

A scenic view of a river or lake with trees on the left and a mountain in the distance. The water is blue and calm, reflecting the sky. The trees are green and dense, with some branches overhanging the water. In the background, a large, rounded mountain rises against a clear blue sky. The overall atmosphere is peaceful and natural.

River Basin Development in Sri Lanka

by

W.A.N.A. Wijesinghe

Sri Lanka



SRI LANKA

INDIA
TAMIL NĀDU

Sri Jayawardenepura

Kandy

INDIAN OCEAN

Bay of Bengal

Gulf of Mannar

10°

Point Pedro
Jaffna
Chavakachcheri

Madurai

Sivakāsi

Paramagudi

Rāmanāthapuram

Talaimannar

Mannar

Mullaittivu

Nedunkeni

Vavuniya

Horowupotana

Trincomalee

Tuticorin

Surandai

Tirunelveli

Tiruchchendūr

Pahala Maragahawewa

Anuradhapura

Dangollegama

Puttalam

Sigiriya

Galewela

Karadiyanaru

Batticaloa

Hettipola

Kurunegala

Paddiruppu

Narammala

Weragantota

Negombo

Gampola

Bibile

Akkaraipattu

Sri Jayawardenepura

Nuwara Eliya

Badulla

Pottuvil

Wadduwa

Ratnapura

Bandarawela

Beruwala

Pitigala

Embilipitiya

Ambalangoda

Baddegama

Beliatta

Galle

Matara

**Annual
Rainfall**

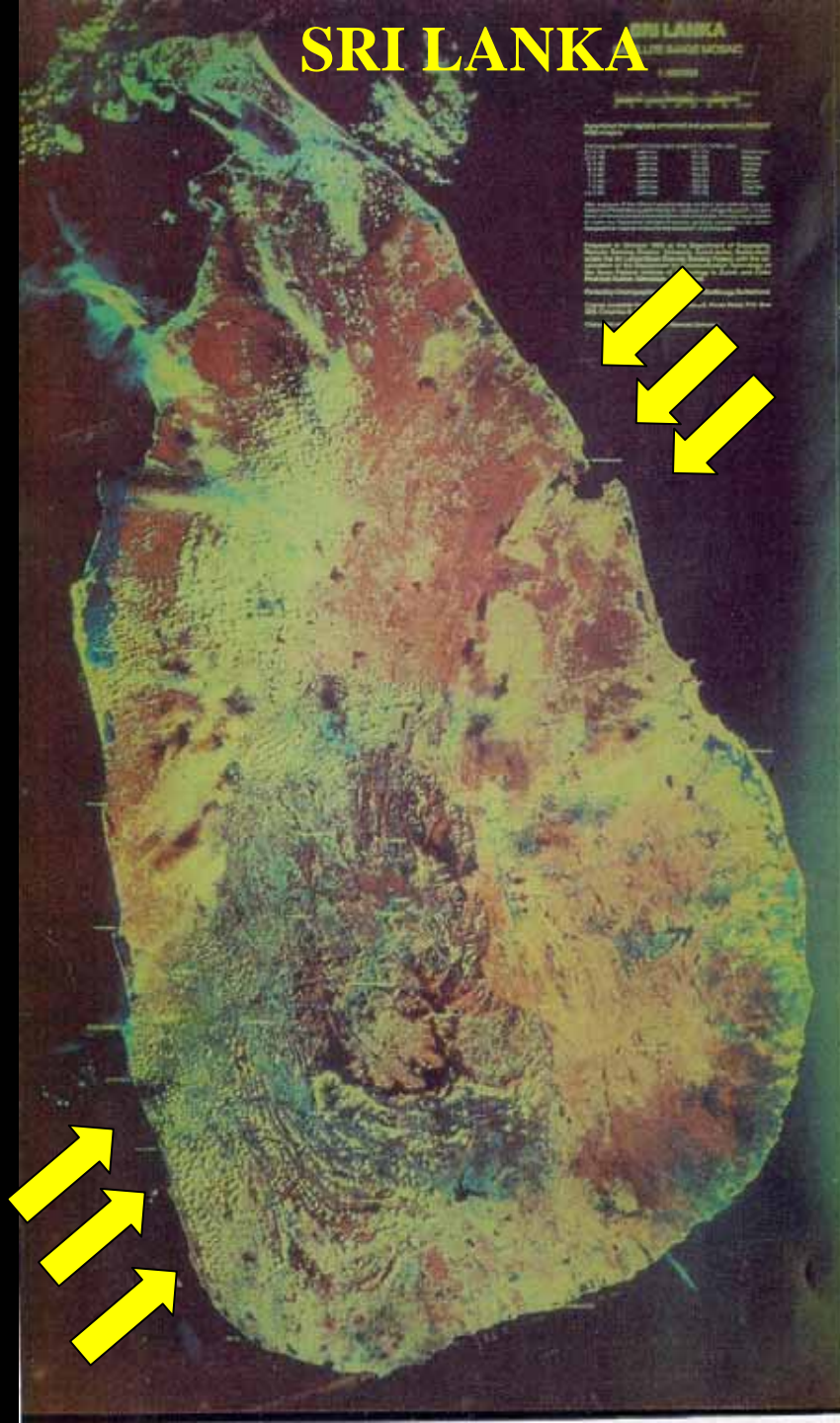
1,900 - 2,500
mm / year

**South – West
Monsoon**

Yala Season

*(May to
September)*

Medium Rains



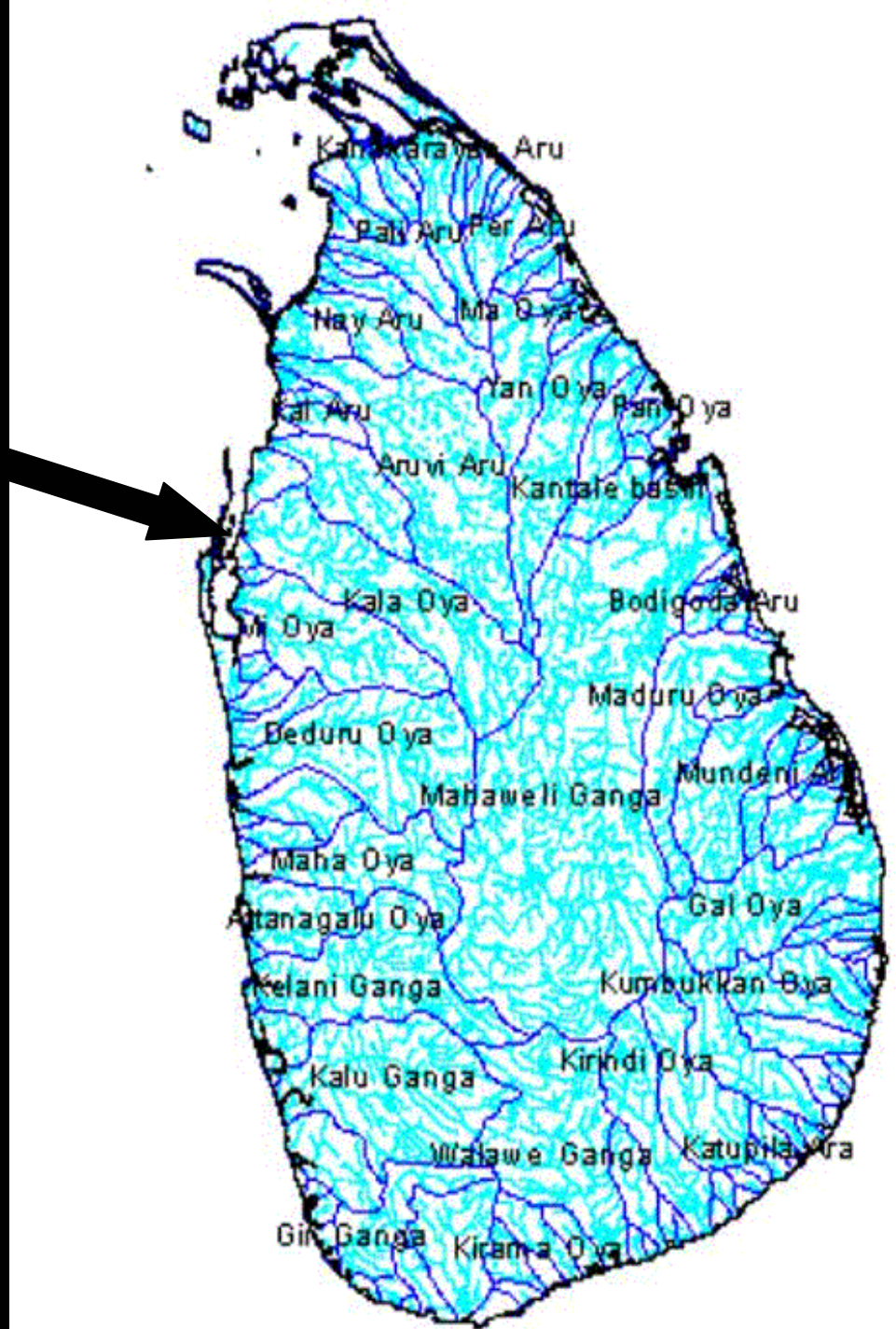
**North – East
Monsoon**

Maha Season

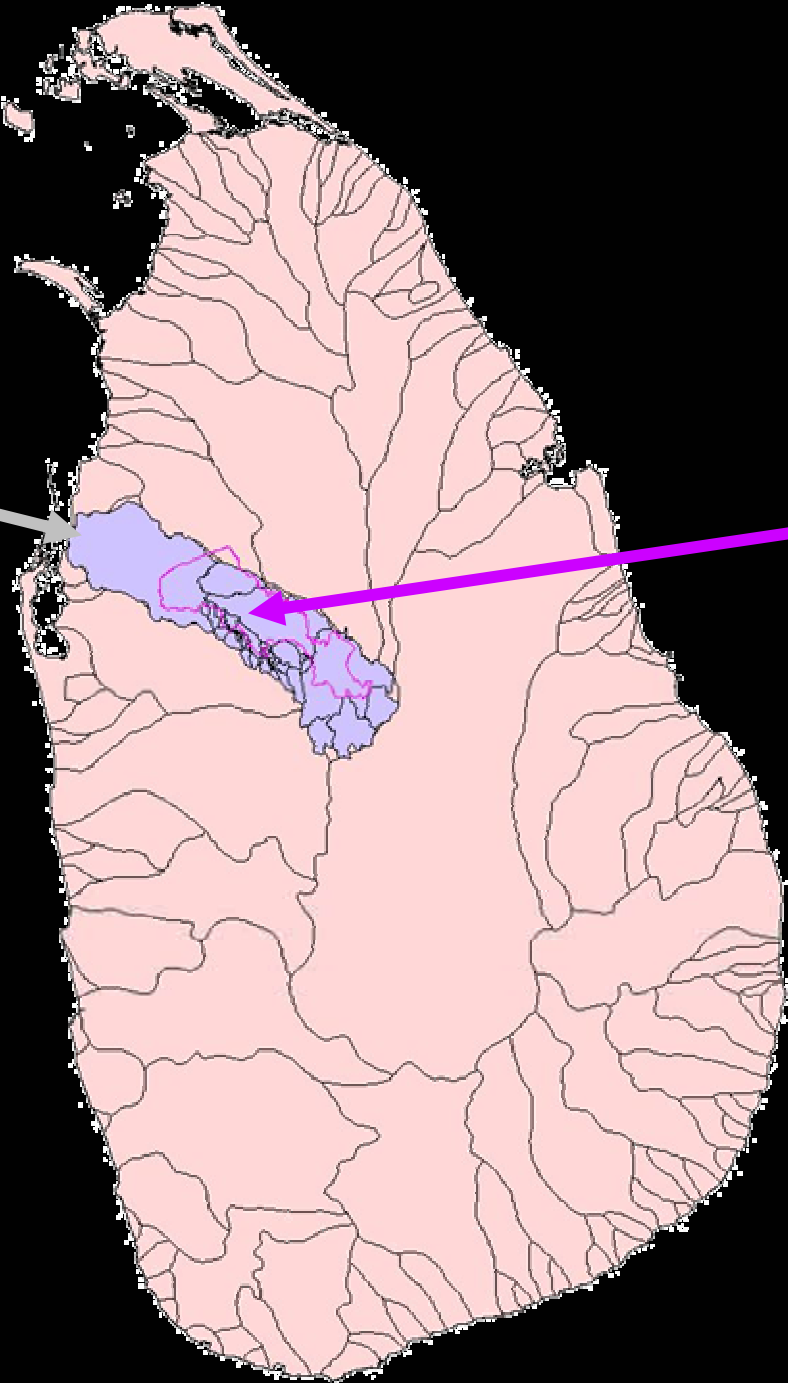
*(November to
February)*

Heavy Rains

103
River
Basins
of Sri
Lanka



Kala Oya
Basin

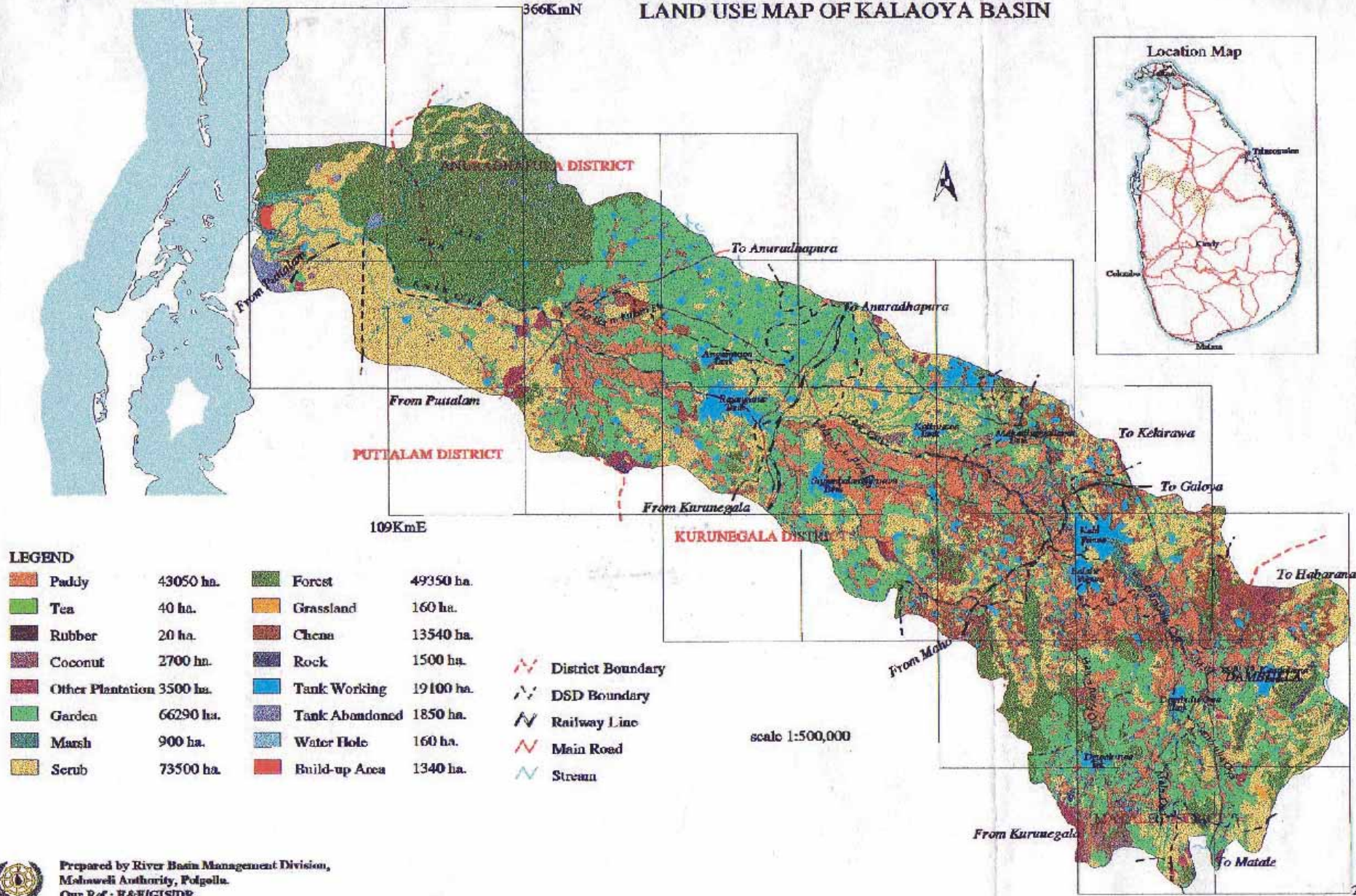


System H



Land use map of Kala Oya Basin

LAND USE MAP OF KALAOYA BASIN



Prepared by River Basin Management Division,
 Mahaweli Authority, Polgolla.
 Our Ref : E&F/GIS/DR
 Date : 2001-6-14

Government / Ministry

Policy Analysis

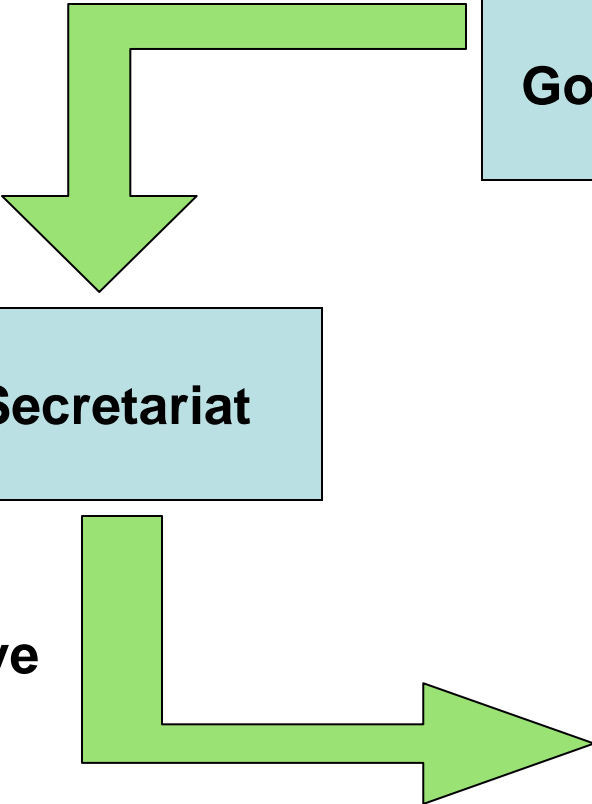
KOBO Secretariat

**Technical &
Administrative
Aspects**

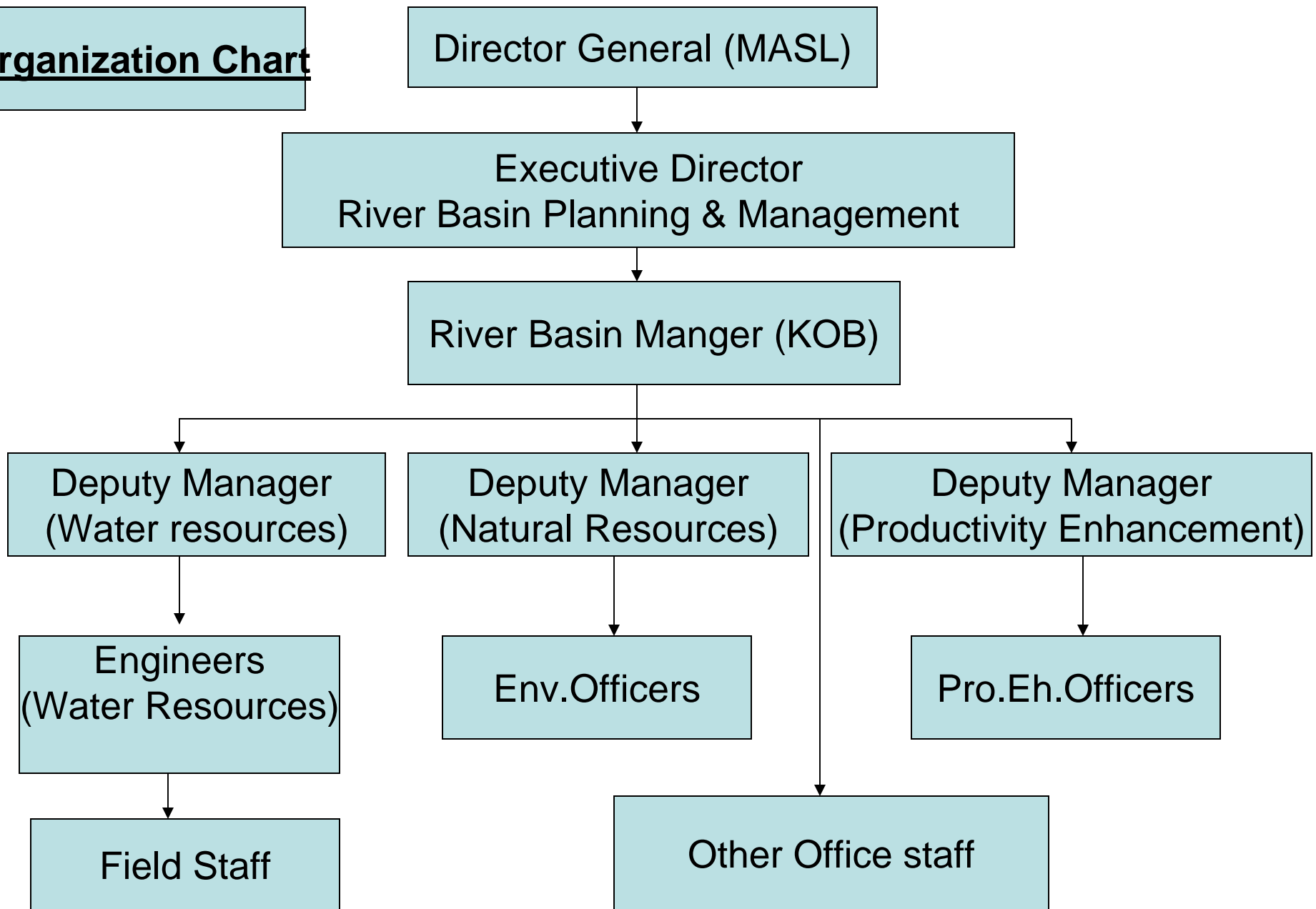
Basin Committee

Implementing Plans

Concept



Organization Chart



Issues Related to Natural Resources

- Natural resources degradation.
- Uncoordinated and conflicting approaches adopted by line agencies.
- Less involvement in resource management activities by community.
- Difficulties in enforcement of regulations.
- Absence of a comprehensive plan.
- No proper solid waste disposal system.
- Encroachment of forest reservations and environmentally sensitive areas.

Issues Related to Natural Resources

Contd.....

- Water quality degradation.
 - i. At sea mouth due to salt water intrusion
 - ii. Upper reaches due to high use of agro chemicals and solid wastes
- Absence of data and information.
- Wild Elephant/ Human conflicts.
- Absence of water quality monitoring program to cover the entire area of the Kala Oya Basin.
- Lack of studies conducted relating to mining of minerals.
- The absence of details related to bio diversity.

Watershed Problems



Soil erosion



Reservoir sedimentation



Sediment transportation

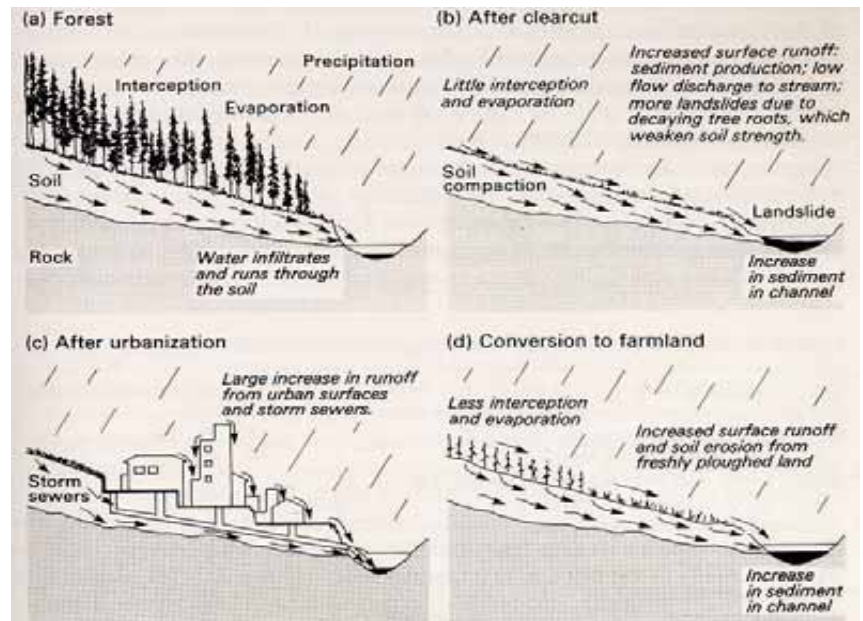


Figure 3.6 The influence of development on slope hydrology, indicating the role of agriculture and urbanisation

Watershed Problems Cont...



Water Pollution



Garbage dumping



Burning of vegetation



Deforestation

Issues Related to Water Resources

- Competitive demand of water for drinking ,agriculture and industrial purposes.
- Lack of coordination between different water users
- Lack of proper water allocation system
- Lack of sufficient storage facilities to catch the runoff.
- Lack of data and data sharing problems
- Insufficient ground water recharging system
- Uncontrolled extraction of ground water leading to degradation of water table
- Degradation of water shed and sedimentation problems

Constraints

- Lack of data
- Lack of legal authority
- Lack of proper water policy
- Lack of cooperation from stakeholders

Thank you

