

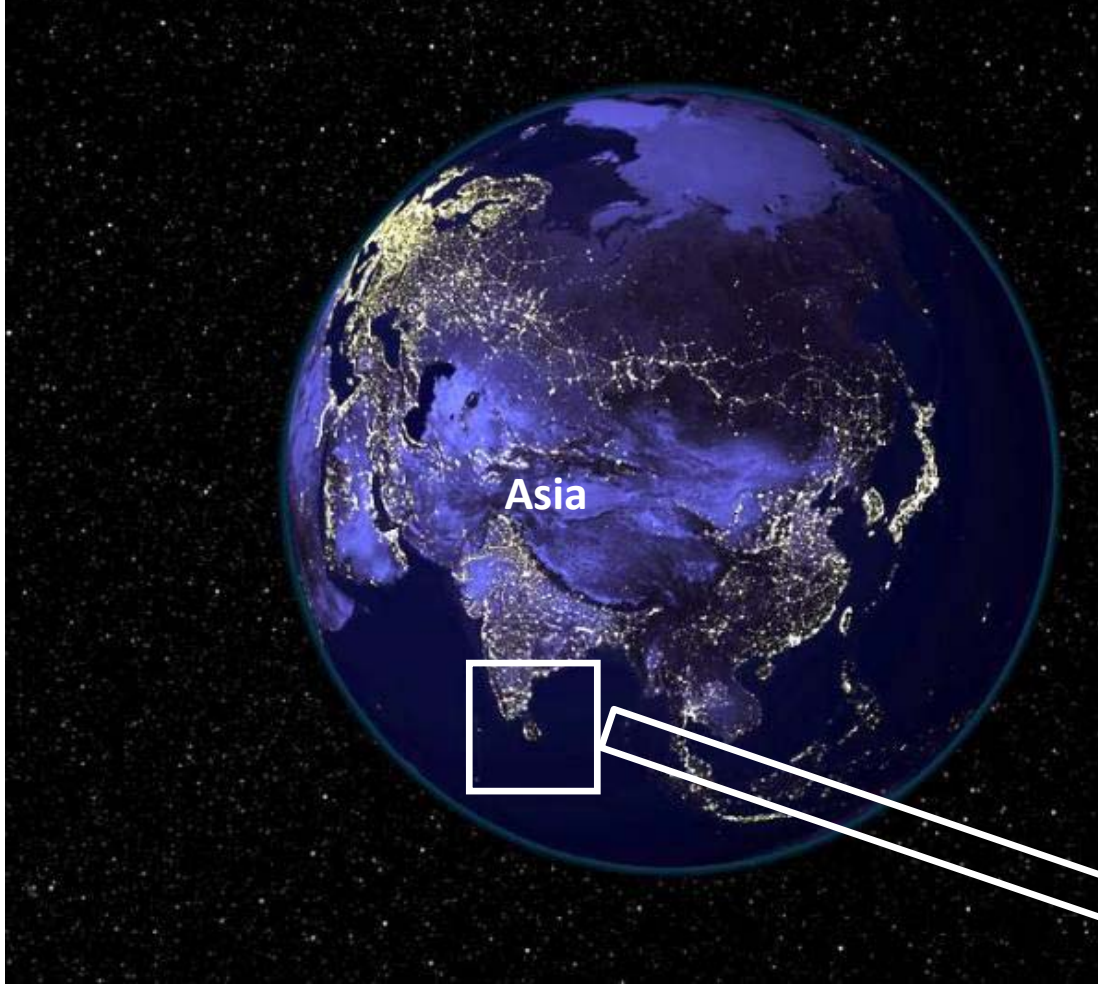
Climate Change and Sri Lanka

Ajith Silva

Director/ Policy and Planning

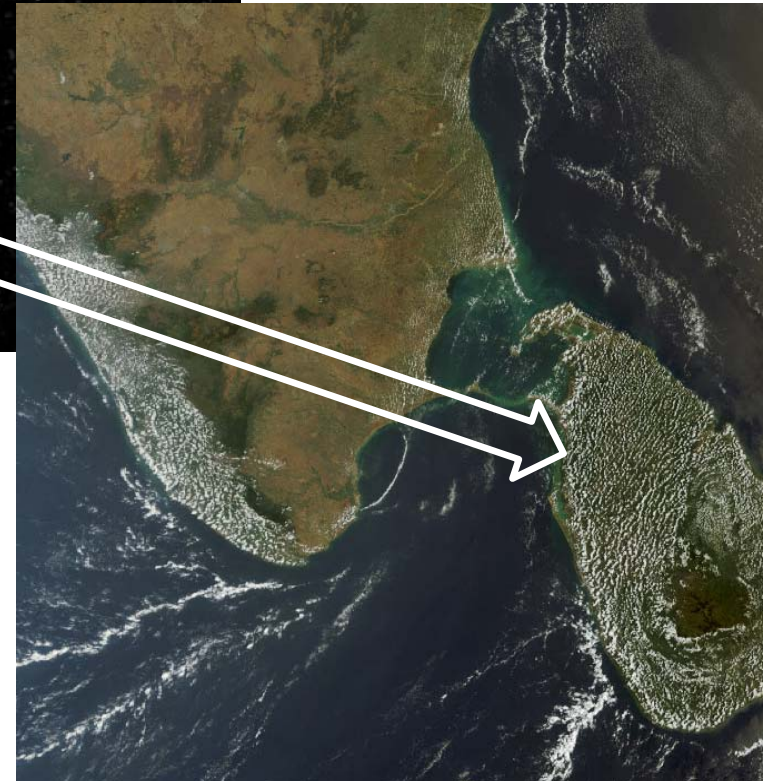
Ministry of Environment and Natural Resources

Sri Lanka



- Total Area: 65610 Km²
- Land Area : 62705 Km²
- Inland water : 2905 Km²
- Coastal Area : 1660 Km

Location of Sri Lanka



The Country-

An island nation

maximum length is 437 km and
width is 225 km

Tropical environment

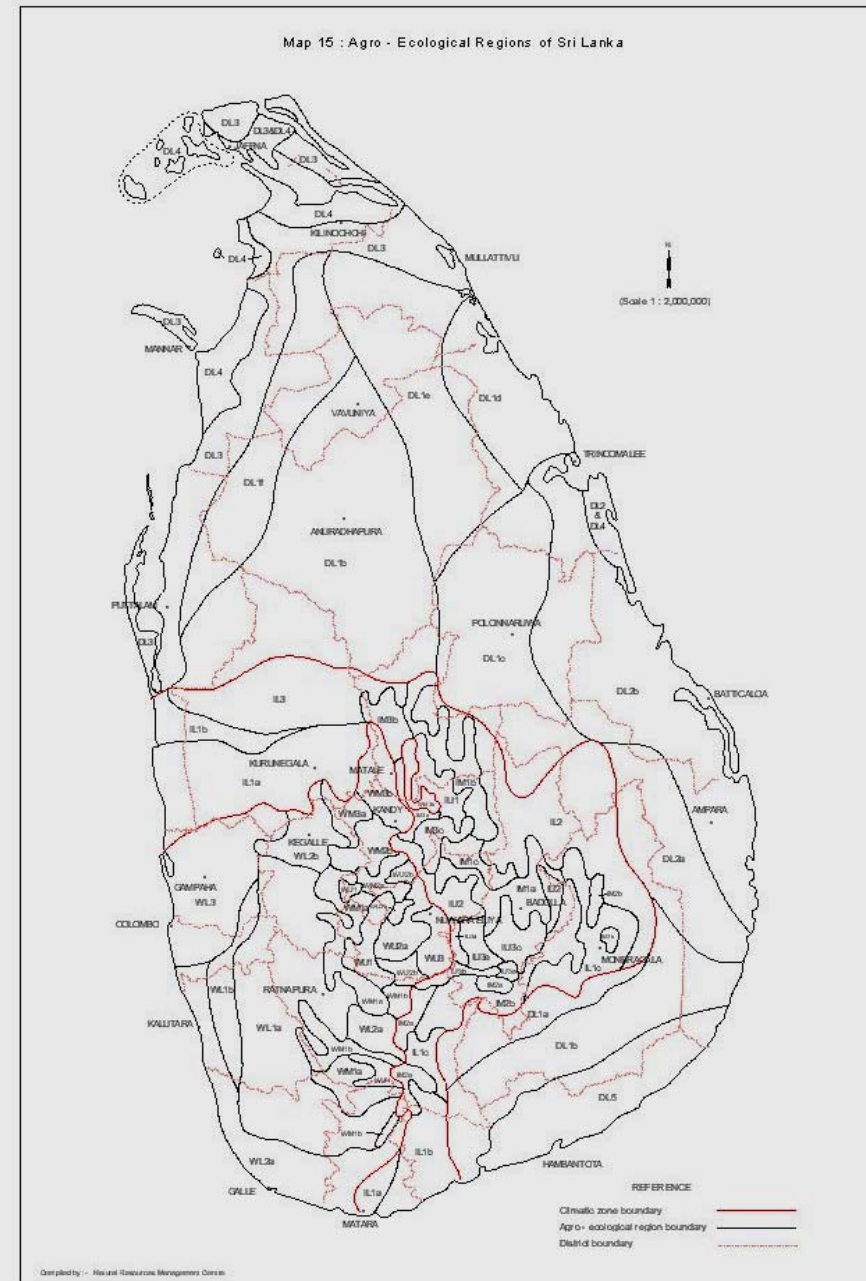
Distinct ago-ecological zones

Elevation

Rainfall

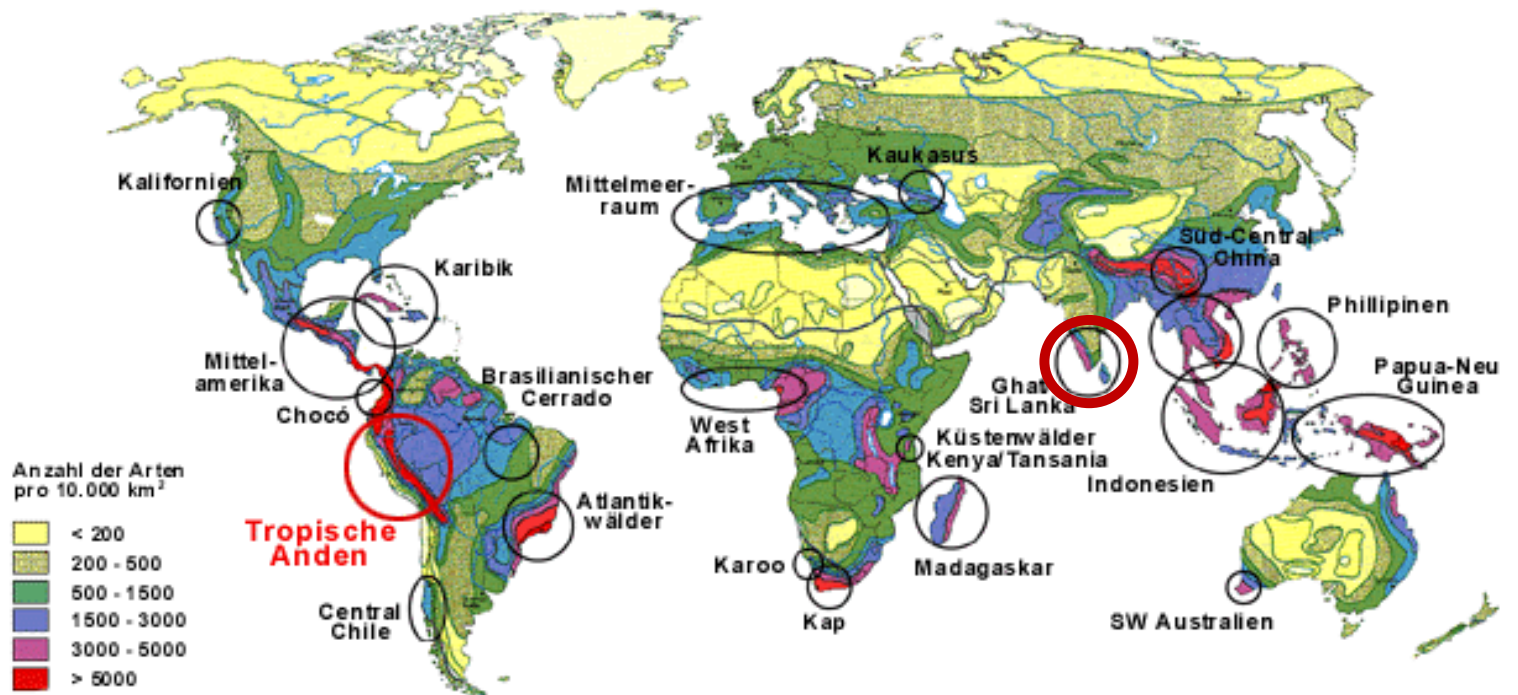
Soil types

Vegetation





High biological diversity and high endemism



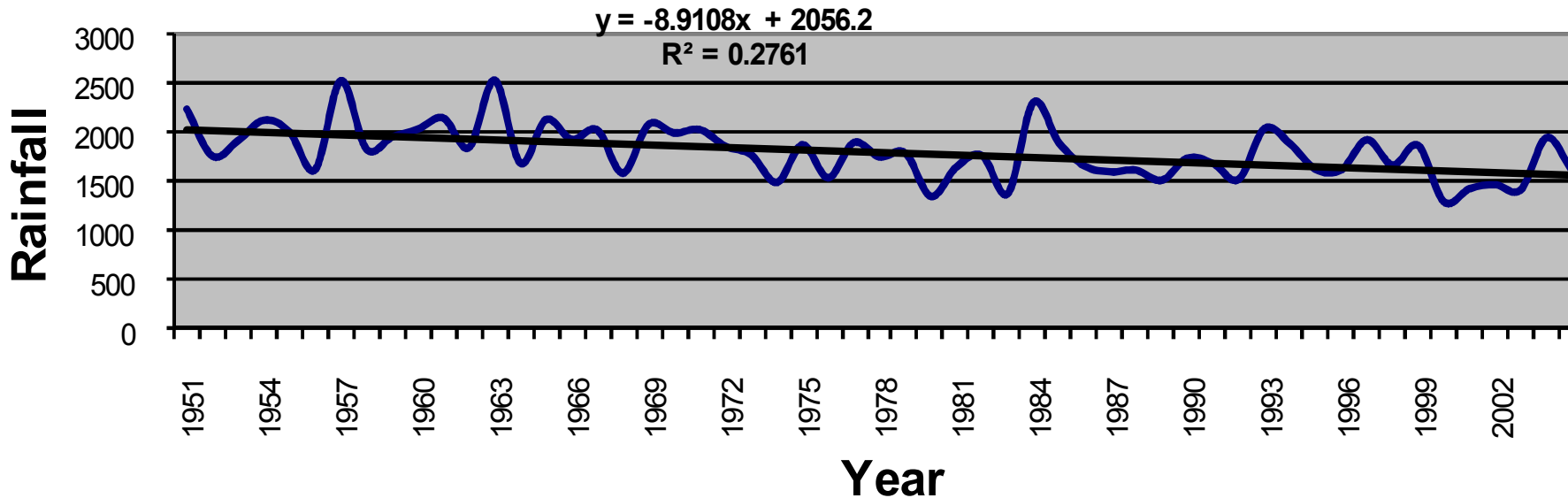
Impacts of Climate Change

- * Rain Fall
- * Temperature

Annual Rainfall

Varies between under 1000 mm to over 5000 mm

Annual Total (Sri Lanka)



Highly Impact on

Agriculture & Bd

Water Resources

- Rainfall – Bimodel RF (Ap-Jul ; Oct-Dec)

With intense rains, “accelerate” Soil erosion



Rains with intensity > 25 mm/hr

Accelerate soil erosion – ‘erosive rains’



Landslides

High probability of landslides when daily rainfall exceed 200mm in landslide prone areas.

Erosion  **Siltation of Reservoirs**

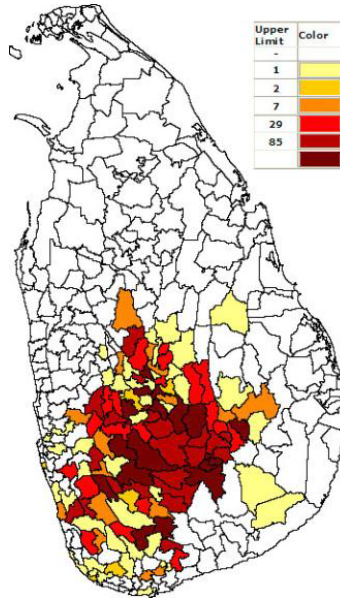
Eg : Polgolla dam - 44% silted by 1988 (rate of siltation -2.8% per year)

Rantembe – 54% silted at present (rate of siltation -4.3% per year)

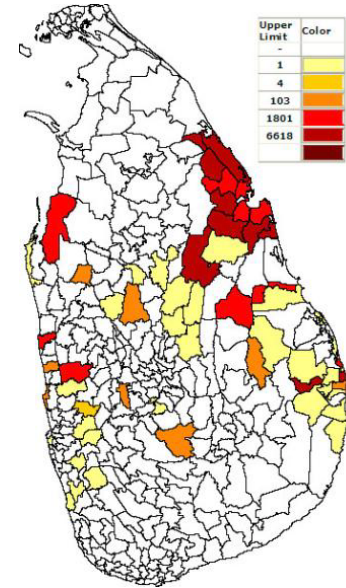
Minor tanks – 2.4% per year

Cannot operate at designed capacity !

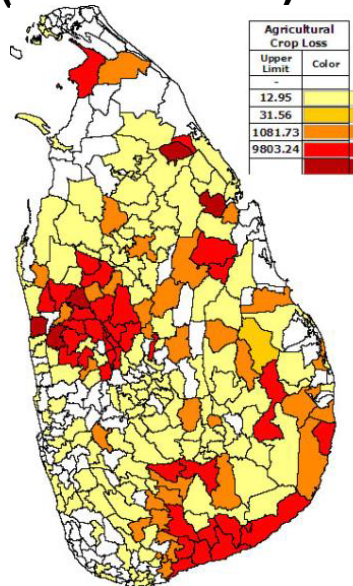
Houses Destroyed due to Landslides (1974 – 2008)



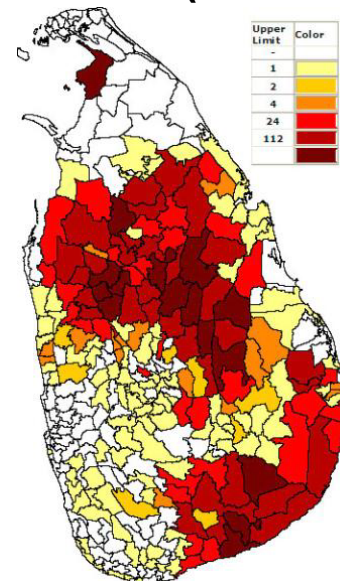
Houses destroyed due to Cyclones (1974 – 2008)

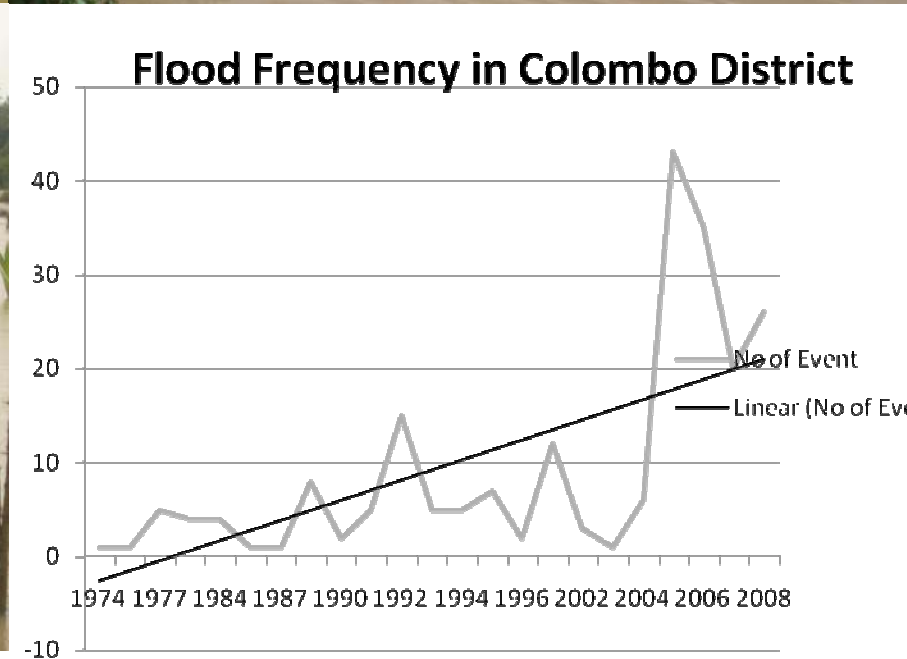


Crop Losses due to Drought(ha) (1974 – 2008)

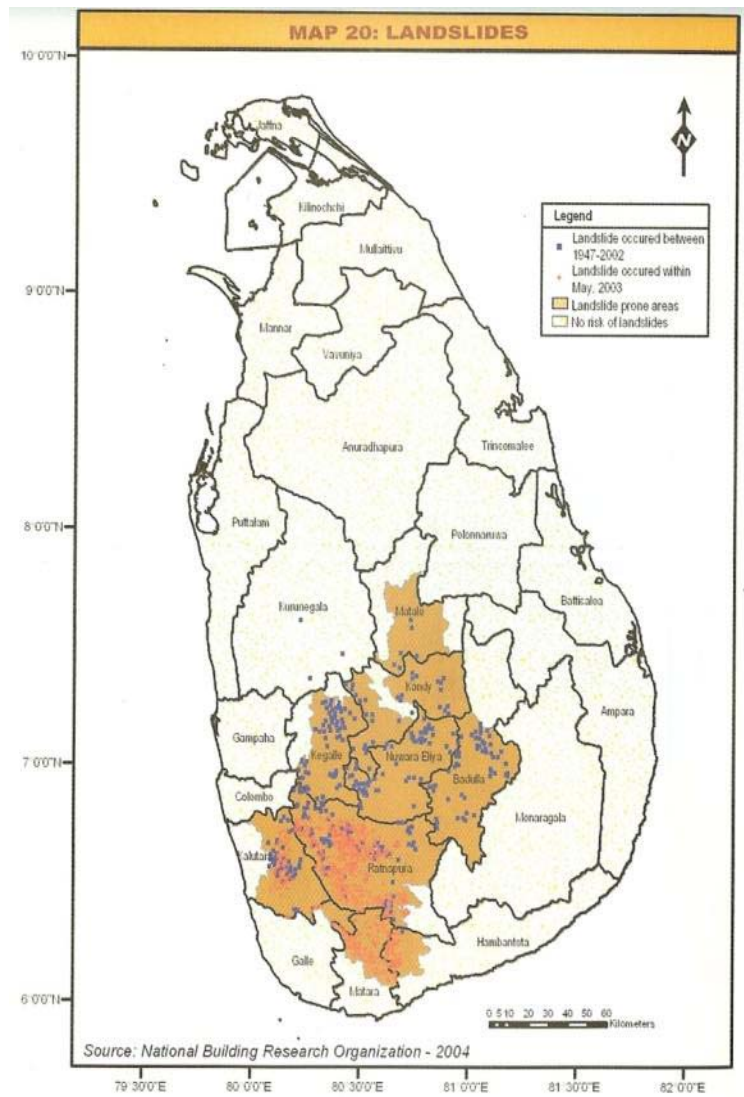


Houses Destroyed due to wild animal Attacks (1974 – 2008)





Landslide Hazard Mapping



- 10 districts are prone to landslides and for 9 districts landslide prone area maps are available
- Detailed Maps for smaller units are being prepared









Vulnerable Areas

- Agriculture
 - Water Resources
 - Human Health
 - Coastal Zone
 - Tourism
 - Forestry, Wildlife, Biodiversity
-
- Ecosystem [Lands and Land Use (Human Settlement & Infrastructure)]

Sri Lanka has identified adaptation is the most suitable way to face climate change issues

National Approaches

Moving towards a **Green Economy**...

➤ **Green Accounting**

- Green Auditing
- Green Taxes
- Green Investments Banking and Insurance
- Green Customs

➤ **Green Energy**

- perceive to lower carbon emissions and create less pollution

➤ **Green Industries**

- more Cleaner and efficient

➤ **Green Agriculture**

- Soil conservation
- Water efficiency
- Organic farming techniques
- Gradual transformation of existing plantations and other farmlands in to e friendly farms and lands.
- Price incentives to organic products.

Cont.....

➤ **Green Cities and Buildings**

- Location Specificity
- Design Specificity
- Waste Mgt and Energy efficiency
- Material efficiency
- Water efficiency
- Occupant health and safety
- Operations and maintenance

➤ **Green Transport**

- Introduction of more and more fuel efficient vehicles
- Improved Road Network
- Strengthening public transport system.
- Encouraging non motorized transport – cycling – walking
- Change in urban design and land use policies and settlement pattern to reduce the dependency on motorized transport systems.
- Continuous air quality monitoring and introduction of new levies.....WET Prog.

➤ **Green Trading**

- **Promotion of Green products and use of eco labels.**
- **Store locations closer to residential areas.**
- **Minimization of shipping and transport distances.**
- **CDM activitie**

➤ Green Infrastructure

- Conservation and restoration of eco systems, introducing eco regions and conducting environmental assessments.
- Reforestation and afforestation
- Agro forestry
- Eco system valuations, certification and permit trading
- Watershed Mgt. Cleaning of water ways and rivers.
- Conservation and restoration of wetland and introduction of wetland mitigation permit systems.
- Implementing comprehensive waste management systems.
- Creating eco corridors and open Bd parks for eco cities.

➤ Green Services

- Promoting eco tourism
- Promoting eco friendly health care systems.

➤ Green Jobs

- Creating new green technologies while promoting indigenous knowledge.
- Transforming education system to facilitate creation of Green Jobs.
- Enhance training, capacity building and awareness on green jobs.
- Drafting of new labor charter to promote the green jobs and wage rights.

National Action Plan for the Haritha Lanka Programme

National Action Plan for **Haritha Lanka** Programme



National Council for Sustainable Development

Presidential Secretariat, Colombo 01.

Convenor: Ministry of Environment and Natural Resources,
82, "Sampathpaya", Rajamalwatta Road, Battaramulla.

Ten Missions of the Action Plan



1. **Clean Air – Everywhere**
2. **Saving the Fauna, Flora and Ecosystems**
3. **Meeting the Challenges of Climate Change**
4. **Wise Use of the Coastal Belt and the Sea Around**
5. **Responsible Use of the Land Resources**
6. **Doing Away with the Dumps**
7. **Water for All and Always**
8. **Green Cities for Health and Prosperity**
9. **Greening the Industries**
10. **Knowledge for Right Choices**

United Nations Climate Change Conference - COP15

- Sri Lanka will propose to COP15

Environment debt (carbon debt) compensation

FUTURE ACTIVITIES WILL BE PLANNED AND FOCUSSED TOWARDS.....

- Simple Life Styles
 - Rational / Efficient use of Resources
 - Low Carbon, Water, Energy Footprints
 - Enhance Conservation of Natural Capital
- Ensure Rights and Good Governance in all sectors

THANK YOU