

# Disaster Management Telecom Regulators Perspective

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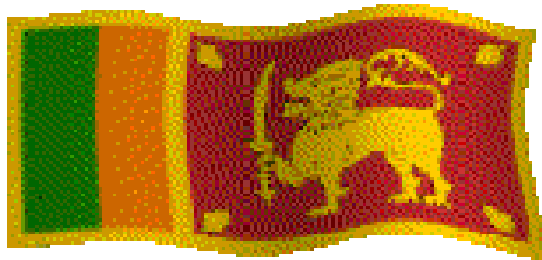


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# Sri Lanka



# Country Profile

- ★ **Commercial Capital** - Colombo
- ★ **Area** - 65,610 sq km
- ★ **Population**- 20.3 million
- ★ **GDP** - US\$ 27 billion
- ★ **GDP per Capita**- US\$ 1617
- ★ **Currency** - Sri Lankan Rupee



# Telecom Sector Profile

PRESIDENTIAL SECRETARIAT

Telecommunications Regulatory  
Commission of Sri Lanka (TRCSL)

Service Providers  
/ Operators

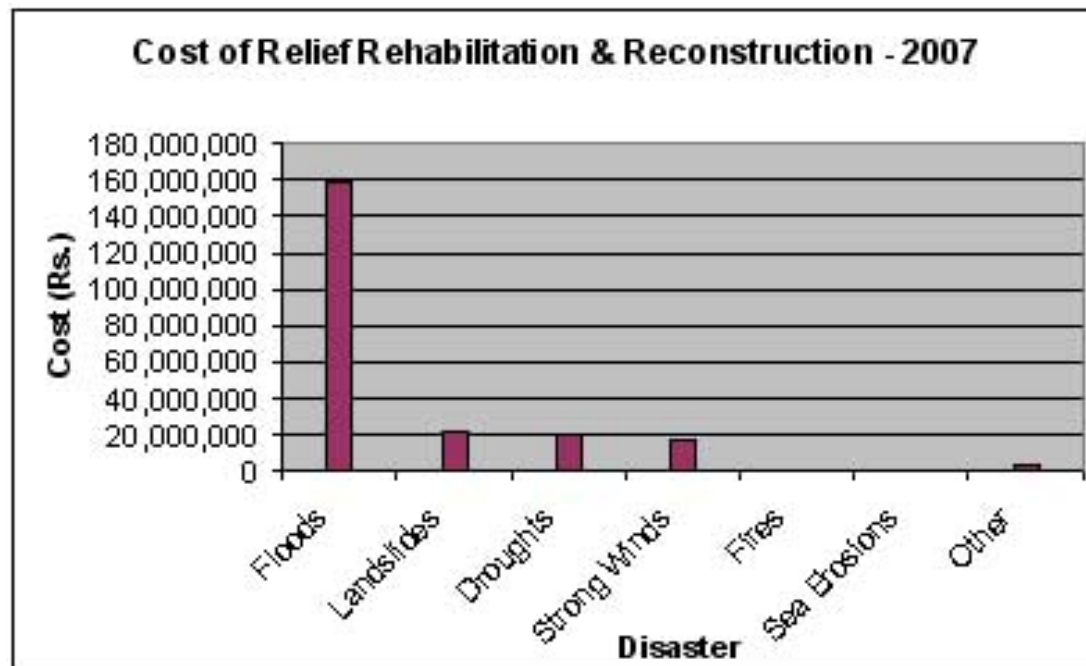


# Natural Disasters in Sri Lanka

- ★ Periodic droughts
- ★ Periodic floods
- ★ Landslides
- ★ Occasional cyclone
- ★ Tsunami



# Financial Impact



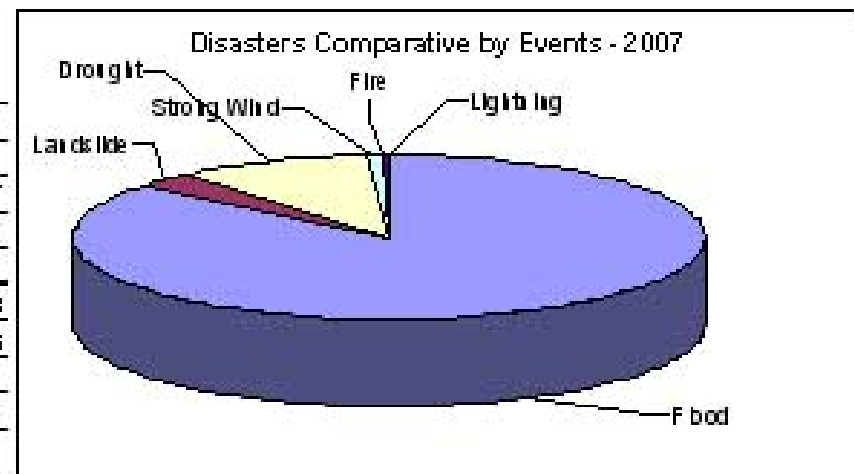
Type of Disaster	Cost of relief & reconstruction (Rs.)
Floods	159,111,089.00
Landslides	22,586,775.00
Droughts	19,921,772.00
Strong Winds	17,662,054.00
Fires	1,390,970.00
Sea Erosions	1,279,695.00
Other	3,031,815.00
Total	224,984,170.00

Source NDMC

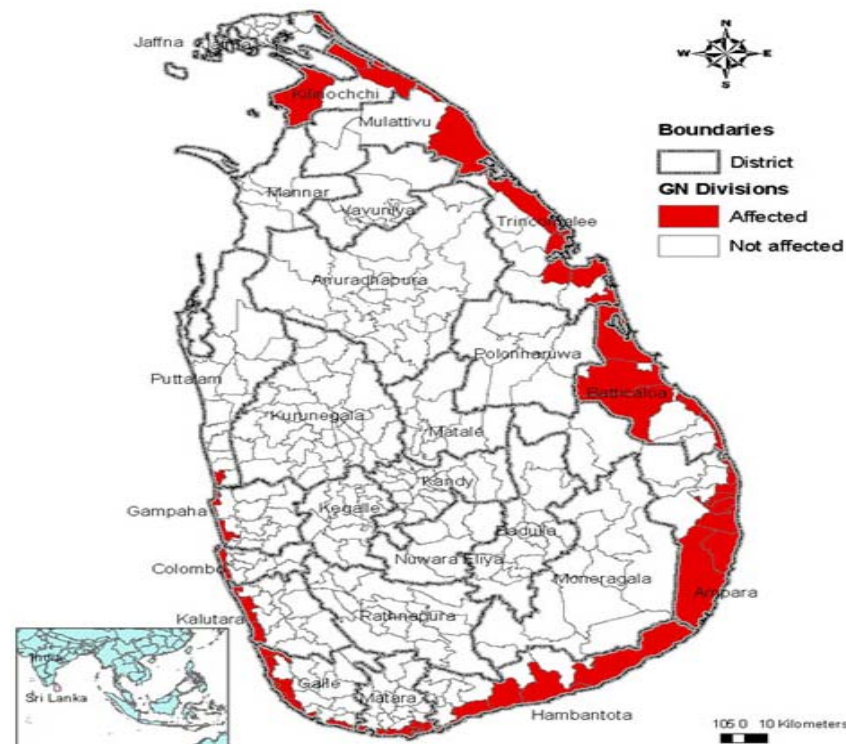
# Comparison by events

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		
<b>Total</b>	<b>567,630</b>	<b>48</b>	<b>105</b>	<b>3,395</b>	<b>10,137</b>



# Divisions affected by tsunami



# Impact of Tsunami in Sri Lanka

	ADB/JBIC/WB <sup>a</sup>		GOSL	
	Losses	Needs	Feb. 05 <sup>b</sup>	May 05 <sup>c</sup>
Housing	306–341	437–487	400	400
Roads	60	200	210	353
Water & sanitation	42	117	190	205
Railways	15	130	77	-
Education	26	45	90	170
Health	60	84	100	100
Agriculture	3	4	10	10
Fisheries	97	118	250	200
Tourism	250	130	58	
Power	10	67–77	—	115
Environment	10	18	30	30
Microfinance	—	—	150	157
Other	90	180	239	424
Total (\$ bn.)	0.9–1.0	1.5–1.6	1.8	2.2

**Estimates of Losses and Needs Assessment on Reconstruction and Rebuilding (US\$ million)**

Source: ADB/JBIC/WB and GOSL.



# Main State Institutional frame work for Disaster Management

## ★ Disaster management center

- \* established under the National Council for Disaster Management in accordance with the Sri Lanka Disaster Management Act No. 13 of 2005 passed by the Parliament of Sri Lanka on 13th May 2005.

## ★ National disaster management center

Established in 1996 and presently Operates under the Ministry of Disaster Relief Services that was formed resulting from reformation of the cabinet. Under the Gazette No. 1422/22, dated on 08th December 2005, the subject of Disaster consisting Preparation, Response and Recovery measures has been assigned to the new Ministry and also funds for these activities have been allocated to the Ministry, ensuring to handle pre and post disaster activities effectively.



# DMC Objectives

- \* Through countrywide ministries, departments and public corporations, Provincial Councils and local authority administration; and district, division and Grama Niladhari administration; to enforce, coordinate and monitor activities related to,
  - \* Hazard Mapping and Risk Assessment.
  - \* Information Management.
  - \* Long-term disaster mitigation.
  - \* Forecasting, early warning and information dissemination.
  - \* Preparedness to respond to disasters when they occur.
  - \* Emergency Operations Management.
  - \* Management of the post-disaster activities after a disaster.



# NDMC Activities

- \* Disaster Management Awareness and Educational Programmes
- \* Disaster Mitigation Programme
- \* Relief, Rehabilitation and construction Work
- \* Research and Development
- \* Legislation and a National Plan on Disaster
- \* Data-Bank for collection of information on disasters
- \* Propaganda and Awareness Programmes on Disaster Management
- \* Co-ordination of disaster related public instructions, foreign agencies and non governmental organizations
- \* International Support for Disaster Management



# Issues in applying ICTs

- ★ Failure of wired lines
- ★ Power failures
- ★ Congestion in wireless communications
- ★ Radio communication interference



# **Regulatory Environment in Emergency Telecommunications**

- ★ ***Sri Lanka Telecommunications Act No. 25 of 1991 Telecommunications Act No. 27 of 1996 as amended.***
- ★ ***Operators License Condition (Planning and Implementation of Special Arrangements for Emergencies)***



# Current Trends (from a Regulators Perspective)

## ★ Learnt Experiences

- Sharing networks(recent tsunami example duplication of towers rather than infrastructure sharing more reliability)
- Operators Licence condition implementation
- Implementation of short codes
- Sat Phones for disaster Communication



# Current Trends cont.

- ★ A counter setup for clearance of emergency related telecom equipments
- ★ SMS's to locate tourists affected by tsunami
- ★ Harnessing the radio amateurs
- ★ Automatic Load shading /filtering system.
- ★ ITU Assistance for implementing Disaster management plan for the telecommunications sector/conducted a workshop with participation of all stake holders / Setup DICOM team
- ★ Setting up telecenter project programme
- ★ Setup a Disaster Management Center
- ★ Roaming facility under consideration
- ★ Call prioritization



# Future Trends

- A general call prioritization scheme
- Considering dedicated networks for emergency service providers
- Preparation of a Disaster Management Plan for the telecom Sector (with the assistance of ITU Consultants)
- Setting up a emergency mobile station
- Preparation of a national emergency communication plan



THANK YOU !

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