

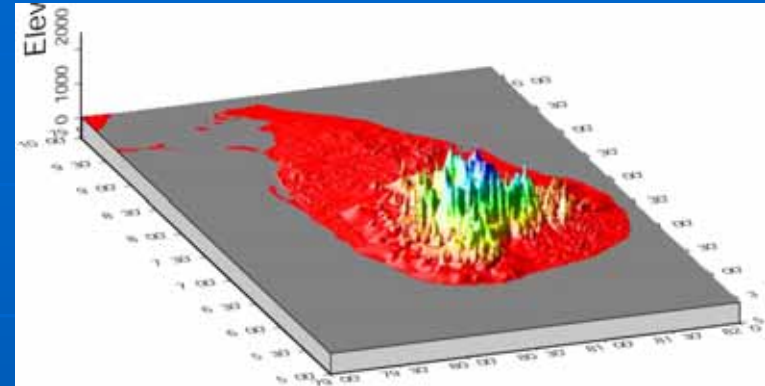
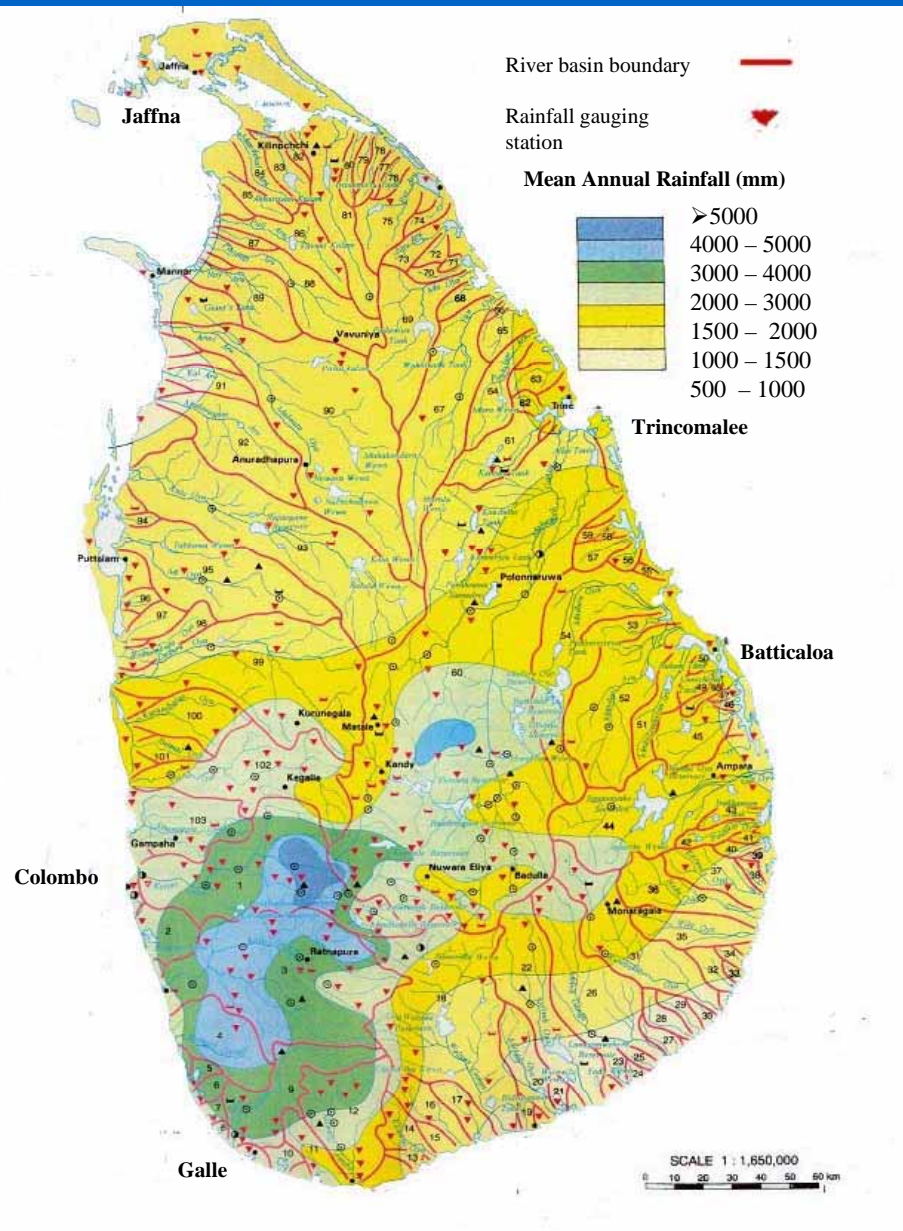
***Short country reports
on
Recent Signs of Water-
related Disasters***

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**3rd GEOSS Asia-Pacific Symposium
and
The 4th International Coordination Group
Meeting
of the GEOSS Asian Water Cycle Initiative
(AWCI)**

Kyoto, Japan, 4-7 February 2009

Water-related disasters in Sri Lanka



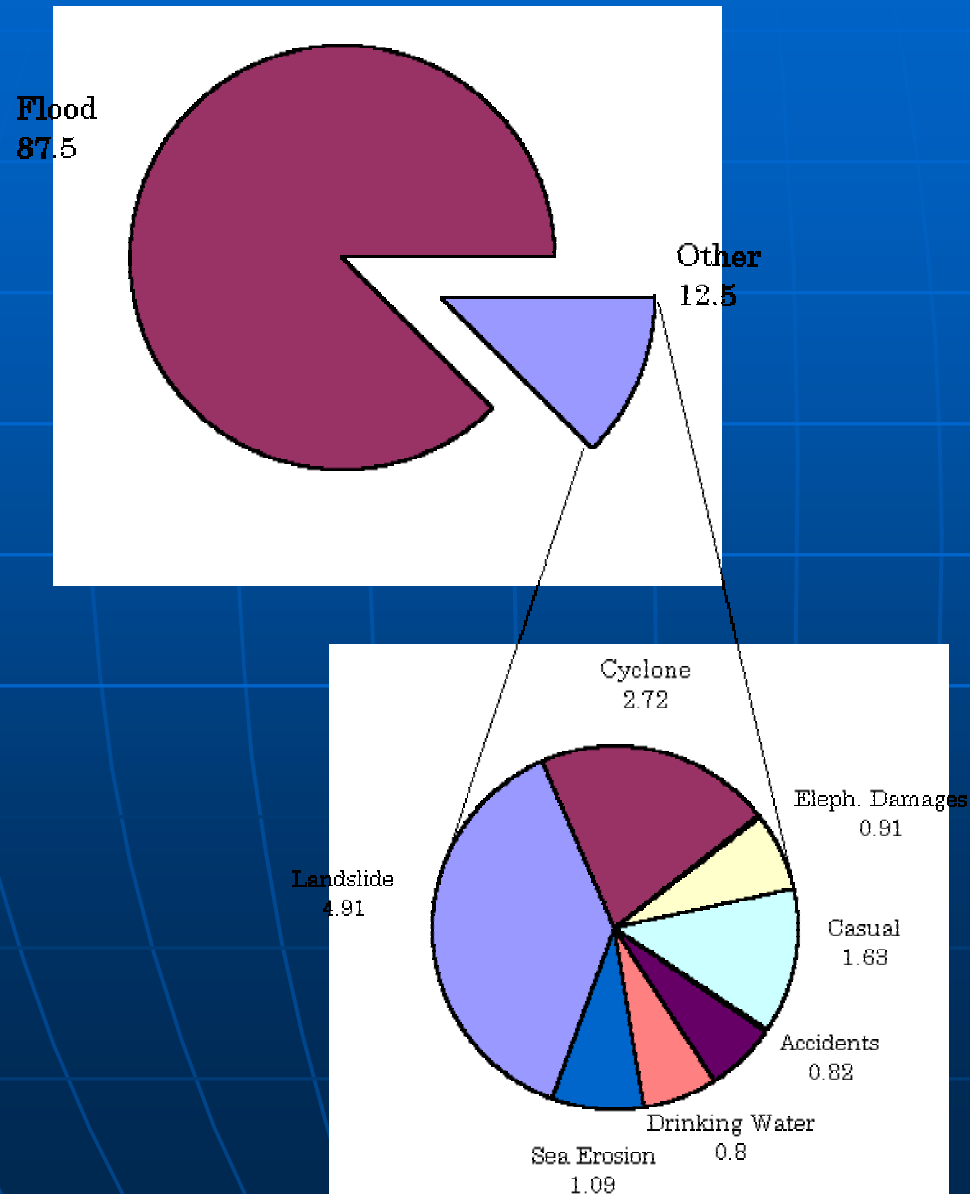
- High spatial and temporal variation of rainfall

Water-related disasters-

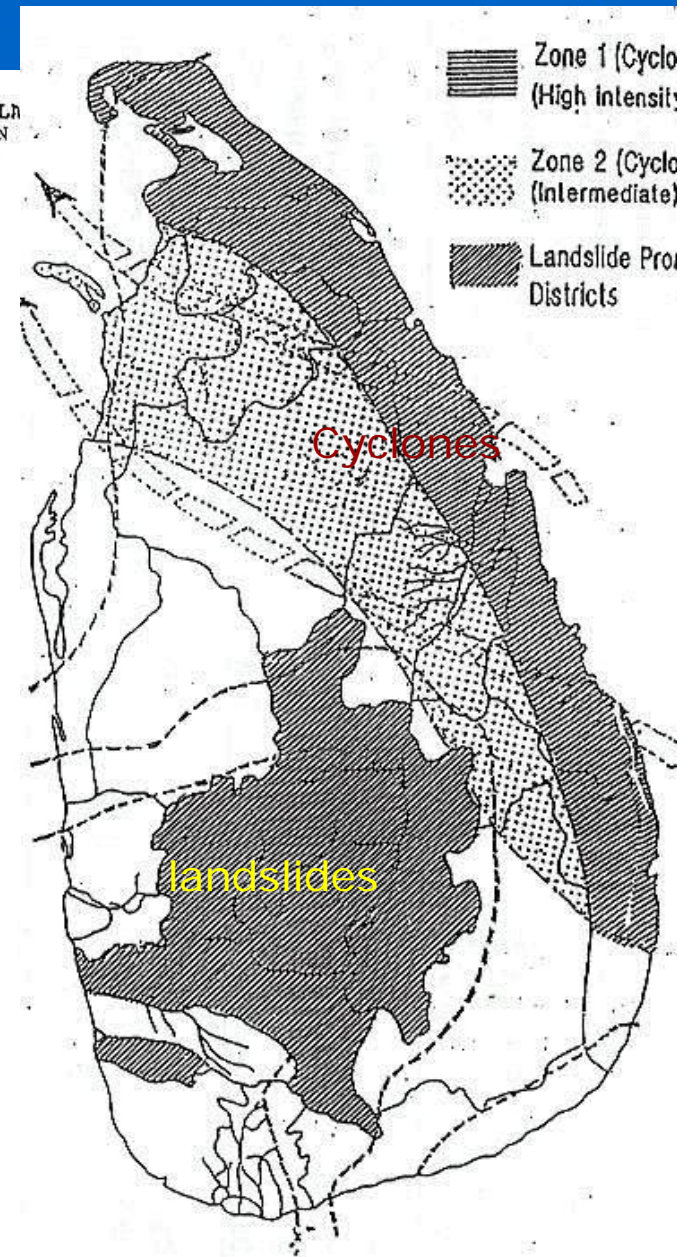
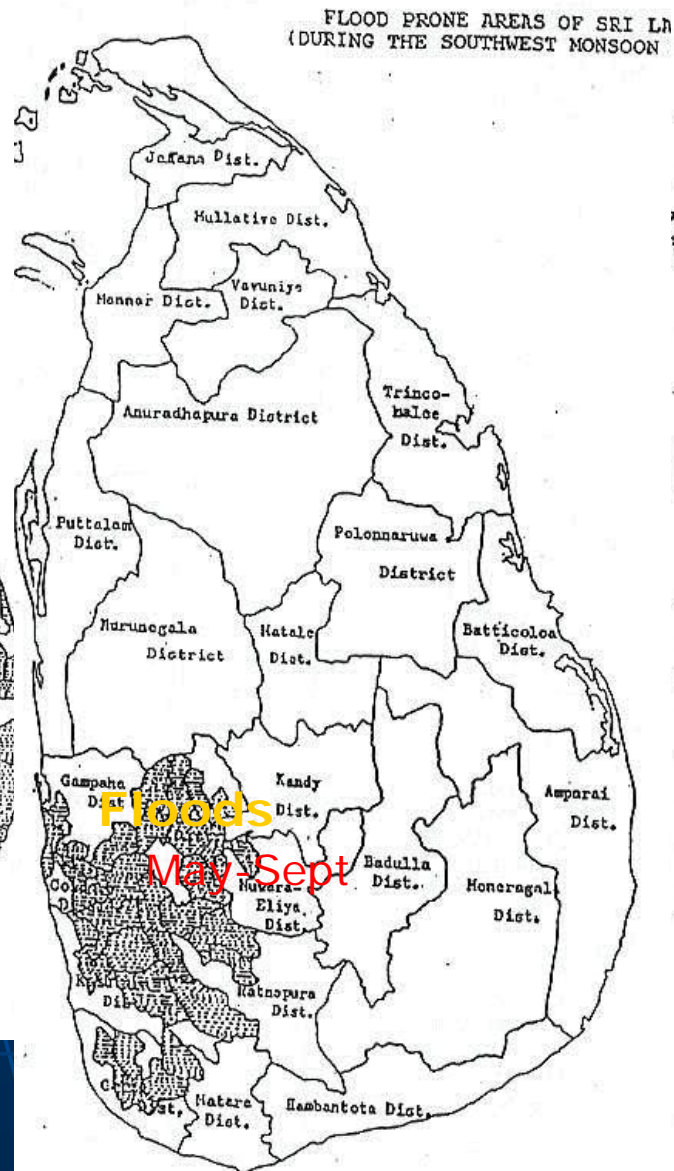
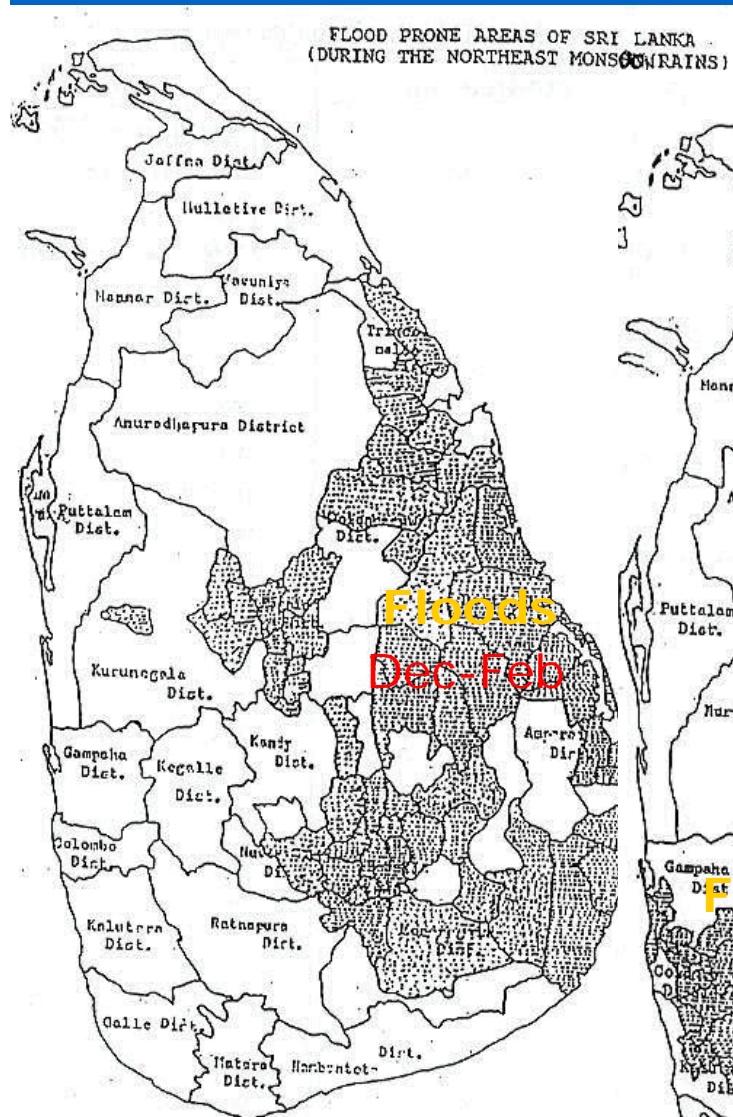
Floods
Droughts
Landslides

- *Tsunami*
- Sri Lanka has 103 river basins with sizes varying from $10 - 10^3 \text{ km}^2$.

Composition of natural disasters in Sri Lanka



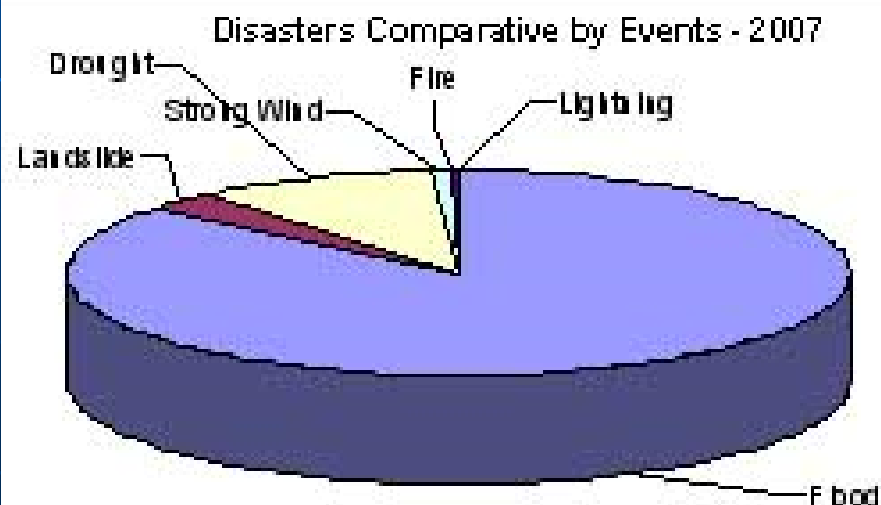
Disaster Prone Regions



Composition of natural disasters in Sri Lanka - 2007

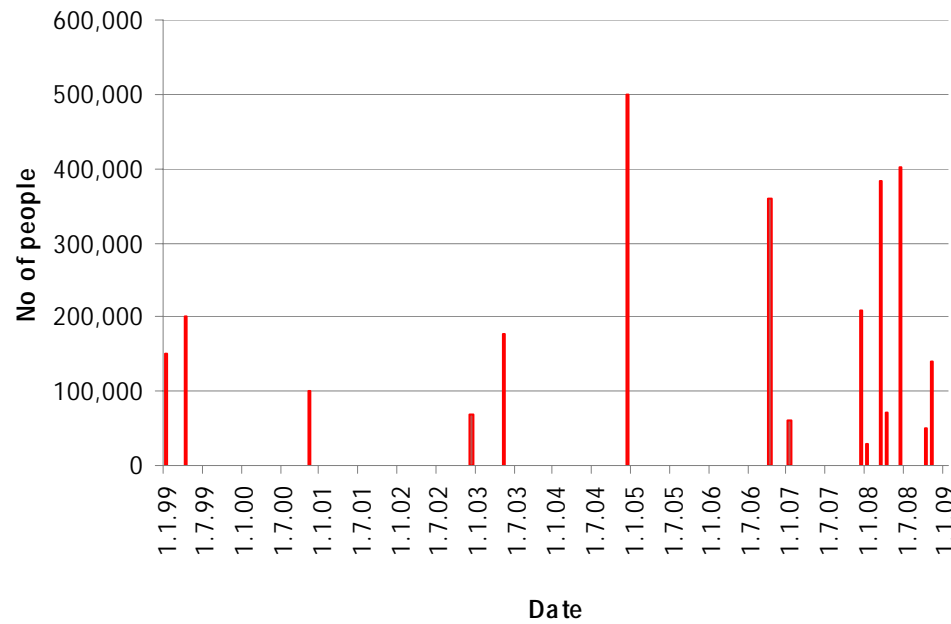
Disasters Comparative by Events

Type of Disaster	No. of affected people	Deaths	Injured	Houses damaged	
				Fully	Partially
Flood	488,880	20	17	2,568	7,237
Landslide	15,199	14	11	437	1,371
Drought	57,435				
Strong Wind	4,914	3	51	108	1,523
Fire	1,193	4	24	282	6
Lightning	9	7	2		
Total	567,630	48	105	3,395	10,137

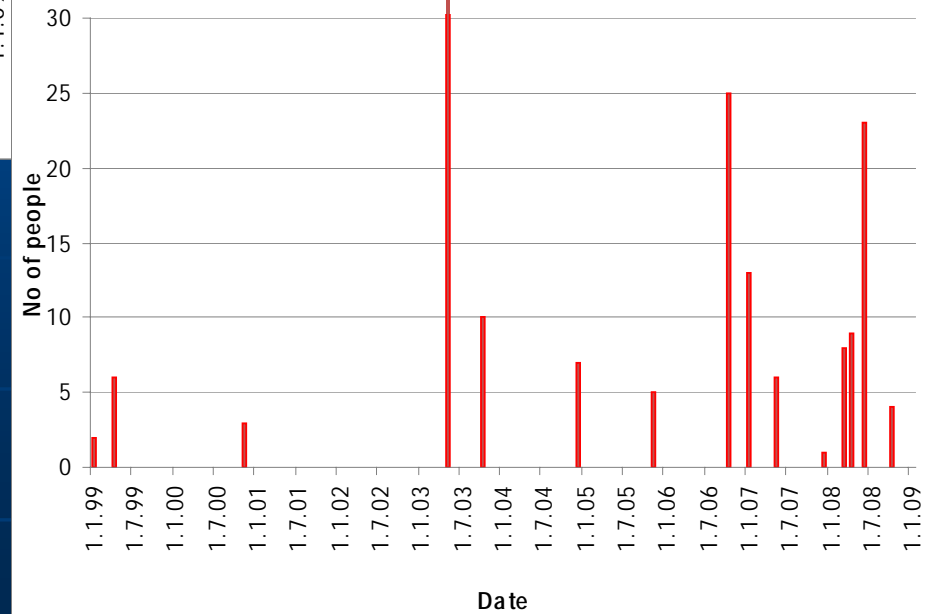


Flood disasters

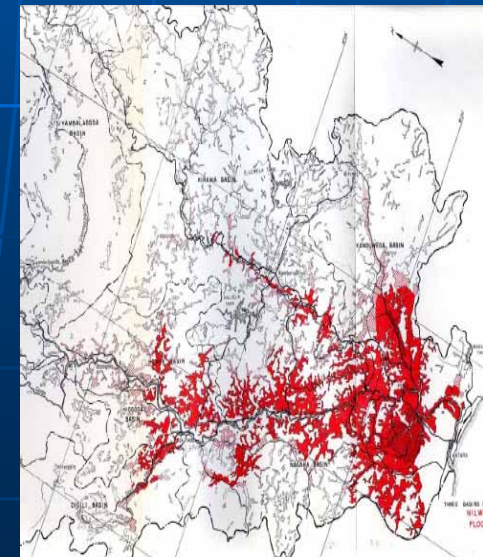
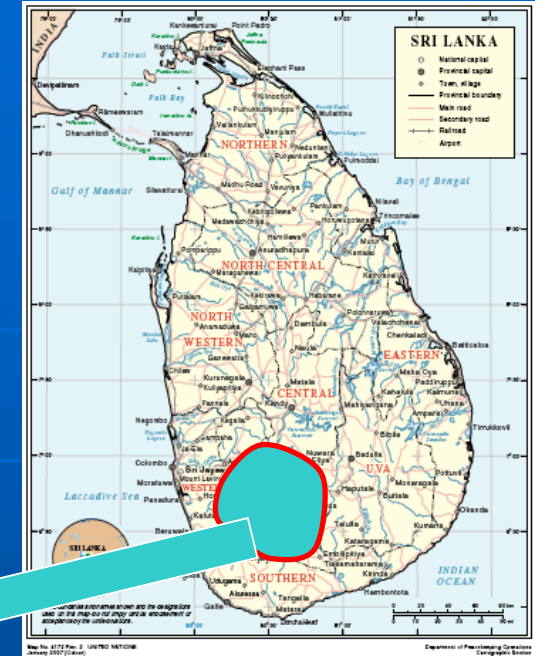
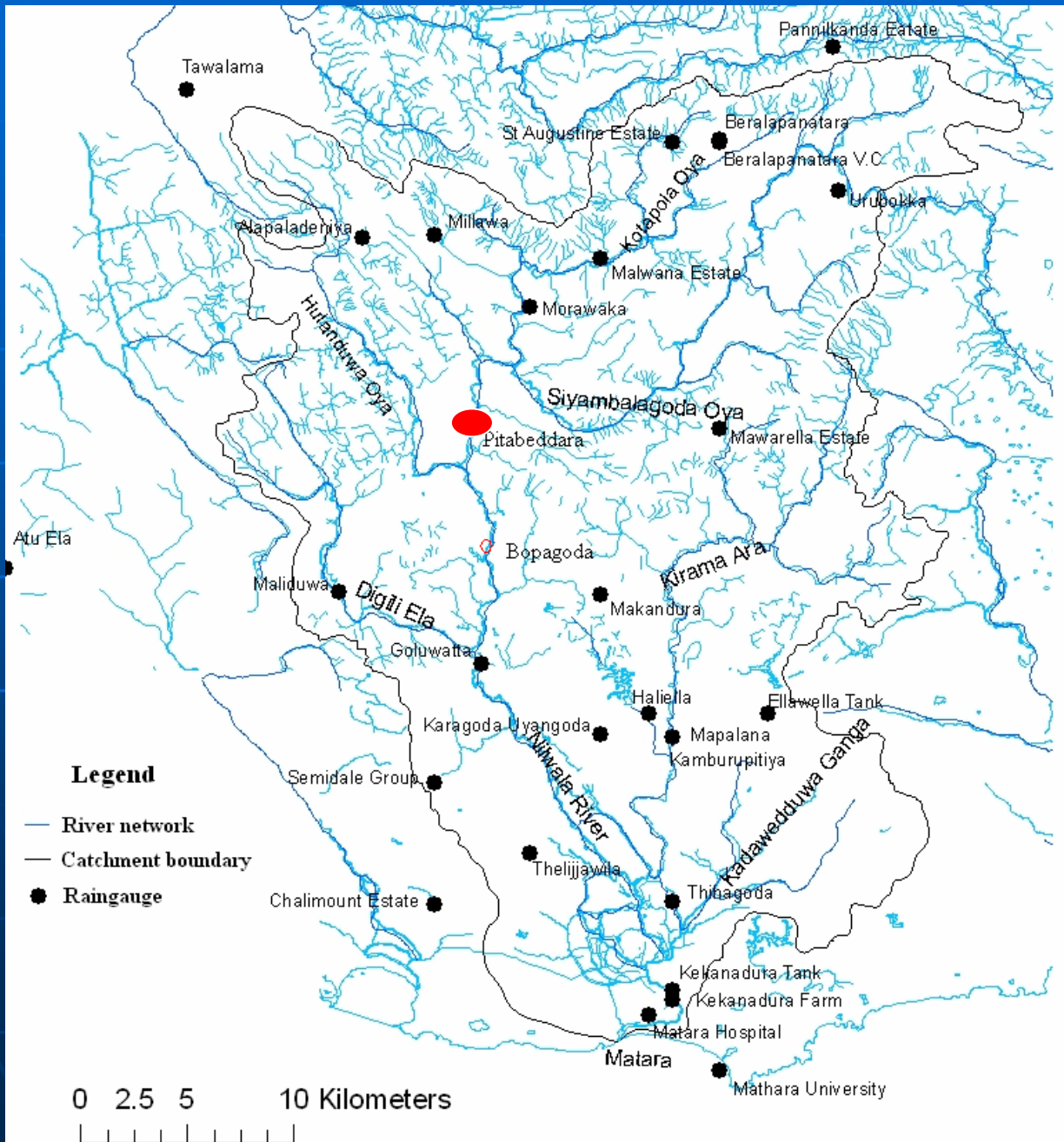
People affected by floods



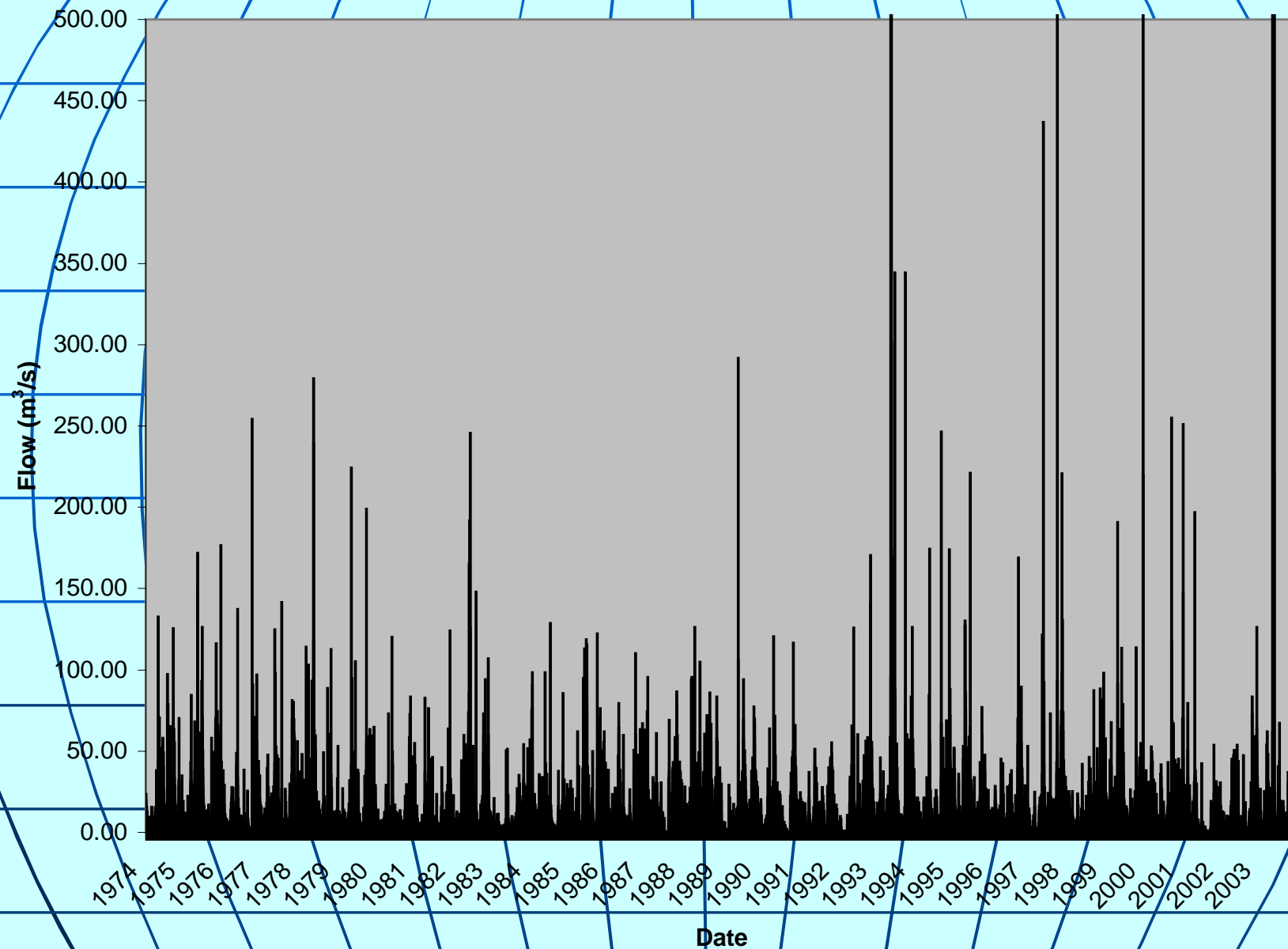
No. of deaths due to floods



Floods in Nilwala River



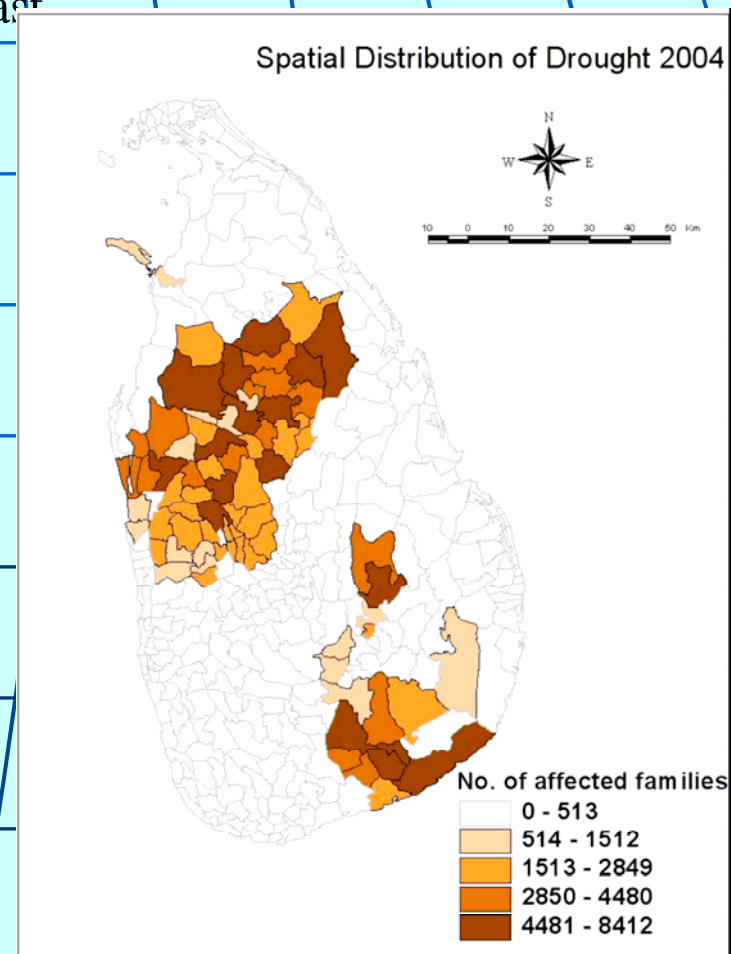
Flow in the Nilwala River at Pitabeddara (m³/s)



Drought disasters

Recent major droughts:

Period	Affected	Region
2004 Sept-Dec	100,000	North Central, South East
2002 July	400,000	South East
2001 Sept	202,183	South East



Tsunami and Cyclones

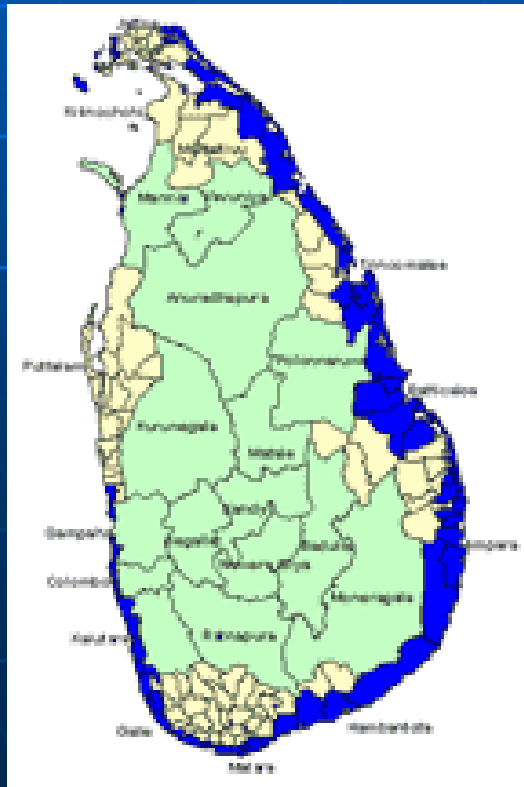
Tsunami 2004

Affected to 5 million people

40,000 died

Loss of 75% fishing fleet

Loss of US \$ 1billion



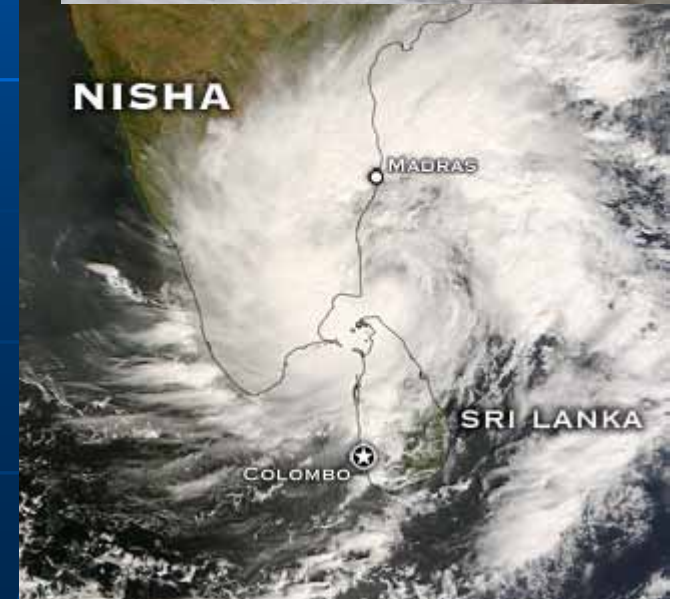
Cyclones

In 1978, eastern provinces

- one million affected
915 died

In 2000,

In 2008, North -east one
-140000 affected



Social and economic consequences of water-related disasters

- Loss of life, damages to the houses and displacement
 - Other economic losses
 - Disruption to Services
 - Agriculture
 - Power generation

Improvement for disaster mitigation

- Development of reliable weather, flood and inundation forecasting systems utilizing real time data remotely sensed information.
- Raising public awareness
- Structural and nonstructural measures
- Improving data collection and dissemination and the early warning systems

Summary

- Preliminary analysis shows :
 - High intensity rainfall
 - Floods, Landslides
 - Long dry spells
 - Less wet days
 - Droughts