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Sri Lanka

Country Presentation

For Visiting Researcher Programme 2011 A, ADRC, Kobe, Japan



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16th August 2011, Kobe ,Japan

Content of the Presentation

1. General Information of the country
 - I. Geography
 - II. Climate
 - III. Demography
2. Natural hazards in the country
 - I. Natural hazards likely to affect the country
 - II. Recent major disasters
3. Disaster Management System
 - I. Administrative system
 - II. Legal system and framework
 - III. Structure of disaster management
 - a. National platform for disaster risk reduction
 - b. National organizations for disaster risk reduction
 - c. Local organizations for disaster risk reduction
4. Disaster Management Strategy, Policy and Plan
5. Progress of the Implementation of Hyogo Framework of Action(HFA)
6. ADRC counterpart (organization name & Contact Information)

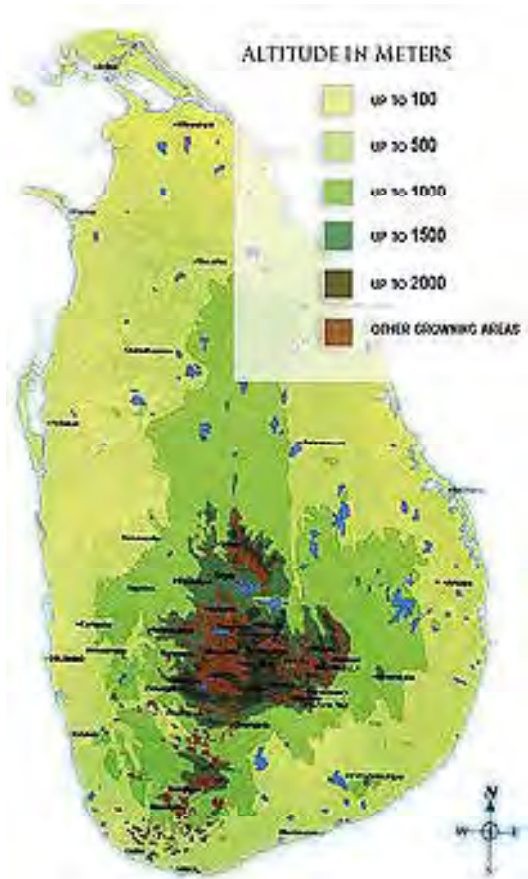
General Information

Geography



- Sri Lanka is an Island
- Location
Indian ocean, Indian sub continent
Latitudes $5^{\circ}55' - 9^{\circ}55' N$
Longitudes $79^{\circ}42' - 81^{\circ}52' E$
- Land area : $65,610 \text{ km}^2$
- Maximum Length : 445 km
- Maximum Breadth : 225 km

Elevation



Rivers



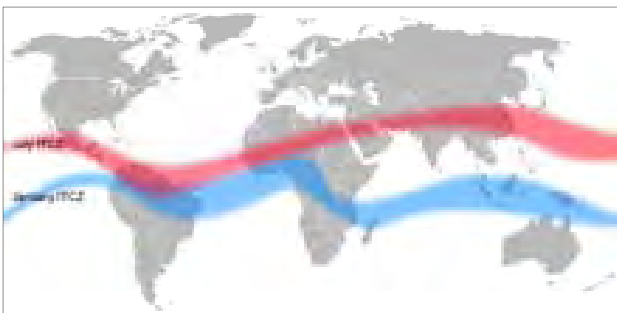
Important Places



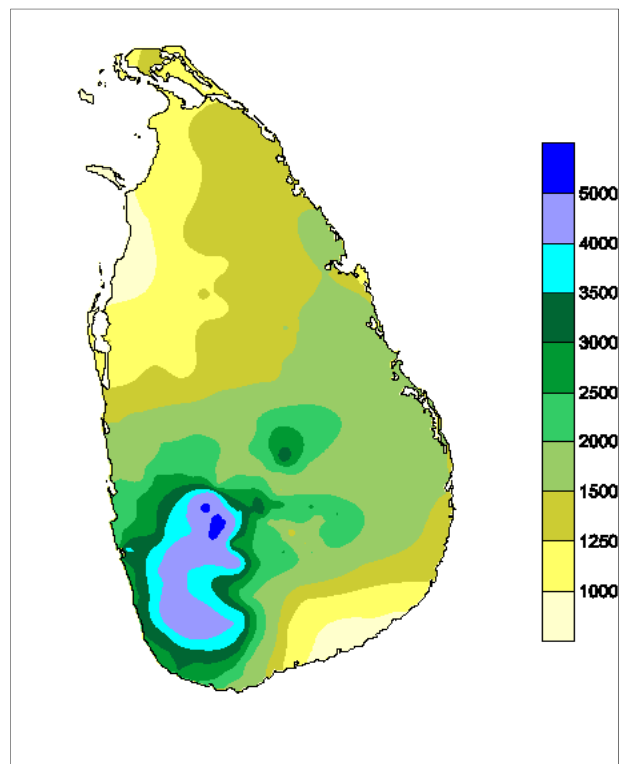
Climate

- Due to the location of Sri Lanka, the climate could be characterized as tropical.
- Sri Lanka lies on Inter Tropical Convergent Zone (ITCZ).
- The topographical features strongly affect the spatial patterns of winds, seasonal rainfall, temperature, relative humidity and other climatic elements, particularly during the monsoon season.
- Rainfall in Sri Lanka has multiple origins. Monsoonal, Convectional and expressional
- The mean annual rainfall varies from 900mm to 5000mm.

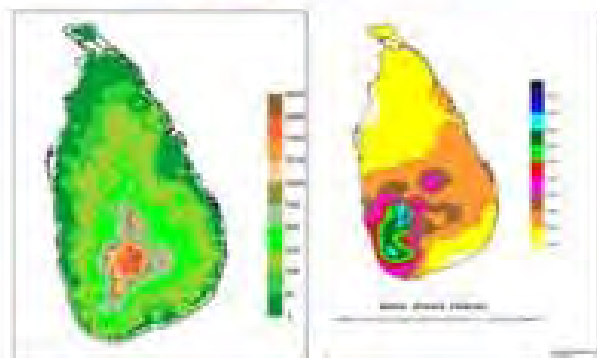
ITCZ



Mean Annual Rainfall(mm)



Topography & Rainfall

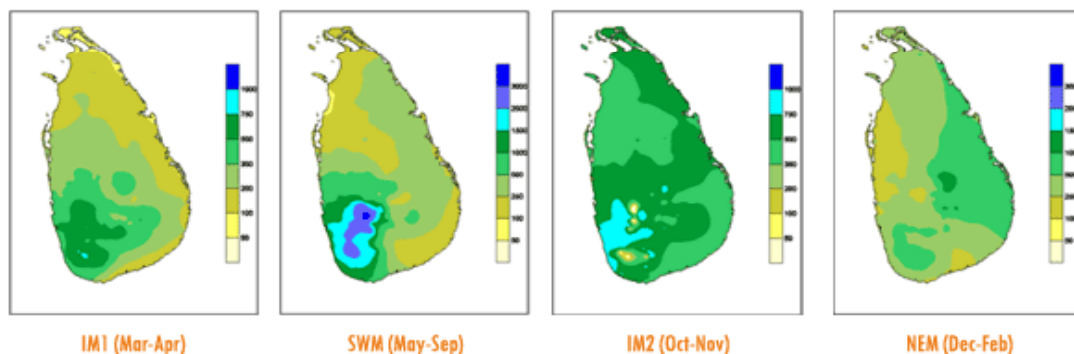


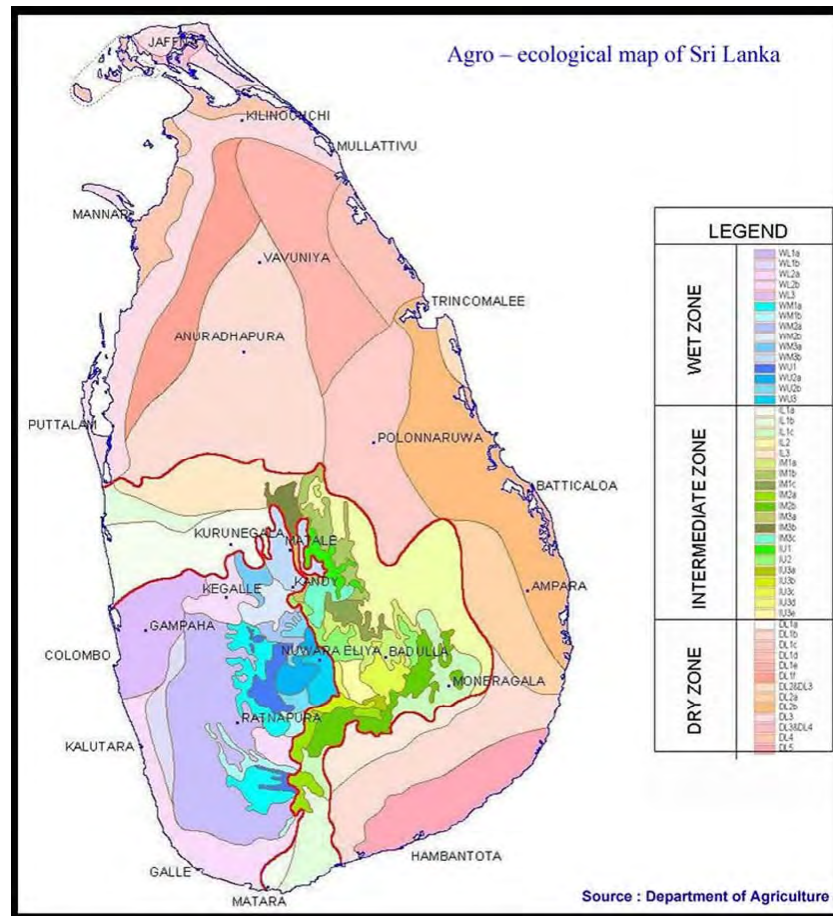
Topography

Annual Average Rainfall

- The mean annual temperature varies from 16⁰c to 27⁰c.
- Climate experienced during 12 months period in Sri Lanka can be characterized in to 4 climate seasons
 - First Inter-monsoon Season – March-April
 - Southwest monsoon season – May-September
 - Second Inter-monsoon season – October-November
 - Northeast Monsoon season - December – February
- Three Agro ecological zones based on climatic conditions.
 - Wet zone
 - Inter mediate zone
 - Dry zone

Seasonal Rainfall





Population

Year	Total	Male	Female
2001	18,797,257	9,359,148	9,438,109
2010 (Estimated)	20,653,000	10,249,000	10,404,000

Religions:-

- Buddhist 70%
- Muslim 7.5%
- Hindu 15%
- Christian 7.5%

Languages:-

- Sinhala (official and national language) 74%
- Tamil (national language) 18%
- other 8%
- English (a link language commonly) is used in government and spoken competently by about 10% of the population

Ethnic groups:-

- 73.8% Sinhalese
- 13.9% Tamil
- 7.2% Moors
- 4.6% Indian Tamil
- 5% Others.

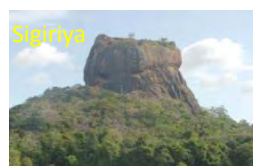
History of Sri Lanka

- History of Sri Lanka begins around 30,000 years ago when the island was first inhabited
- Chronicles, including the [Mahawansa](#), the [Dipavansa](#), the [Chulavansa](#) and the [Rajaveliya](#), record events from the beginnings of the [Sinhalese monarchy](#) in the 6th century BC
- [Buddhism](#) was introduced in the 3rd century BC by Arhath [Mahinda](#) (son of the Indian emperor [Ashoka the Great](#))
- [European Colonialists](#) arrived in the 16th century and [disestablishment](#) of the monarchy in 1815.
- Portuguese arrived in 1505 and ruled a part of the country's coastal Area.
- Dutch rule lasted from 1656 to 1796 and ruled a part of the country.
- British ruled from 1796 to 1948
- By a peaceful process and constitutional evolution, Sri Lanka won back her independence in 1948 and is now a sovereign republic.
- The [Sri Lankan Civil War](#) began in 1983, ending in 2009.

World Heritage Sites of Sri Lanka

- Eight sites of Sri Lanka have been inscribed in the [UNESCO World Heritage](#)

1. The ancient city of [Polonnaruwa](#) (1982)
2. The ancient city of [Sigiriya](#) (1982)
3. The [Golden Temple of Dambulla](#) (1991)
4. The old town of [Galle](#) and its fortifications (1988)
5. The sacred city of [Anuradhapura](#) (1982)
6. The sacred city of [Kandy](#) (1988)
7. The [Sinharaja Forest Reserve](#) (1988)
8. The [Central Highlands of Sri Lanka](#) (2010).



National Symbols



National Emblem



National Flag



National Flower
"Nil Mahanel"
Blue water lily



National Bird
"Wali kukula"
Jungle fowl



National Tree
"Na"
Iron wood

Government System

- Name of the State:- Democratic Socialist Republic of Sri Lanka
- Head of the state :- Executive President
- Parliament : -225 members
- Cabinet
- Provincial councils :- Nine PC
- Local authorities :- 335



- President :- His excellency the President Mahinda Rajapaksha
- Prime Minister :- Hon. D.M.Jayarathne



- Minister for Disaster Management : - Hon. Mahinda Amaraweera
- Deputy Minister for Disaster Management : - Hon.Duleep Wijesekara
- Secretary for the Ministry of Disaster Management :- Mrs. S.M. Mohomad
- Director General for Disaster Management Centre :- Major Gen. Gamini Hettiarachchi



Administration

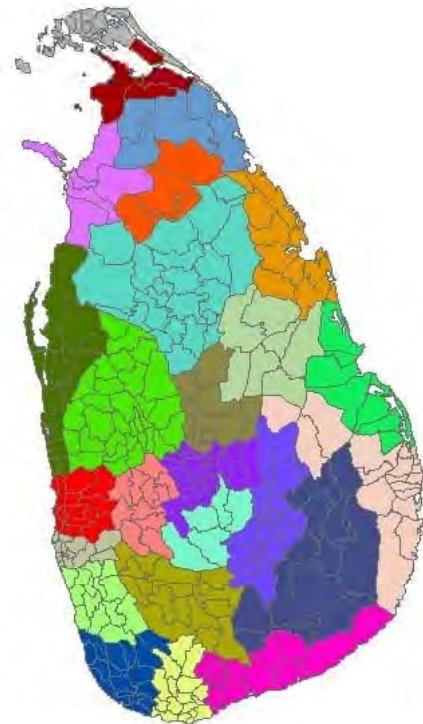
Nine Provincial Councils
and 335 Local Bodies

Twenty five Districts
and 327 Divisional Secretariats



Legend

Orange	Vavuniya
Light Orange	Trincomalee
Yellow-Green	Rathapura
Dark Green	Puttalam
Light Green	Polonnaruwa
Light Blue	Nuwara - Eliya
Blue	Mullaitivu
Dark Blue	Monaragala
Yellow	Matara
Light Green	Matale
Pink	Mannar
Light Green	Kurunegala
Dark Red	Killinochchi
Light Red	Kegalle
Purple	Kandy
Light Green	Kalutara
Grey	Jaffna
Pink	Hambantota
Red	Gampaha
Dark Blue	Galle
Light Green	Colombo
Green	Batticaloa
Purple	Badulla
Light Blue	Anuradhapura
Light Pink	Ampara



Economy

- Currency :- Sri Lankan rupee (LKR)
- GDP :- 56 USD billion, (2010)
- Per Capita Income :- USD 2399 (2010)
- Unemployment :- 4.9 % (2010)
- Literacy Rate :- 97 % (2010)

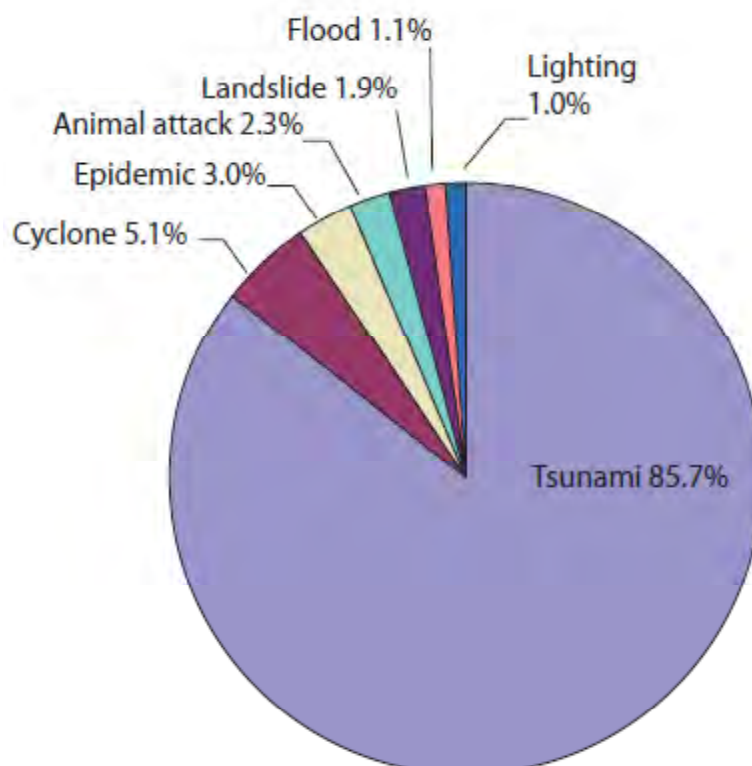
Natural Hazards

- Tsunami
- Droughts
- Floods
- Wild Elephant Attacks
- Cyclones
- Tornados
- High Winds
- Landslides
- Lightning
- Coastal Erosions
- Epidemics
- Fire
- Dam Failures

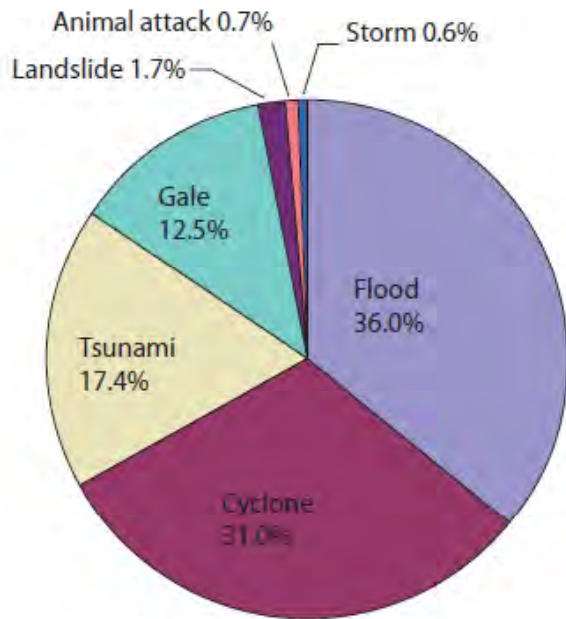
Disaster Impacts by all hazards from 1974 to 2007

Event	Data cards	Deaths	No. of people affected	No. of families affected	No. of destroyed houses	No. of damaged houses	Damage to paddy (Ha)	Damage to crops (Ha)	Relief distribution (Rs)
Epidemic	12,129	1,384	139,698	3,038	NA	NA	NA	NA	2,4647,000
Animal Attack	4,747	1,055	10,549	3,216	1,283	2,734	15,334	24,590	330,680
Flood	2,861	498	5,831,413	2,405,364	49,891	144,916	274,056	170,159	713,796,761
Fire	2,057	2	1,583	407	336	146	NA	NA	NA
Drought	1,249	NA	10,578,284	2,621,668	NA	NA	303,956	530,685	1,110,434,179
Landslide	643	870	148,970	22,753	2,029	6,899	479	114	15,360,969
Cyclone	627	2,344	396,485	392,388	65,756	101,816	1,747	4,409	225,024,322
Lighting	394	437	115	134	5	66	NA	NA	NA
Gale	348	41	86,977	4,790	58,210	9,611	103	440	NA
Coastal Erosion	180	9	11,045	2,168	1,301	998	NA	NA	18,620,429
Storm	133	60	5,027	310	332	2,967	NA	1,000	NA
Urban Flood	125	NA	2,016	4,491	4	75	NA	NA	NA
Tsunami	71	39,331	426,622	150,651	44,250	49,914	90	NA	153,460,200
Plague	45	NA	NA	NA	NA	NA	1,935	NA	NA
Forest fire	37	3	1,175	NA	15	NA	NA	1,128	NA
Snake bite	33	32	NA	NA	NA	NA	NA	NA	NA
Tornado	33	28	775	284	47	1,240	NA	NA	NA
Rains	22	NA	NA	NA	NA	2	NA	NA	NA
Surge	21	3	502	NA	2	15	NA	NA	NA
Structure	15	16	NA	NA	NA	2	NA	NA	NA
Hailstorm	14	NA	NA	NA	NA	70	NA	NA	NA
Sedimentation	7	NA	NA	NA	NA	NA	NA	NA	NA
Earthquake	3	NA	NA	NA	NA	NA	NA	NA	NA
Tidal Wave	3	NA	1,750	NA	NA	350	NA	NA	NA
Frost	2	NA	NA	NA	NA	NA	202	NA	NA
Leak	2	NA	325	NA	NA	NA	NA	NA	NA
Soil Erosion	2	NA	NA	NA	NA	NA	NA	NA	NA
Pollution	1	NA	NA	NA	NA	NA	NA	NA	NA

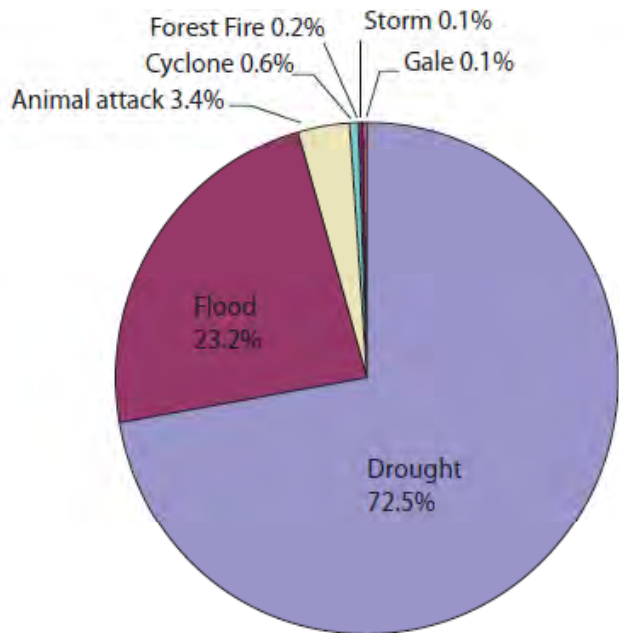
Loss of Human Lives due to disasters: 1974-2007



Damaged & Destroyed Houses : 1974-2007

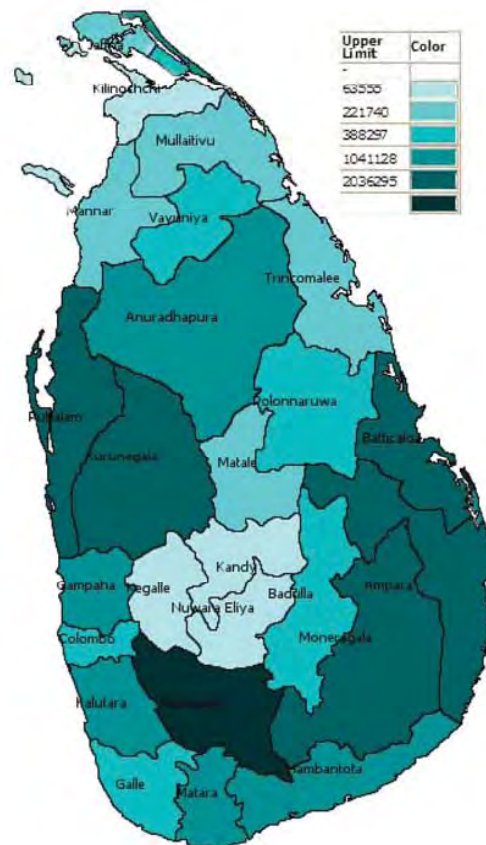


Impacts on Paddy & other Crops: 1974-2007



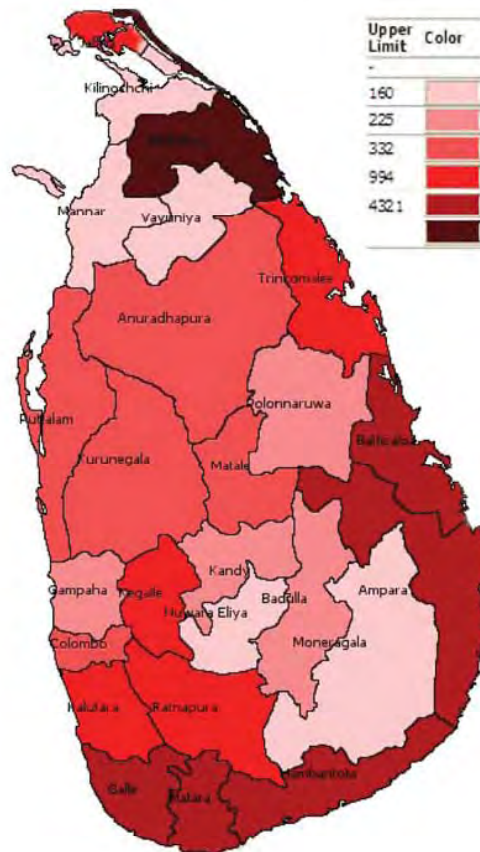
People Affected due to Disasters : 1974 – 2007

District	No of Affected people
Rathnapura	3,329,806
Batticaloa	2,036,295
Monaragala	1,638,509
Puttlam	1,625,443
Kurunegala	1,410,425
Ampara	1,072,272
Anuradapura	1,041,128



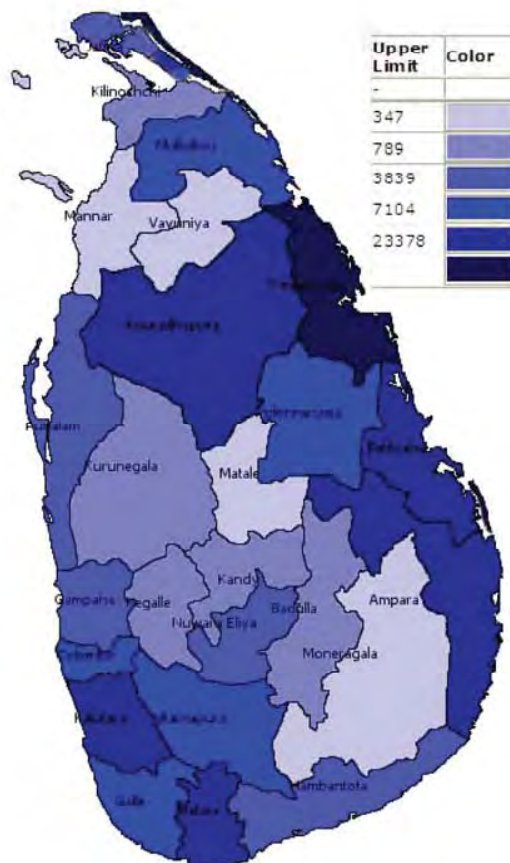
Loss of Human Lives due to Disasters: 1974-2007

District	No of Deaths
Mulative	26,346
Ampara	4,321
Batticaloa	3,820
Hambantota	2,638
Galle	1,639
Matara	1,518
Trincomalee	994
Ratnapura	484



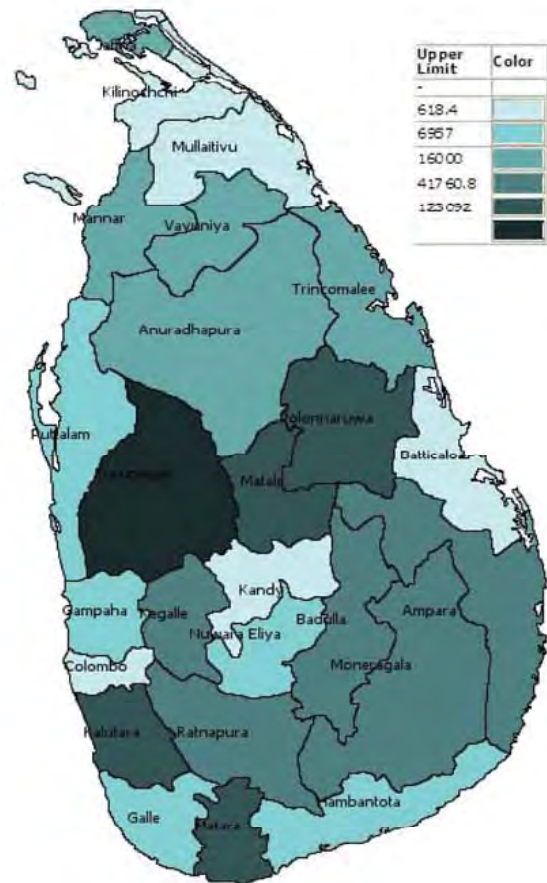
Destroyed Houses due to Disasters : 1974 - 2007

District	No of Houses
Trincomalee	106,672
Ampara	23,378
Batticaloa	22,516
Anuradapura	12,788
kalutara	8,606
Matara	8,317
Galle	7,104

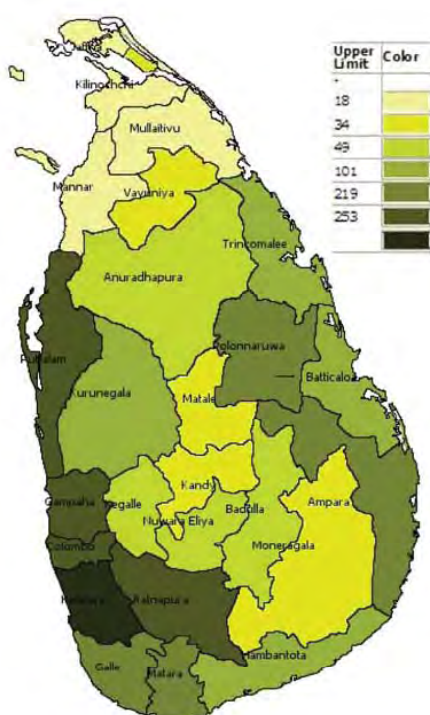


Paddy & other Crops Damage due to Disasters : 1974 - 2007

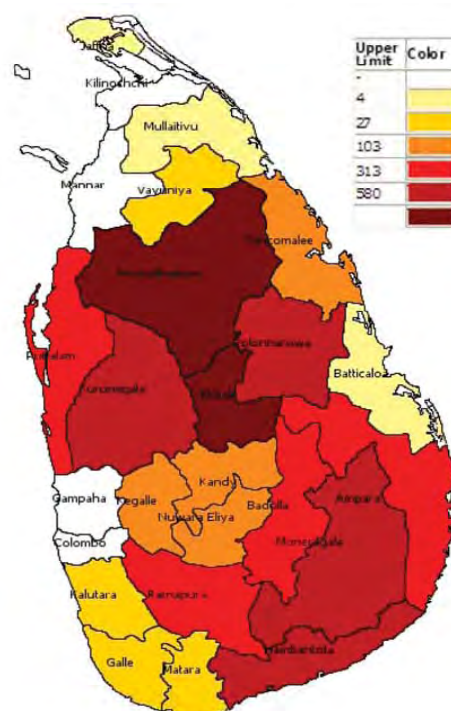
District	No of Damage (Ha)
Kurunegala	141,400
Matale	123,092
Polonnaruwa	71,220
Matara	57,119
Kalutara	57,052
Monaragala	41,760
Badulla	41,374
Ampara	23,698



Floods (1974 - 2007)



Animal Attacks (1974 - 2007)



Floods



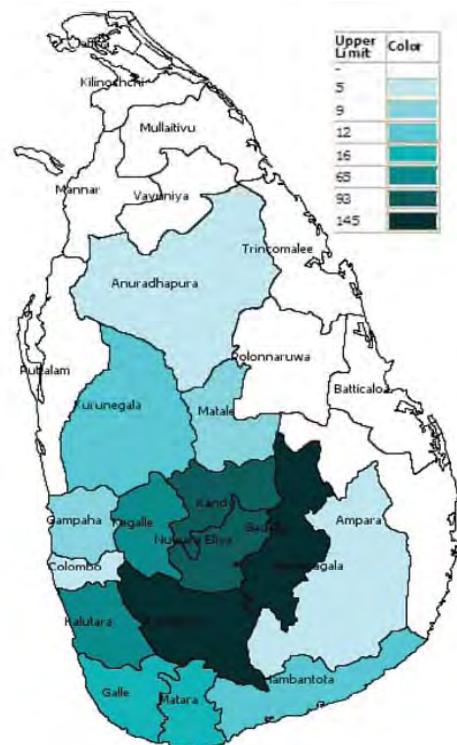
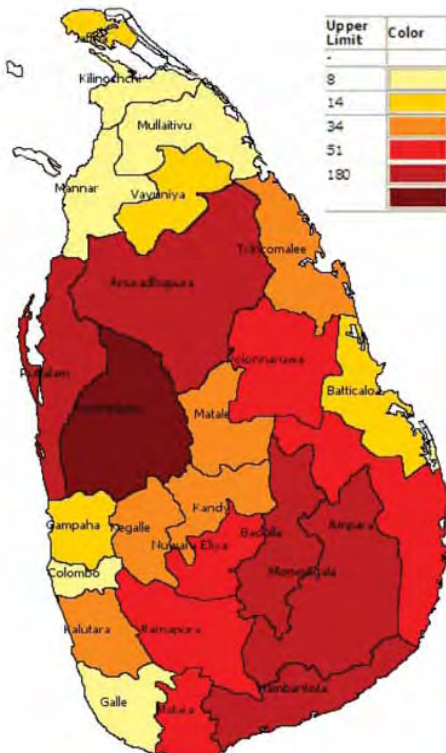
Wild Elephant Attacks



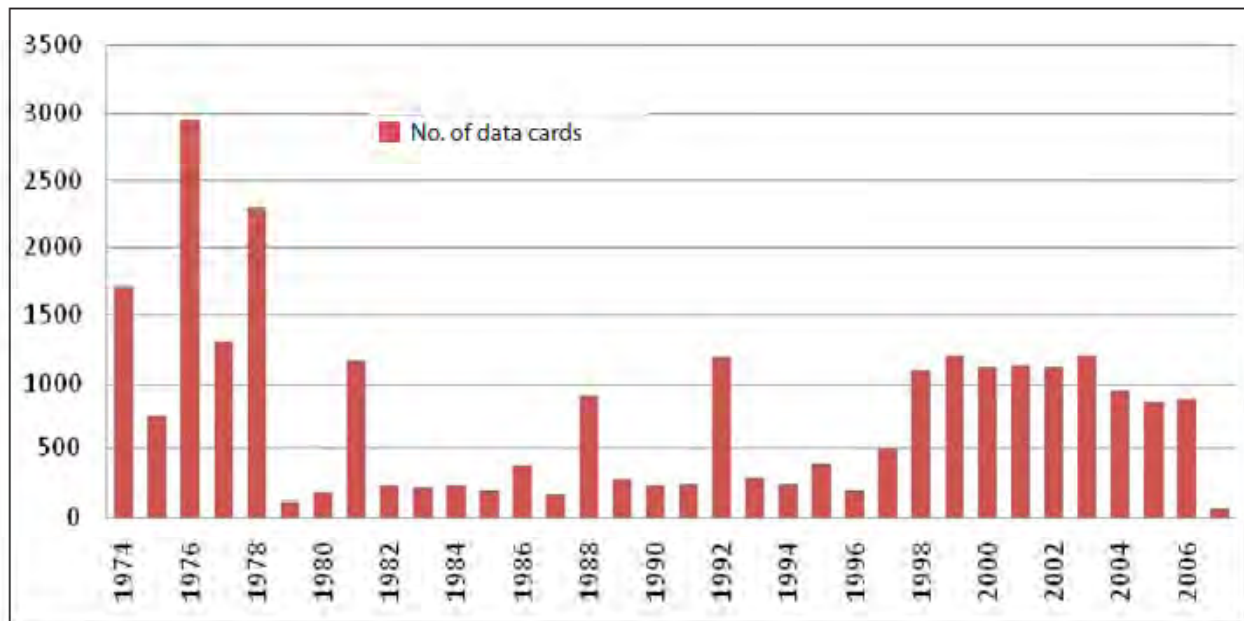


Droughts (1974 – 007)

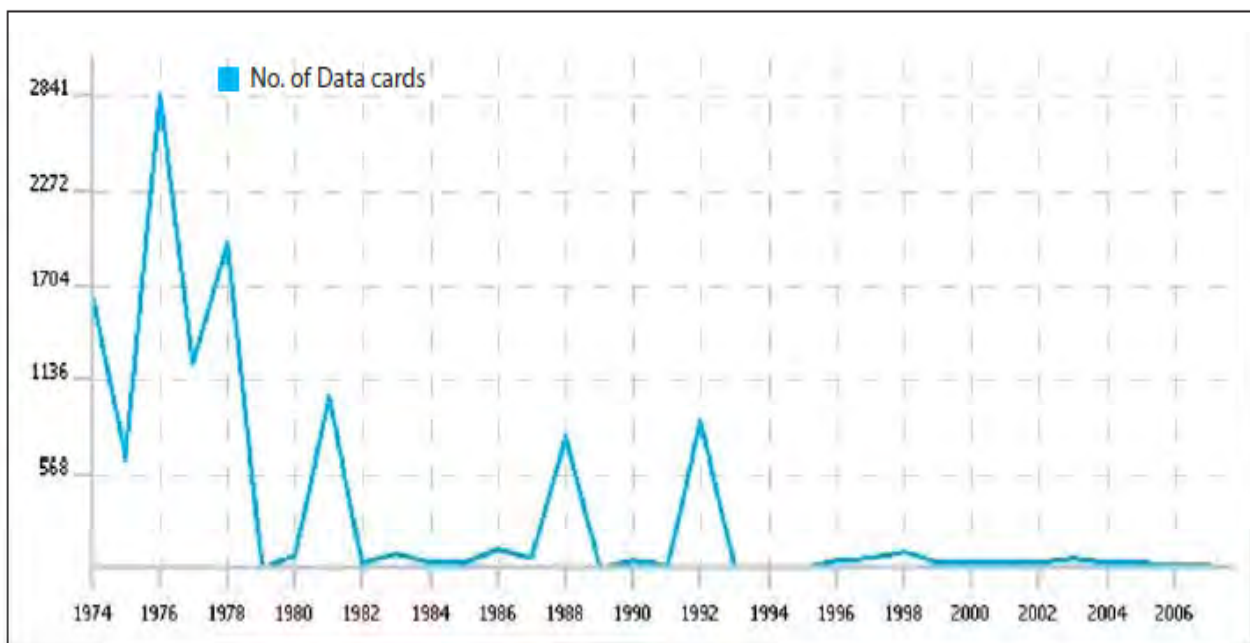
Landslides (1974 – 2007)



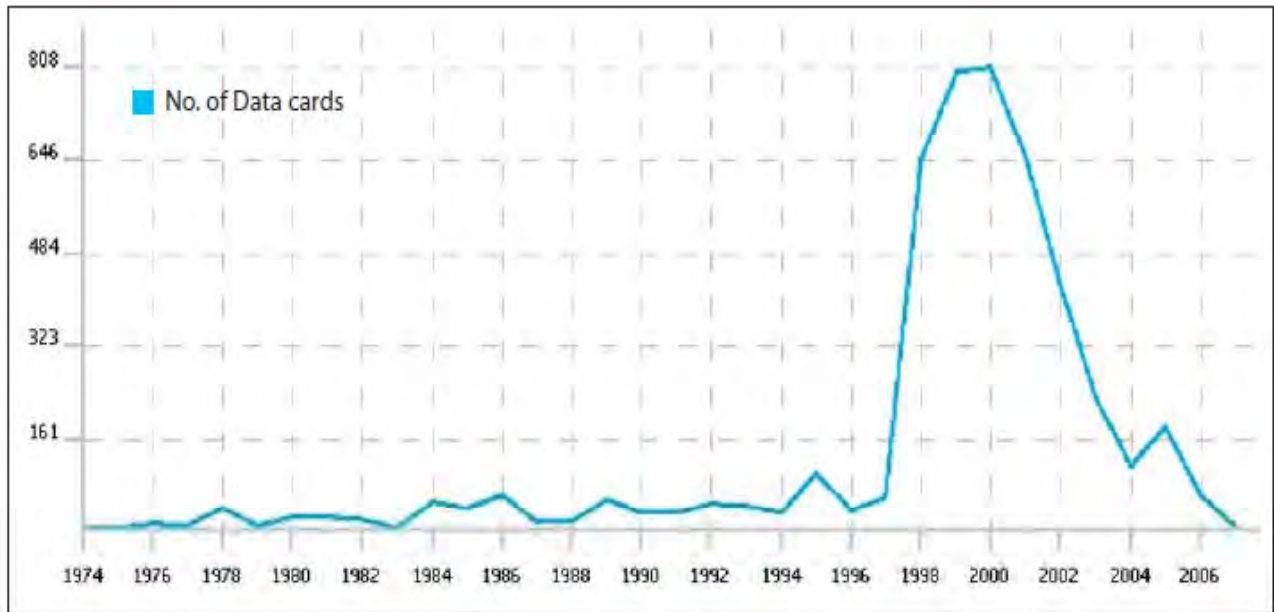
General Trend: Number of Reports (All hazard types, 1974-2007)



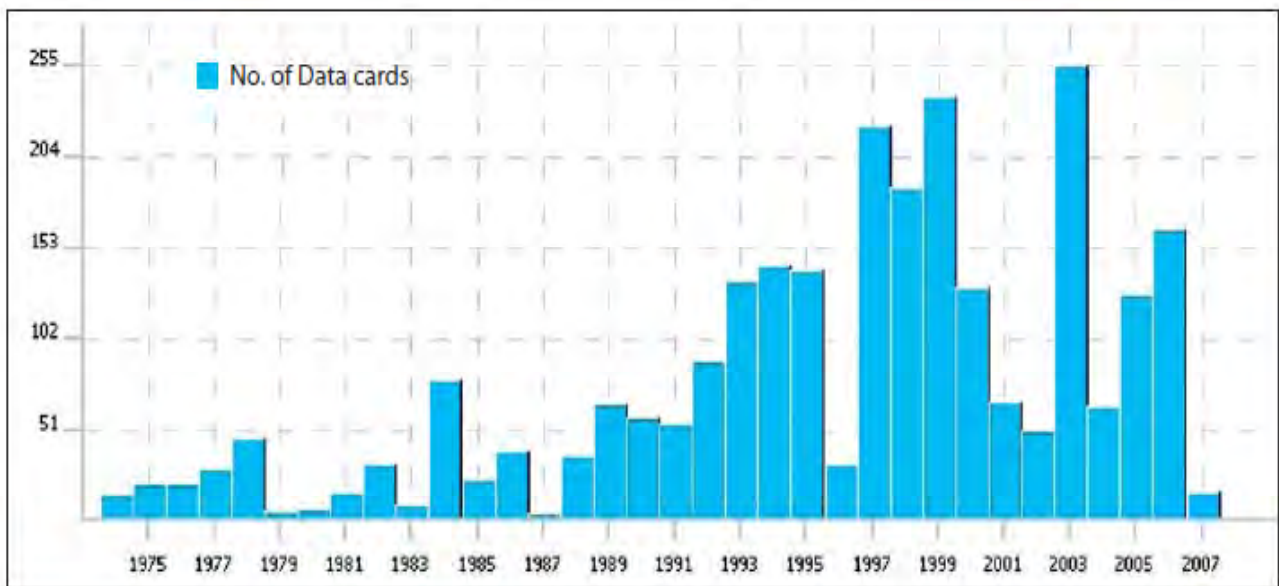
General Trend: Number of Data Cards (Epidemics, 1974-2007)



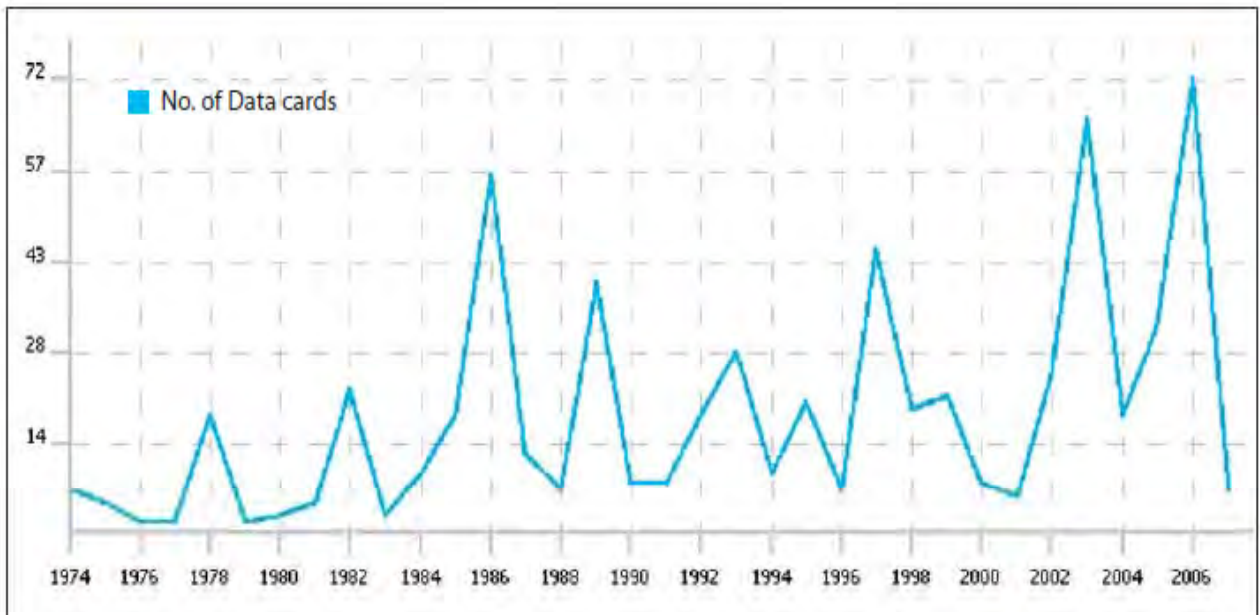
General Trend: Number of Data Cards Reported (Animal Attacks, 1974-2007)



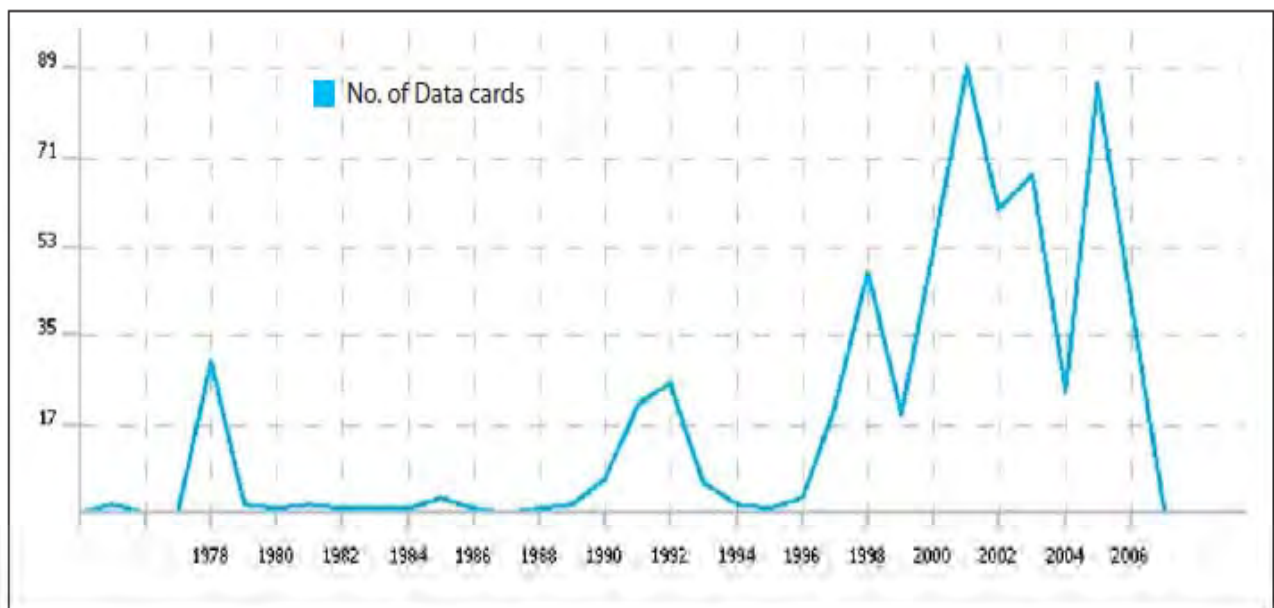
General Trend: Number of Data Cards (Floods 1974-2007)



General Trend: Number of Data Cards (Landslides, 1974-2007)



General Trend: Number of Reports (Cyclone, 1974-2007)



Tsunami 2004.12.26



- Southern, Western, Eastern and Northern coastal belt is prone to Tsunami
- The unprecedented havoc caused by Tsunami had devastated two thirds of the coastal belt of Sri Lanka.
- More than 35,000 lives were lost and 100,000 houses were completely damaged in thirteen districts along the coastal belt. Approximately 5,000 people were missing.









Disaster Management System in Sri Lanka

Evolution of Ministries/Departments for DM

- Before 1977 -Dept. of Social Services
- 1977 – 1988 -Ministry of Social Services/Department of social Services
- 1989 –1994 -Ministry of Rehabilitation, Reconstruction and Social Welfare
- 1994 – 1995 -Ministry of Health & Social Services
- 1995 -Ministry of Social Services
- 1996 -National Disaster Management Centre (NDMC)/ Dept. of Social Services
- Since 1996, while NDMC has been doing in Disaster management activities consisting Preparedness, Mitigation, Response and Recovery measures , the Dept. of Social services was providing relief assistance to the disaster victims
- Meanwhile, Ministry of Rehabilitation and Reconstruction and several other organizations have been assisting displaced persons due to civil conflict
- May 13th 2005 –The National Disaster Management Act, No. 13 was passed
- Dec 2005 – Under gazette No. 1422/22, dated on 08 Dec. 2005 two ministries were established as
 - » Ministry of Disaster Management & Human Rights
 - » Ministry of Disaster Relief Services
- 2010 Ministry of Disaster Management was established

Requirement for Disaster Management Legislation

- Floods and Landslides in 2003
 - 37,221 Families affected
 - 756,027 persons affected
 - 369 persons died
 - 37227 houses damaged
 - Government allocated Rs. 1740.15 mn for relief and rehabilitation assistance
 - Total estimated economic loss were Rs. 7000 million
- Tsunami in 2004
 - 260,967 families affected
 - 1.3mn people affected
 - 35,000 people died
 - 5000 people missing
 - 108,467 houses damaged
 - Total estimated economic loss were US\$ 3.6 billion
- In the last 10 years period before 2005, it was reported 35 major disasters and the total economic loss were US\$ 6.16 billion

Current Disaster Management System in Sri Lanka

Legal frame work for DM –
Sri Lanka disaster Management act, No.13 of 2005

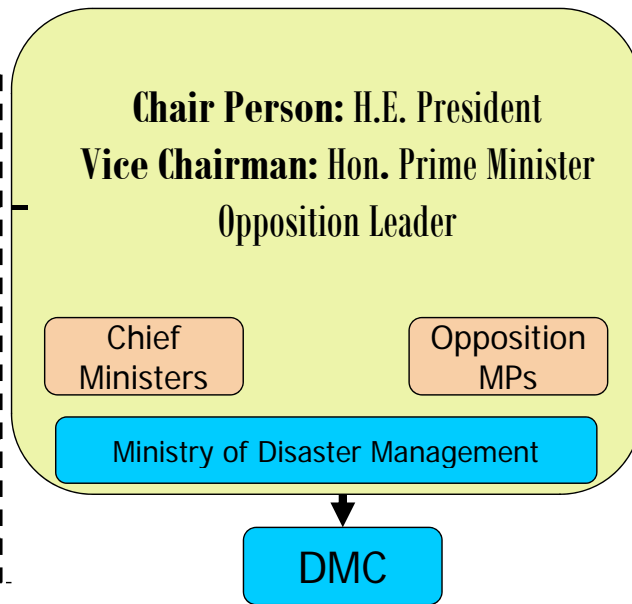
- The National Council for Disaster Management (NCDM) was established by the act
- The Disaster Management Centre (DMC) was established under the National Council for Disaster Management (NCDM) as the lead agency on disaster risk management in the country in implementing the directives of NCDM
- In December 2005, the Ministry for Disaster Management was established.
- On January 2006, Ministry of Disaster Management & Human Rights (with human right portfolio) established.



National Council For Disaster Management (NCDM)

Ministers in charge of

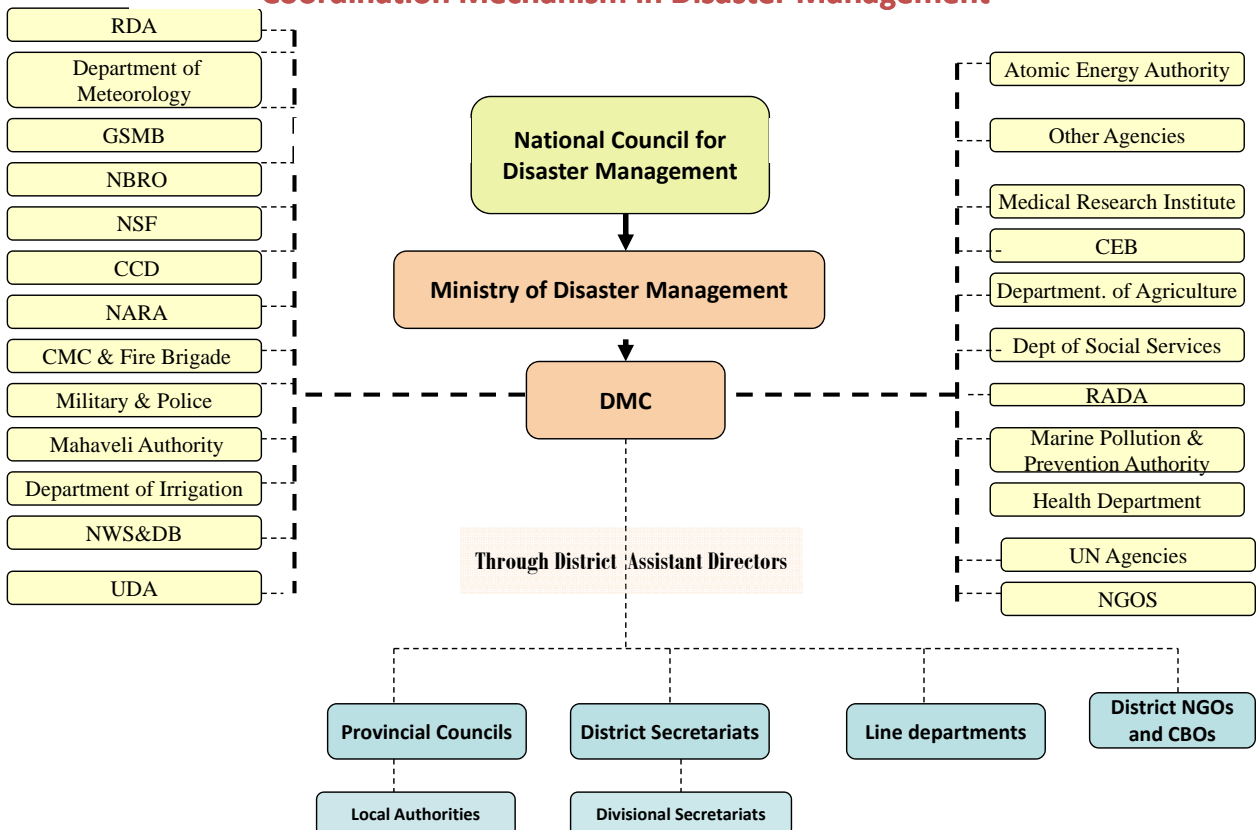
- Social Services
- Rehabilitation & Reconstruction
- Home Affairs
- Health
- Science & Technology
- Housing
- Coast Conservation
- Irrigation
- Power
- Defence



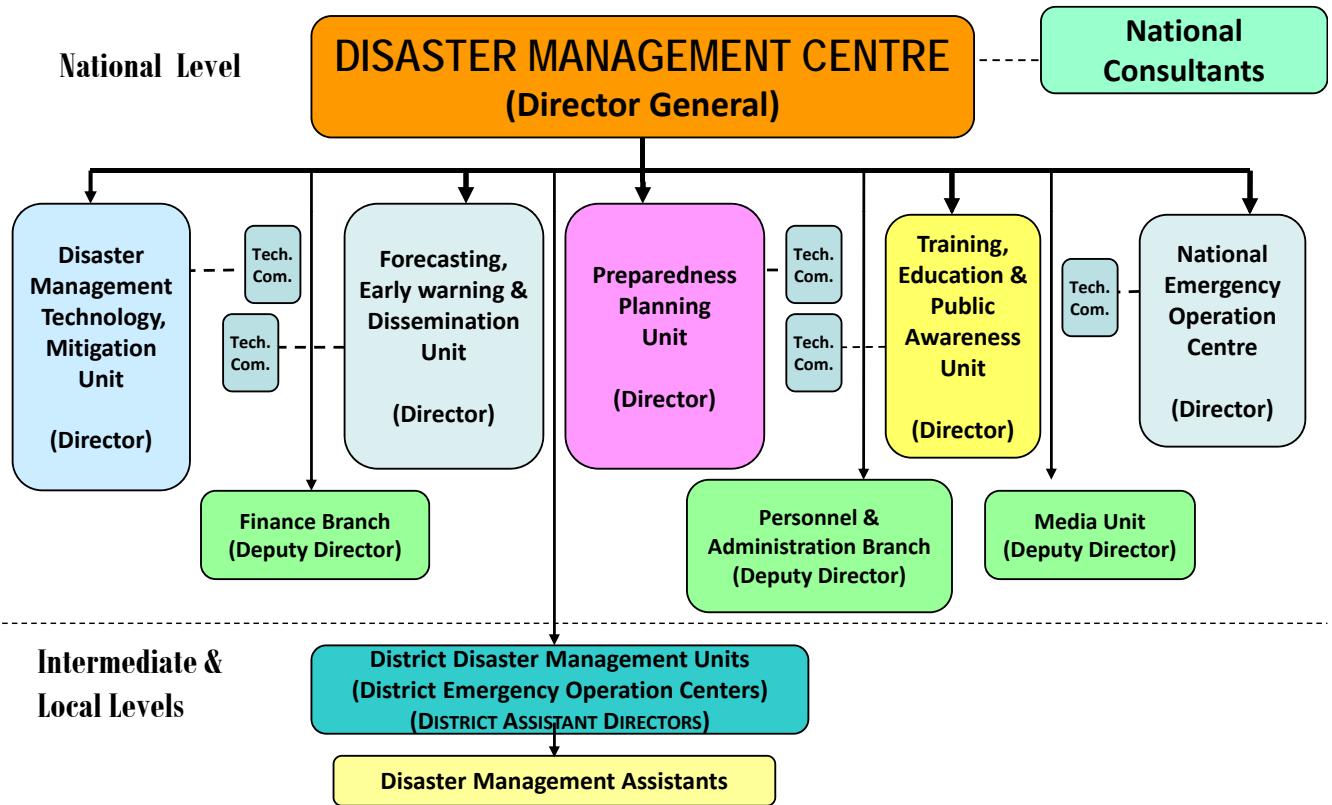
Ministers in charge of

- Police
- Finance
- Land
- Fisheries & Aquatic Resources
- Foreign Affairs
- Water Supply
- Highways
- Urban Development
- Education
- Environment

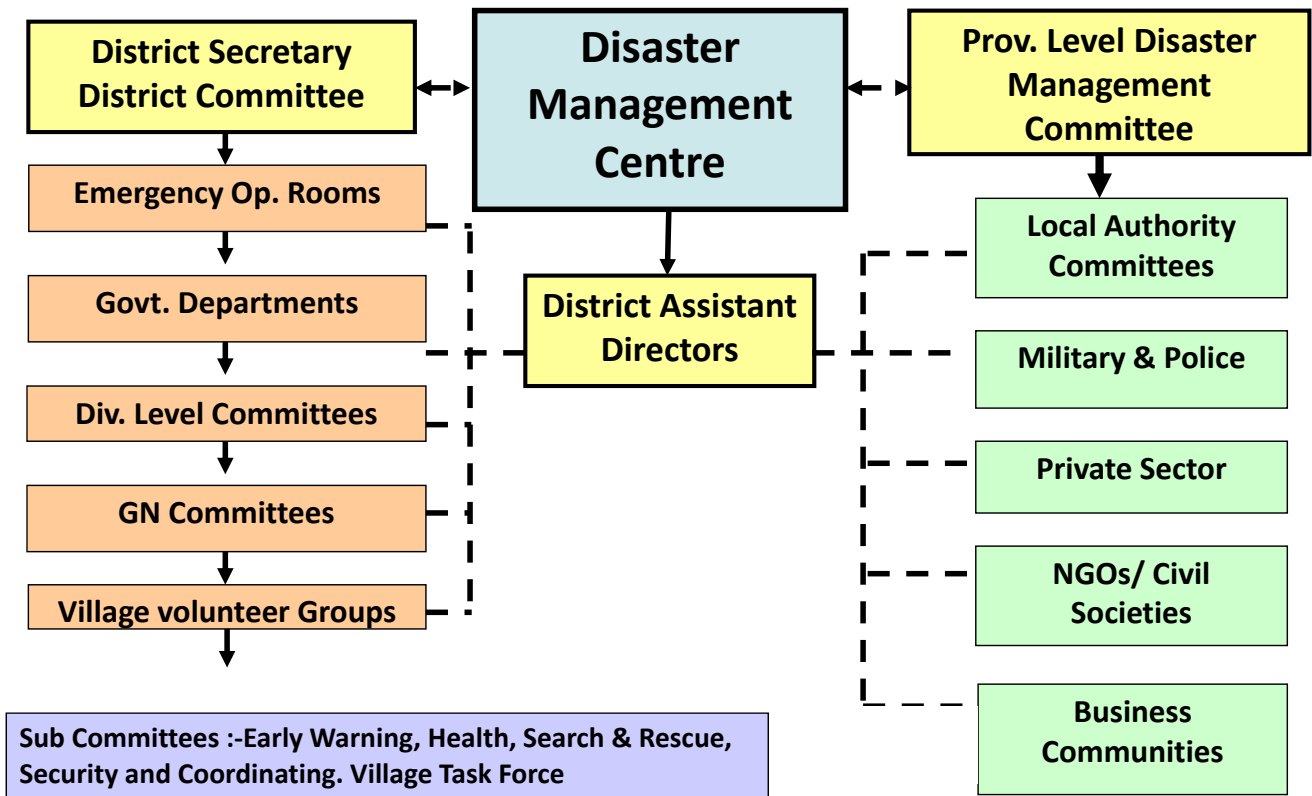
Coordination Mechanism in Disaster Management



Organization Structure of Disaster Management Centre



Disaster Risk Management Mechanism at Intermediate and Local Level



Functions of the DMC as per the DM Act

- Preparation & implementation of National Disaster Management Plan for the country
- Preparation & implementation of National Emergency Operation Plan for the country
- Assisting various Ministries, Government Departments, or Public Corporations in preparing their disaster management plans
- Implementing programs and plans for disaster preparedness, mitigation, prevention, relief, rehabilitation, and reconstruction activities and coordinating of such organizations
- Issuing instructions and guidelines to appropriate organizations, non-governmental organizations, district secretaries and divisional secretaries on activities related to disaster management
- Promote research & development programs

Disaster Management Centre (DMC)

Vision:

Disaster Risk Management for safer communities and sustainable development in Sri Lanka.

The Broad Mission:

To create a culture of safety among communities and the nation at large through systematic management of natural, technological and man-made disaster risks.

Main Activities of DMC

Disaster Management Centre works to enforce, coordinate and monitor the activities related to

1. Disaster Management Technology, Long-term Mitigation & DRR
 - Hazard Mapping and Risk Assessment
 - Information and Data Collection
 - Research and Analysis
 - Building Technology
 - DMC Website
 - Long term Disaster Risk Reduction
 - Specific risk reduction projects to reduce specific identified risks that can cause future disasters
 - DRR integration in Development
 - Long-term action planning
2. Early Warning
 - Have systems in place for receiving forecasting and early warning
 - Forecasting of impending disasters
 - Early warning and Dissemination

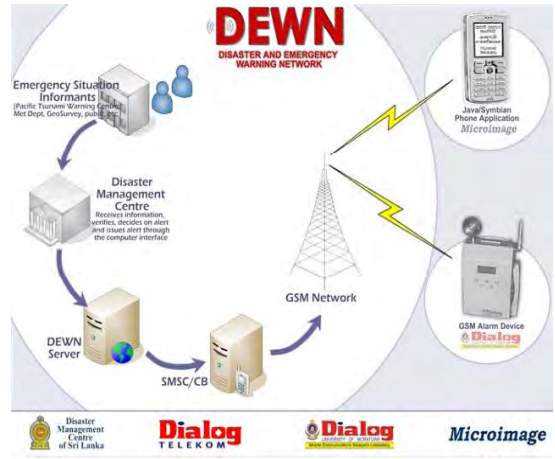
Continue

3. Emergency Operations in case of a disaster
 - Establishment of National Emergency Operation Centre
 - Establishment of Emergency Operation Rooms at provincial, district and divisional levels
 - Carrying out Emergency Operations, coordinating with armed forces, police and other related agencies at national and all sub levels
4. Preparedness Planning (National and other levels)
 - Preparation of National Disaster Management Plan and Emergency Operation Plans
 - Facilitating, issuing guidelines, coordinating, directing and monitoring of preparation of disaster preparedness and response plans at provincial, district, local authority, divisional and village levels
 - Preparedness for timely and effective response, equitable relief distribution, speedy recovery, timely rehabilitation and reconstruction at national level and all sub levels
5. Training, Education & Public Awareness
 - Training – Disaster risk reduction related training at all levels
 - Education – integration of disaster risk reduction in school curricula and in university curricula as appropriate
 - Social Marketing (Public Awareness) – Programmes for officials at all levels, school children and community level

Erection of warning signs



Early Warnings



Progress for Implementing the Hyogo Framework for Action(HFA)

- National progress report on the implementation of the Hyogo Framework for Action (2009-2011) has been prepared by Sri Lanka
- The NDMC meets regularly and discusses programmes implemented by members and policy requirements to make implementation more effective.
- Nearly 40 per cent of the activities identified in the Road Map have commenced.
- The Disaster Management Act is being modified to give more authority to the DMC in terms of coordination of disaster management activities. The draft Act has been forwarded to the Attorney General's Department.
- Disaster management concepts were included in the Local Governance Policy, which has been approved by the Government. The DMC has already provided disaster concerns to be incorporated into the Act based on the LG policy.
- Building application used by Local Authorities for approval of land subdivision plans and building plans are being modified with the concurrence of the UDA to include DRR concepts. The draft format has been submitted to the UDA for their consideration.
- Other.....

ADRC Counterpart

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Major Gen.Gamini Hettiarachchi(Retd)

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E-mail : info@dmc.gov.lk, dgdmc@sltnet.lk

Website : www.dmc.gov.lk

Supporting Agencies

•UNDP



•ADRC



•ADPC

•UNHCR



OCHA

•OCHA

•NGOs



•INGOs

Thank You

