

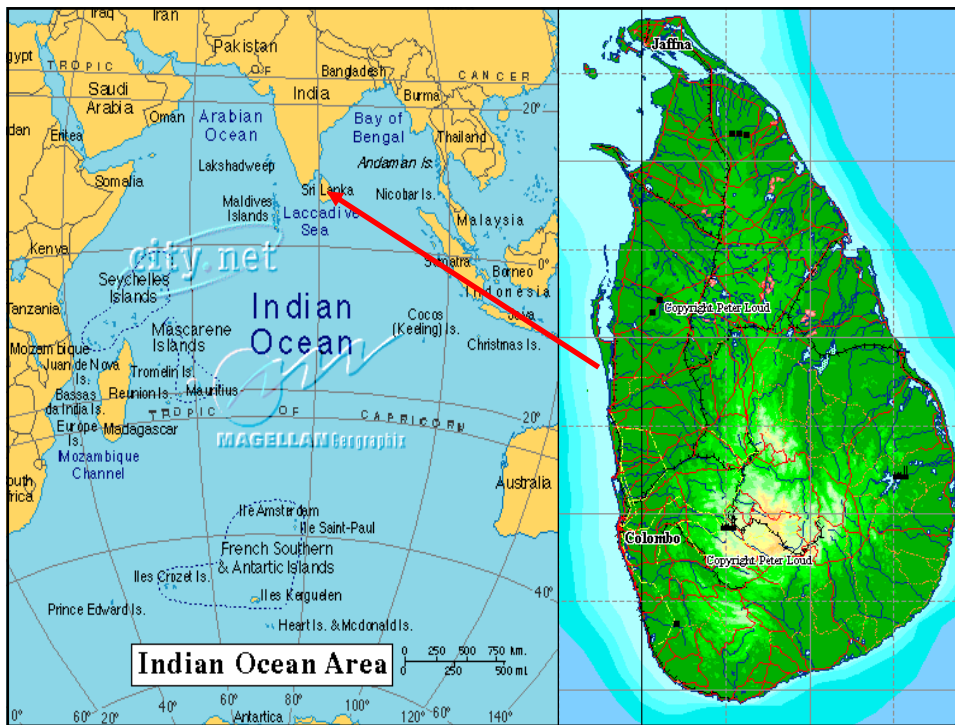
**AUBOWAN**

# **SRI LANKA AND ITS DISASTER MANAGEMENT ACTIVITIES**



**DEPARTMENT OF SOCIAL  
SERVICES  
MINISTRY OF SOCIAL  
SERVICES**

**NIMAL HETTIARACHCHI**



## SRI LANKA IS AN ISLAND

- LOCATION  
 INDIAN OCEAN  
 INDIAN SUB CONTINENT  
 LATITUDES 5.55-9.55 N  
 LONGITUDES 79.42-81.52 E

LAND AREA : 65,610 SQKM

LENGTH : 445 KM

BREADTH : 225 KM

## CLIMATE IN SRI LANKA

LOW LAND TYPICALLY TROPICAL

HIGHER ELEVATION QUITE COOL

AVERAGE TEMPERATURE 28-30 C

HIGHER ELEVATION 8-14 C

MAIN RAIN SOURCES

SOUTH WEST MONSOON – MAY-SEP

NORTH EAST MONSOON - NOV.-JAN.

INTERMEDIATE MONSOON – APRIL,OCT.

RELATIVE HUMIDITY VARIES 70% DURING THE DAY TO  
90% AT NIGHT



## History



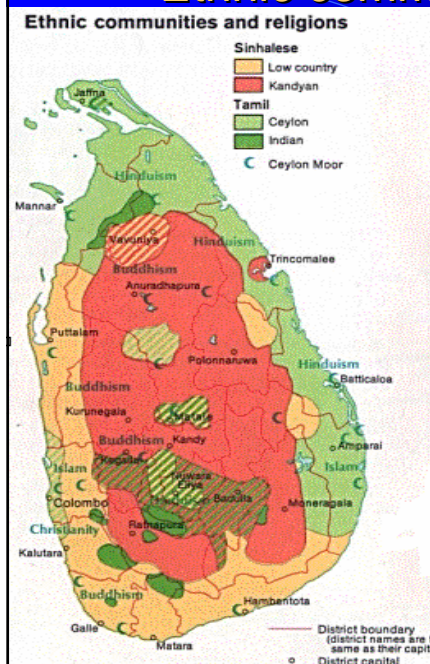
2000 YEARS HERITAGE  
BUDDHISM INTRODUCED IN 243 B.C  
ANCIENT CITIES-  
ANURADAPURA,POLONNARUWA,SEGIRIYA,KANDY  
PORTUGUESE,DUTCH & BRITISH INVADED THE ISLAND  
WON BACK INDEPENDENCE IN 1948



## DEMOGRAPHY

TOTAL POPULATION	- 18.7 MILLION(1999)
DENSITY	- PERSONS PER SQKM 299
URBAN POPULATION	- 22%
RURAL POPULATION	- 78%
ANNUAL GROTH RATE	- 1.2%
LIFE EXPECTANCY	- MALE 70 YEARS FEMALE 72 YEARS

## Ethnic communities & religions



### Ethnic distribution

Sinhalese	- 74%
Tamil	- 18.3%
Muslim	- 7.6%
Others	- 0.1%

### Religious afflictions

Buddhist	- 69.3%
Hindu	- 15.5%
Muslim	- 7.6%
Christian	- 7.5%
others	- 0.1%

## ECONOMY IN SRI LANKA

AN AGRICULTURAL ECONOMY BASED COUNTRY

RICE IS STAPLE FOOD

MAIN EXPORT ARE TEA,RUBBER,COCONUT,READY  
MADE GARMENTS,GEM AND MINOR EXPORT CROPS

OTHER EXPORTS ARE PETROLIUMPRODUCTS,  
LEATHER & FIBER GOODS AND ELECTRONIC GOODS

MAIN FOREIGN EXCHANGE EARNERS – EXPORTS

FOREIGN EMPLOYMENT AND TOURISM

MONETARY UNIT - SL RUPPE(\$ 1=SL 70)

PER CAPITA INCOME - \$ 840(1999)



## GOVERNMENT

NAME – DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

GOVERNMENT – UNITARY MULTIPARTY REPUBLIC

LEGISLATIVE HOUSE – PARLIAMENT

HEAD OF STATE – PRESIDENT

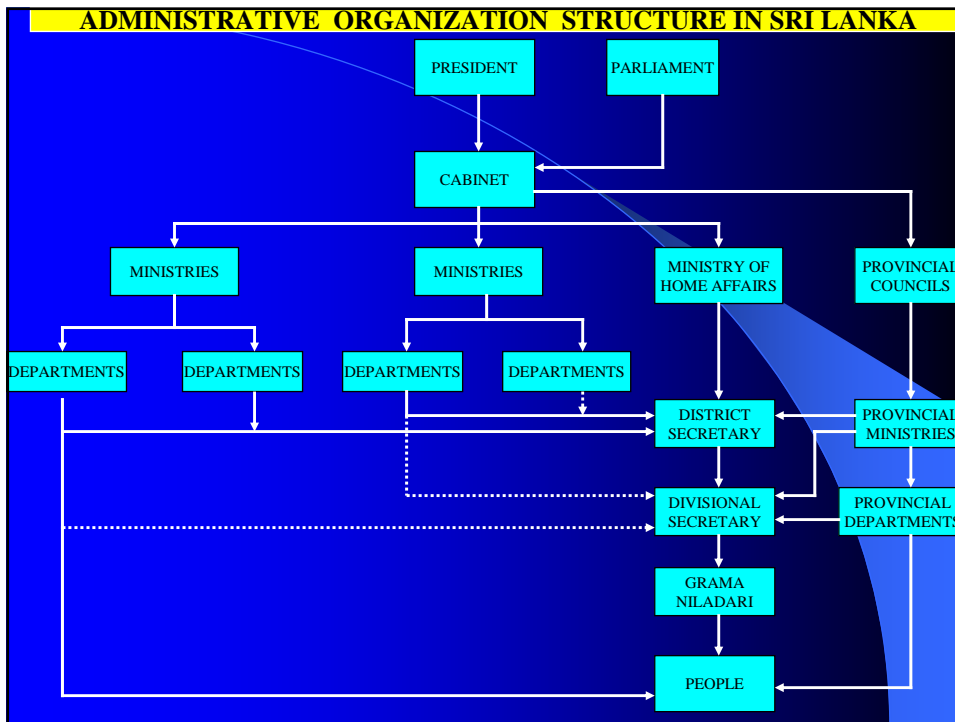
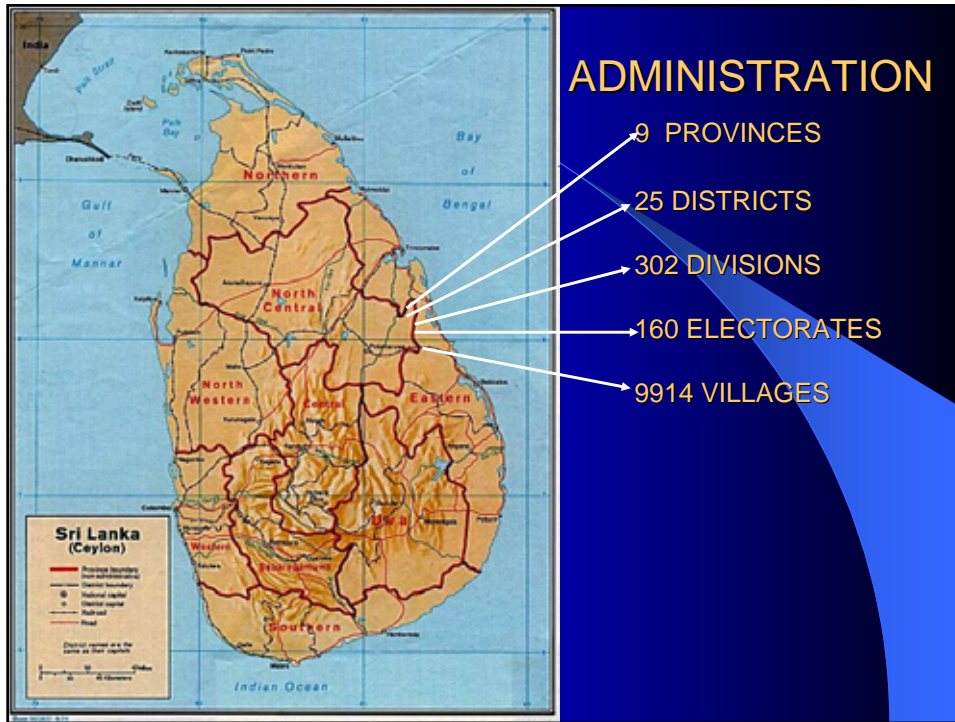
EXECUTIVE POWER – PRESIDENT & CABINET

CAPITAL(ADMINISTRATIVE) – SRI JAYWARDENEPURA

COMMERCIAL & LARGEST CITY – COLOMBO

OFFICIAL LANGUAGES – SHINHALA & TAMIL

LINK LANGUAGE – ENGLISH



# MAIN NATURAL DISASTERS IN SRI LANKA

FLOOD

LANDSLIDES

CYCLONE

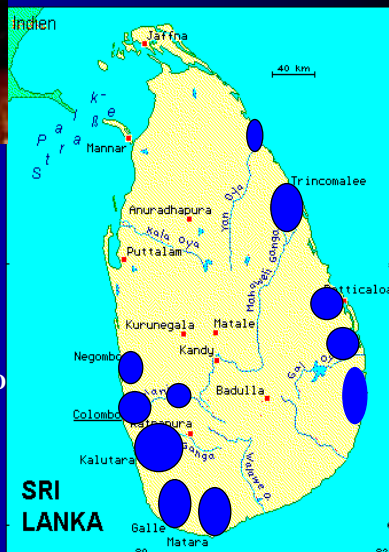
DROUGHT

SEA EROSION



## FLOOD

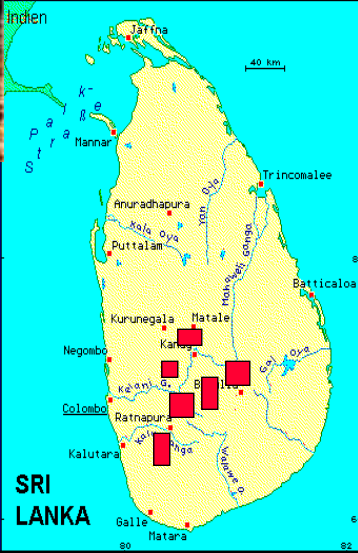
- 103 RIVERS IN SRI LANKA
- 10 RIVERS ARE CONSIDERED AS MAJOR
- MAHAWELI IS THE LARGEST RIVER – 330 KM
- KALU, NILWALA, GIN AND MAHAWELI
- ARE VULNERABLE TO FLOOD
- MAJOR FACTORS FOR FLOOD
  - DEFORESTATION
  - IMPROPER LAND USED
  - ABSENCE OF SCIENTIFIC SOIL CONSERVATION
  - IMPROPER URBANIZATION
- FLOOD PRONE DISTRICTS – RATHNAPURA,
- KEGALLE, COLOMBO, GAMPAHA, MATARA,
- GALLE, AMPARA, TRINCOMALEE, BATTICALOA,
- BADULLE AND MATALE





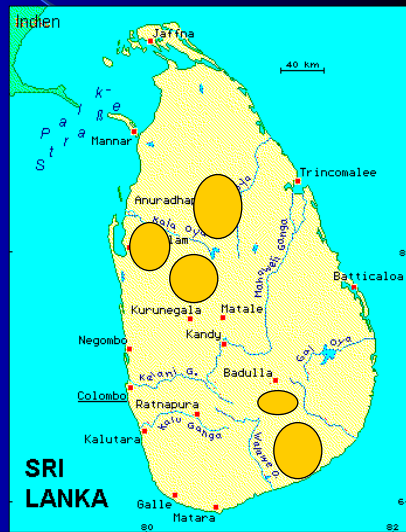
## LANDSLIDES

- INCREASE OCCURRENCES OF LANDSLIDES DURING THE LAST TWO DECADES
- 21% OF TOTAL LAND AREA IS HILLY AND 1% EXTREMELY STEEP
- MAIN CAUSES FOR LANDSLIDE
  - HEAVY RAINS & GEOLOGICAL CHANGES
  - INDISCRIMINATE CLEARANCE OF STEEP SLOPES
  - GEM MINING
  - IMPROPER URBANIZATION
- LANDSLIDE PRONE AREAS
  - CENTRAL, SOUTH WESTERN REGIONS



## DROUGHTS

- DRY ZONE AREAS IN SRI LANKA ARE PRONE TO DROUGHTS
- EVERY YEAR , SOME WHERE IN THE COUNTRY HAS A DROUGHT
- DROUGHTS OF REGIONAL SIGNIFICANCE OCCUR ONCE IN EVERY 3-4 YEARS
- SEVERE DROUGHTS OCCUR WITHIN 10 YEARS CAUSING MUCH HARDSHIPS TO THE PEOPLE AND ECONOMY





# CYCLONE

- Cyclones are not common disasters in the country
- Northern, eastern and central region of the country are vulnerable to cyclone
- High gales and depressions are more common disasters in Sri Lanka
- 1978 cyclone
  - Affected more than 1 million people
  - Killed nearly 1000 people
  - More than 250,000 house damage



# SEA EROSIONS

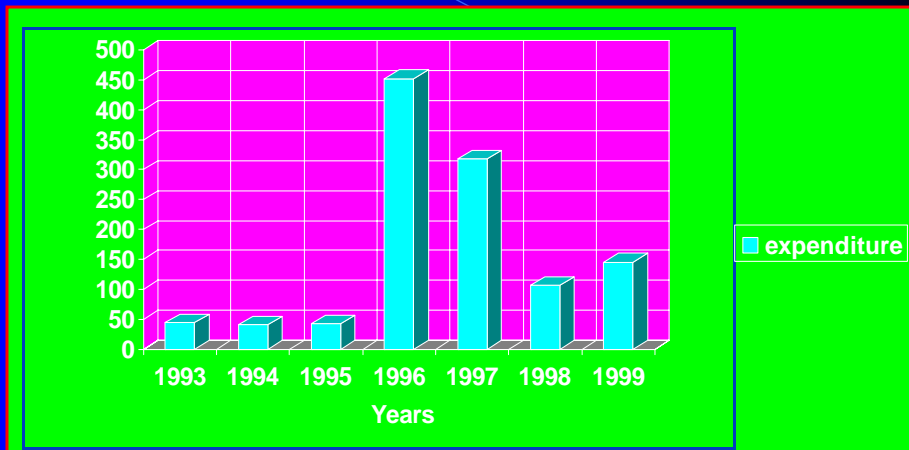
- COASTLINE – 1585 KM
- MORE THAN HALF OF POPULATION ARE LIVING IN COASTAL AREA.
- 50% SUBJECT TO SEA EROSION
- MOST AFFECTED AREAS
  - NORTH WESTERN
  - WESTERN
  - SOUTH
- MAIN CAUSES FOR SEA EROSION
  - OFF SHORE MINING OF CORALS
  - REMOVAL OF SAND
  - CLEARING OF MANGROVE SWAMPS
  - DESTRUCTION OF COASTAL VEGETATION



## OCCURRENCE OF NATURAL DISASTERS AND FUNDS ALLOCATION FOR DISASTERS IN SRI LANKA - 1993-1999

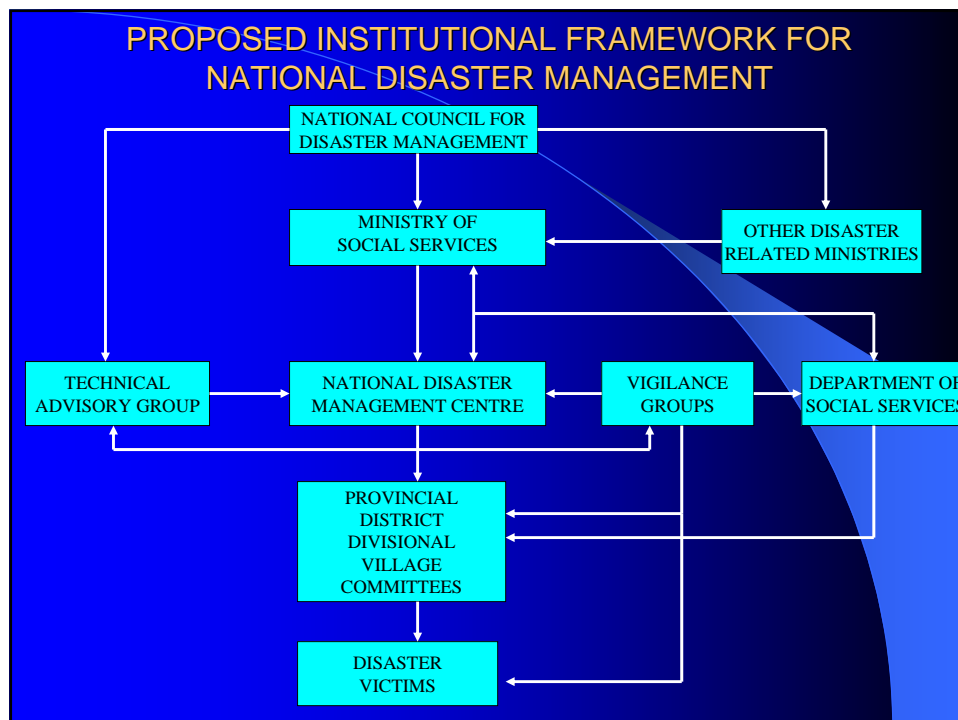
YEAR	TYPE OF DISASTER	NO. OF DEATHS	Damaged Houses	NO.OF AFFECTED FAMILIES	EXPENDITURE FOR DISASTERS
1993	Flood	6	42148	219874	30,001,904
	Landslides	29	320	870	4,419,500
	Sea Erosion			160	497,000
	Cyclone(High Gale)	1		450	700,000
	Drought			16383	8,108,200
	<b>Total</b>	<b>36</b>	<b>42468</b>	<b>237737</b>	<b>43,726,604</b>
1994	Flood	8	52927	353409	37,401,904
	Landslides			284	628,520
	Sea Erosion			384	880,183
	Cyclone(High Gale)	10		456	627,500
	Drought			2800	618,700
	<b>Total</b>	<b>18</b>	<b>52927</b>	<b>357333</b>	<b>40,156,807</b>
1995	Flood	1	10984	353409	37,401,904
	Landslides		418	484	2,970,686
	Sea Erosion		40	517	366,800
	Cyclone(High Gale)		265	1403	958,807
	Drought			260	481,300
	<b>Total</b>	<b>1</b>	<b>11707</b>	<b>356073</b>	<b>42,179,497</b>
1996	Flood	3	971	8238	12,224,897
	Landslides		12	75	52,400
	Sea Erosion				
	Cyclone(High Gale)	10	8360	8360	14,870,185
	Drought			199535	424,855,387
	<b>Total</b>	<b>13</b>	<b>9343</b>	<b>216208</b>	<b>452,002,869</b>
1997	Flood	4	3185	29948	16,746,908
	Landslides	15	46	626	1576942
	Sea Erosion		263	154	363980
	Cyclone(High Gale)		114	650	2537735
	Drought			434775	296863722
	<b>Total</b>	<b>19</b>	<b>3608</b>	<b>466153</b>	<b>318,089,287</b>
1998	Flood	2	6161	34746	31236159
	Landslides		57	50	410953
	Sea Erosion		196	188	428080
	Cyclone(High Gale)	3	1523	3018	3990025
	Drought				70600562
	<b>Total</b>	<b>5</b>	<b>7937</b>	<b>38002</b>	<b>106665779</b>
1999	Flood	6	3665	94352	43862752
	Landslides	3	28	404	345000
	Sea Erosion		61	303	254000
	Cyclone(High Gale)		49	168	551130
	Drought				100981957
	<b>Total</b>	<b>9</b>	<b>3803</b>	<b>95227</b>	<b>145994839</b>

## EXPENDITURE FOR DISASTERS IN SRI LANKA



## DISASTER RELEVANT ORGANISATION IN SRI LANKA

- MINISTRY OF SOCIAL SERVICES
- NATIONAL DISASTER MANAGEMENT CENTER
- DEPARTMENT OF SOCIAL SERVICES
- NATIONAL BUILDING RESEARCH ORGANIZATION
- METEOROLOGICAL DEPARTMENT
- IRRIGATION DEPARTMENT
- COST CONSERVATION DEPARTMENT
- CENTER FOR HOUSING PLANNING OF BUILDING
- GEOLOGICAL SURVEY DEPARTMENT
- DISTRICT AND PROVINCIAL ORGANIZATION
- URBAN DEVELOPMENT AUTHORITY



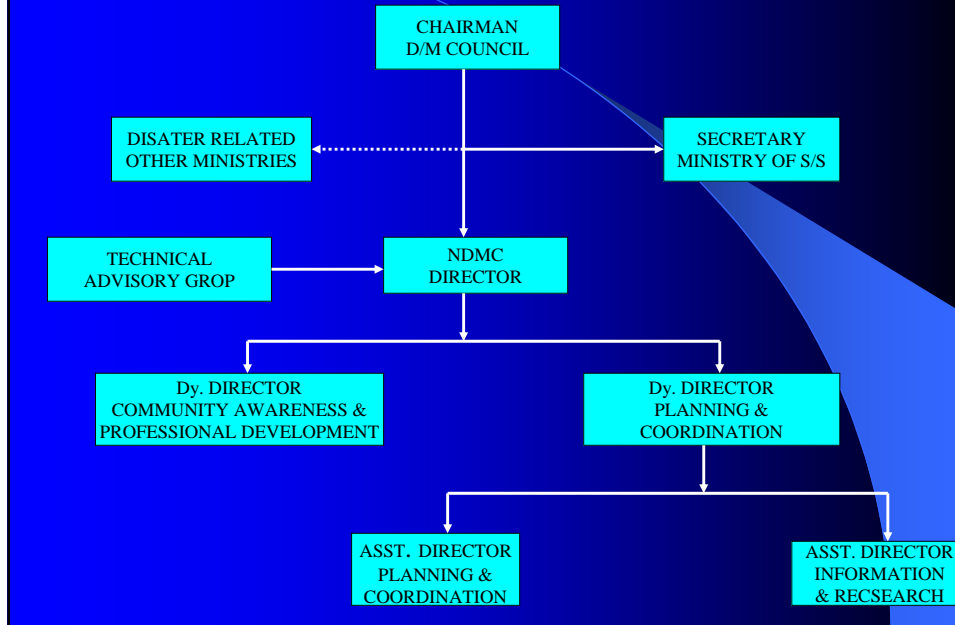
## **NATIONAL POLICIES OF DISASTER MANAGEMENT IN SRI LANKA**

- PROTECTION OF LIFE AND PROPERTY FROM DISASTERS
- PROMOTE AND CONTRIBUTE DISASTER MITIGATION ACTIVITIES TO NATIONAL DEVELOPMENT
- EFFECTIVE USE OF RESOURCES FOR PREPAREDNESS, PREVENTION, RESPONSE AND RECOVERY
- IMPLEMENT AND DEVELOP PROGRAMME FOR PUBLIC AWARENESS AND TRAINING
- INTRODUCTION AND AFFLICTION OF IMPROVED PROFESSIONAL PRACTICES TO AGRICULTURE, LAND USE PLANNING, CONSTRUCTION AND MAINTENANCE
- PROMOTE THE SHIFTING EMPHASIS TO PRE DISASTER PLANNING, PREPAREDNESS AND MITIGATION
- IMPROVING POST DISASTER RELIEF, REHABILITATION AND RECONSTRUCTION CAPABILITIES
- ENHANCEMENT OF LOCAL CAPABILITY AND CAPACITY TO MANAGE RISK AND APPLY DISASTER MANAGEMENT PRACTICES
- ENCOURAGE PARTICIPATION OF NON-GOVERNMENTAL ORGANIZATIONS, PRIVATE INSTITUTIONS FOR DISASTER MANAGEMENT ACTIVITIES

## **ACTIVITIES OF THE NATIONAL DISASTER MANAGEMENT PLAN(DRAFT)**

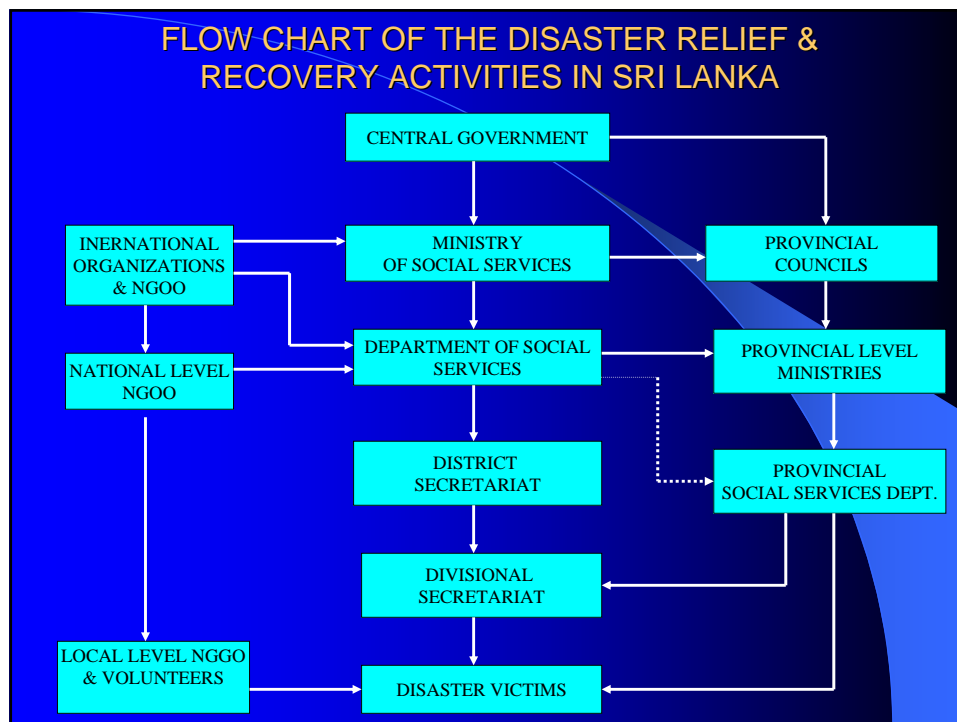
- PREPAREDNESS ACTION
- RELIEF OPERATION
- RECOVERY, REHABILITATION AND RECONSTRUCTION
- AWARENESS AND PUBLIC EDUCATION

## NATIONAL DISASTER MANAGEMENT CENTER ORGANIZATIONAL STRUCTURE



## NATIONAL DISASTER MANAGEMENT CENTER FUNCTIONS

- PREPARATION OF NATIONAL DISASTER MANAGEMENT PLAN
- MONITOR THE IMPLEMENTATION OF DISASTER MANAGEMENT PLANS PREPARED BY OTHER MINISTRIES AND ORGANIZATION
- PREPARATION OF NATIONAL EMERGENCY OPERATION PLAN
- ESTABLISHMENT OF DATA BANK AND DISASTER INFORMATION SYSTEM
- PROVIDE ASSISTANCE TO AND FUNCTION AS THE SECRETARIAT TO THE NATIONAL COUNCIL FOR DISASTER MANAGEMENT



### CURRENT DISASTER RELIEF REHABILITATION AND RECOVERY PROCEDURES

- ALLOCATE FUNDS & RESOURCES BY THE GOVERNMENT
- ALL RELIEF & RECOVERY ACTIVITIES ARE BEING IMPLEMENTED BY DEPARTMENT OF SOCIAL SERVICES
- THE DEPT GIVES FUNDS AND GUIDANCE TO DISTRICT AND DIVISIONAL AUTHORITIES
- DISTRICT AND DIVISIONAL SECRETARIES HANDLING RELIEF AND RECOVERY ACTIVITIES AT THE DISTRICT AND DIVISIONAL LEVEL
- SUBMIT REPORT TO THE GOVERNMENT WITH REGARD TO ALL RELIEF AND RECOVERY ACTIVITIES PROVIDED TO DISASTER VICTIMS
- COLLECT AND ANALYZE DISASTER INFORMATION BY DEPT. OF SOCIAL SERVICES

## DISASTER RELIEF ASSISTANCE PROGRAMME

- COOKED MEALS
- DRY RATIONS
- KITCHEN UTENSILS
- TRADE IMPLEMENTS
- DAMAGED HOUSES ASSISTANCE
- CROPS DAMAGE ASSISTANCE
- FUNERAL EXPENSES

## OBSTACLES AND WEAKNESSES ON THE DISASTER MANAGEMENT IN SRI LANKA

- INSUFFICIENT FUNDS AND RESOURCES
- LACK OF TRAINING AND EDUCATION IN THE DISASTER MANAGEMENT FIELD
- LACK OF PUBLIC AWARENESS PROGRAMME
- NO PROPER PREPAREDNESS PLAN
- LACK OF COORDINATION AMONG THE DISASTER RELATED ORGANIZATIONS
- LACK OF PAYING ATTENTION TO DISASTERS BY PLANNERS, POLICY MAKERS AND NATIONAL LEADERS
- NO PROPER PREVENTION, MITIGATION, AND PREPAREDNESS PROGRAMMES

## CONCLUSION

- SRI LANKA IS KNOWN AS A DISASTER PRONE COUNTRY
- DISASTERS HAVE CAUSED IMMENSE DAMAGES TO ECONOMY AND SOCIETY OF SRI LANKA
- IT IS VERY ESSENTIAL TO STRENGTHEN DISASTER MANAGEMENT CAPACITIES TO COPE WITH IMPACT OF DISASTERS
- IT IS VERY ESSENTIAL A LEGAL AND INSTITUTIONAL FRAME WORK AND AN ACTION PLAN
- ESSENTIAL TO SEEK INTERNATIONAL COOPERATION
- MORE ATTENTION SHOULD BE PAID PRE DISASTER ACTIVITIES WHILE IMPROVING POST DISASTER ACTIVITIES
- ESSENTIAL TO IDENTIFY CO-RELATION WITH DISASTERS AND DEVELOPMENT
- USEFUL TO CREATE DATA BANK WITH REGARD TO DISASTERS