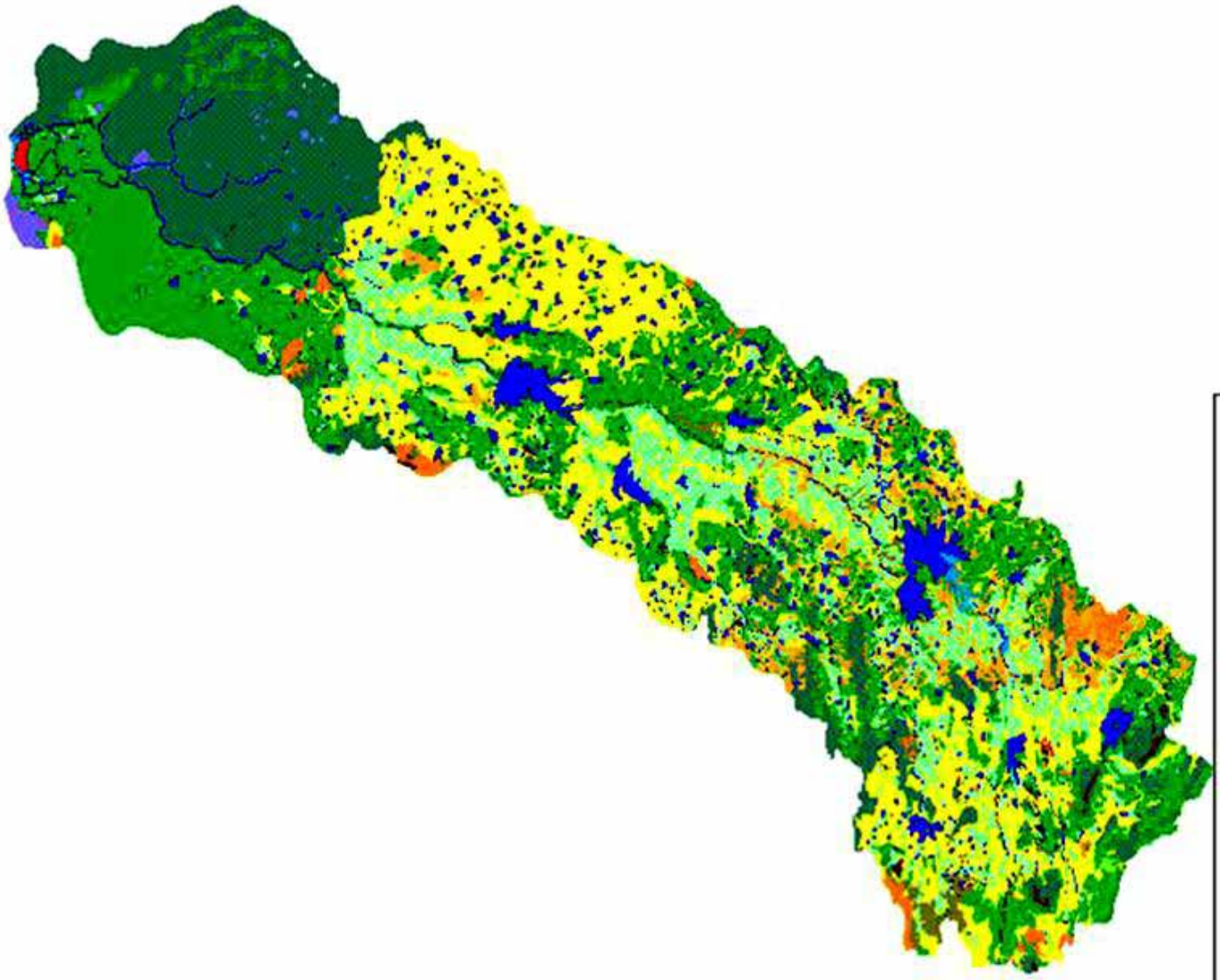
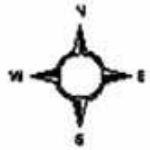
Important Statistics of Kala Oya Basin

1. Basin population - 0.41 Million
2. Extent of the Basin - 2870 sq.km.
3. Major Reservoirs/Scheme Dewahuwa, Dambulu Oya, Kandalma, Mahailluppallama, Katiyawa, Rajanganaya, Angamuwa, Neela Bemma Anicut and Kalawewa
4. Small Tanks - 856 Nos.
5. 76% KOB is in dry zone and 24% in intermediate zone
6. Land use

Shrub jungle	- 21%	Home gardens	- 17%
Forest	- 27%	Paddy cultivation	- 21%
Working tanks	- 7%		

LAND USE - KALA OYA BASIN





Land Use

- Build-up Area
- Chena
- Coconut
- Forest
- Garden
- Grassland
- Marsh
- Other Plantation
- Paddy
- Rock
- Scrub
- Tank Abandoned
- Tank Working
- Water Hole

Protected Areas

DWLC Managed

Wilpaththu National Park

Kahalla-Pallekelle Sanc.

Sigiriya Sanc,

Tabbowa Sanc.

Marine Bar reef Sanc,

Girithale Minneriya Nature reserve

FD Managed

Dry monsoon forests,

Sparse & open forests,

Moist monsoon forests,

Riverine forests,

CHARACTERISTICS OF KALA-OYA BASIN

- **Elevation range 0 - 600m** (Varies from coastal area to up country)
- **Major crop in the area - Paddy**
- **Average annual rainfall - 1500mm**
- **Water demand - 97% for irrigation & 3% for drinking and other purposes**

Status of Water Policy

- 02 Policies approved by the cabinet (2000, 2004)
- Approximately 26 drafts of the water policy
- Approximately 10 drafts of the act.
- Still revising the policy.
- Draft of new water policy advertised in 09 th October 2006 , for entertaining public views.

Comprehensive Plan consists of 02 parts

Wet area - WRM Plan

Dry area - Tank cascade area (65%)

At Present, KOBO is conducting the participatory process, for

- Building up consensus on the plan with basin stakeholders.
- Collection of data and analyzing.
- Up dating the plan.

Moreover , pilot level implementation of certain Components in the plan for ,

- Testing acceptance of the people to the plan
- Testing long term sustainability

  eg. Cascade development on pilot basis
  - Researching for a suitable institutional arrangement of stakeholders for implementation

Present Undertakings

1) Development of Hydrological Model.
2) Water Quality Monitoring (12 stations)
3) Data Base development.
4) Awareness programme on IWRM , for school children , and the community.
5) Promotion of Rain water harvesting for drinking & Agricultural purposes.
6) Cascade development on pilot basis.
7) Mitigation of Human – Elephant conflicts.

8) Homestead development.
9) Upper watershed management.
10) Reverine Management.
11) Ground water studies.
12) Introduction of modern agricultural techniques on demonstration basis.
13) Introduction of high value, Low water consuming crops on demonstration basis.
14) Promotion of post harvest technology.
15) Encouragement of forward agreement for farmer produces.

Development of Hydrological Model

Water Quality Monitoring

Awareness Programme for School Children

Tree Planting Programme

Rain Water Harvesting for Domestic Purposes

Desiltation of

Small Tanks

Improvement of Dead

Storage for Ground Water Improvement

Homestead Development

Rain Water Harvesting for Agricultural Purposes

Rain Water Harvesting Ponds for Ground Water Improvement

Riverrine Management

Ground Water Level Monitoring

Micro Irrigation

Cattle Shed Programme

Thank You