



Best Practices and Challenges on Recovery from Mega Disasters: Evolving Structure for Recovery in Sri Lanka

Ministry of Public Administration and Disaster Management
Sri Lanka

CLIMATE RISK INDEX 2016 & 2017

Ranking 2016 (2015)	Country	CRI score	Death toll	Deaths per 100 000 inhabitants	Absolute losses in million US\$ (PPP)	Losses per unit GDP in %	Human Development Index 2015 ¹²
1 (40)	Haiti	2.33	613	5.65	3 332.72	17.224	163
2 (14)	Zimbabwe	7.33	246	1.70	1 205.15	3.721	154
3 (41)	Fiji	10.17	47	5.38	1 076.31	13.144	91
4 (98)	Sri Lanka	11.50	99	0.47	1 623.16	0.621	73
5 (29)	Vietnam	15.33	161	1.17	4 037.70	0.678	115
6 (4)	India	18.33	2 119	0.16	21 482.79	0.247	131
7 (51)	Chinese Taipei	18.50	103	0.44	1 978.55	0.175	Not included
8 (18)	Former Yugoslav Republic of Macedonia	19.00	22	1.06	207.93	0.678	82
9 (37)	Bolivia	19.33	26	0.24	1 051.22	1.334	118
10 (21)	United States	23.17	267	0.08	47 395.51	0.255	10



Ranking 2017 (2016)	Country	CRI score	Death toll	Deaths per 100 000 inhabitants	Absolute losses (in million US\$ PPP)	Losses per unit GDP in %	Human Development Index 2017 ¹⁰
1 (105)	Puerto Rico ¹¹	1.50	2 978	90.242	82 315.240	63.328	-
2 (4)	Sri Lanka	9.00	246	1.147	3 129.351	1.135	76
3 (120)	Dominica	9.33	31	43.662	1 686.894	215.440	103
4 (14)	Nepal	10.50	164	0.559	1 909.982	2.412	149
5 (39)	Peru	10.67	147	0.462	6 240.625	1.450	89
6 (5)	Vietnam	13.50	298	0.318	4 052.312	0.625	116
7 (58)	Madagascar	15.00	89	0.347	693.043	1.739	161
8 (120)	Sierra Leone	15.67	500	6.749	99.102	0.858	184
9 (13)	Bangladesh	16.00	407	0.249	2 826.678	0.410	136
10 (20)	Thailand	16.33	176	0.255	4 371.160	0.354	83



DISASTERS

- ❖ Landslides
- ❖ Cyclones
- ❖ Floods
- ❖ Droughts
- ❖ Industrial Hazards
- ❖ Tsunami
- ❖ Earthquakes
- ❖ Air Hazards
- ❖ Marine Hazards
- ❖ Fire
- ❖ Epidemics
- ❖ Explosions
- ❖ Air Raids
- ❖ Civil or Internal Strife
- ❖ Chemical Accidents
- ❖ Radiological
- ❖ Oil Spills
- ❖ Nuclear Disaster
- ❖ Urban and Forest Fire
- ❖ Coastal Erosion
- ❖ Tornadoes/Lightening
- ❖ Animal Attacks
- ❖ Dam Breach

DISASTER RISK INDEX

Some Pictures of Devastation...



EARTHQUAKE

FLOOD

TSUNAMI

TROPICAL CYCLONE

DROUGHT

HUMAN



0.1

6.2

8.2

3.5

3.4

2.3



Source: OCHA

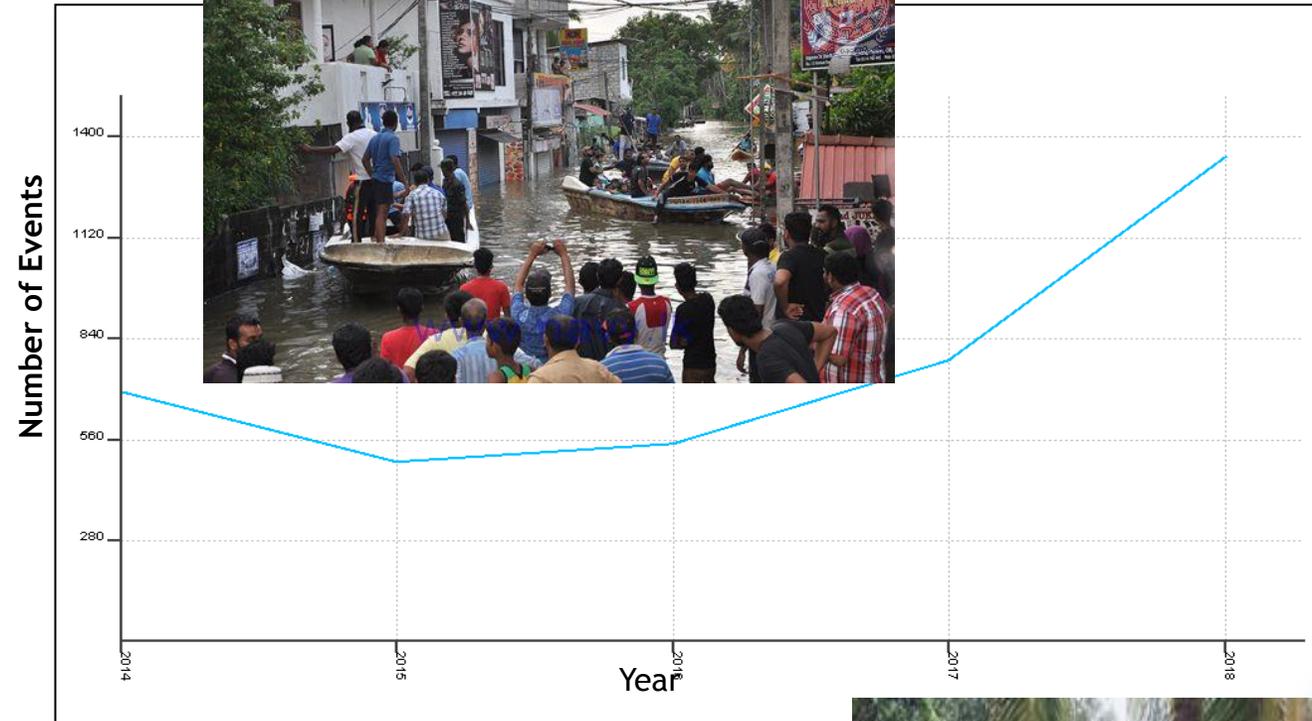
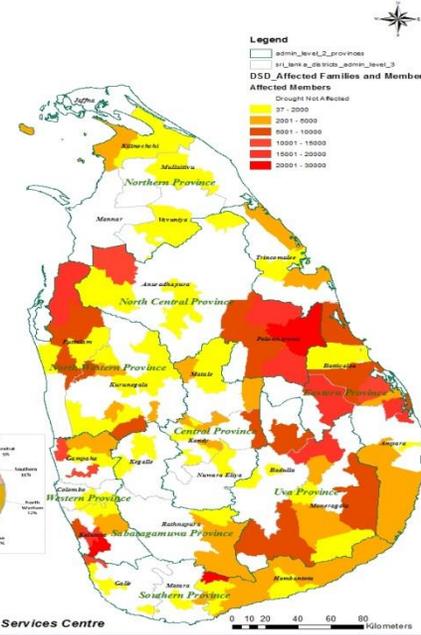
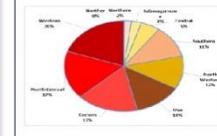
Number of Disaster Events from 2014 - 2018

Number of Families & Persons Affected By Drought 14-Oct-2016

Details of affected people

District	Families	Members
Ampara	1398	4374
Anuradhapura	4263	14880
Badulla	10536	42460
Batticaloa	16591	57011
Colombo	602	2464
Galle	632	17700
Gampaha	8057	34569
Hambantota	14682	53605
Jaffna	1363	4338
Kandy	22642	93646
Kegalle	6542	24009
Kilinochchi	1516	5550
Kurunegala	9704	32912
Matara	3007	8653
Matara	1180	4906
Mawanarala	11206	44824
Mullaitivu	243	864
Nuwara Eliya	335	1260
Polonnaruwa	27837	99811
Puttalam	12195	49960
Rathnapura	4961	15003
Trincomalee	3651	13512
Vavuniya	388	1311
Total	179656	665208

Districts	24
DS	135
Schools	61
Students	23365
Families	179656
Persons	665208





Comparison of last Three Years of disaster events & Impacts

Sri Lanka
Post-Disaster Needs
Assessment

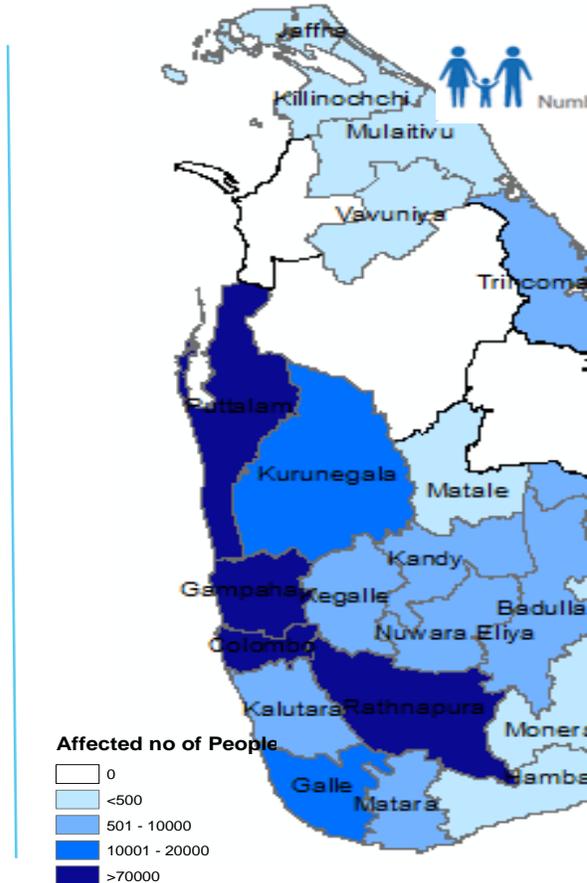
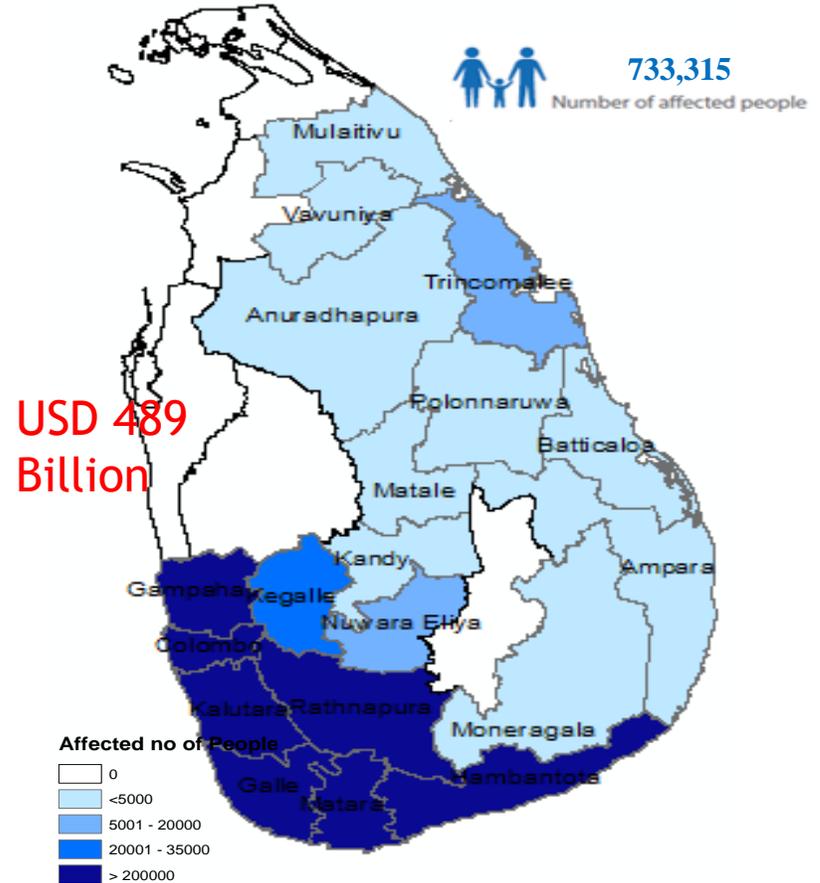
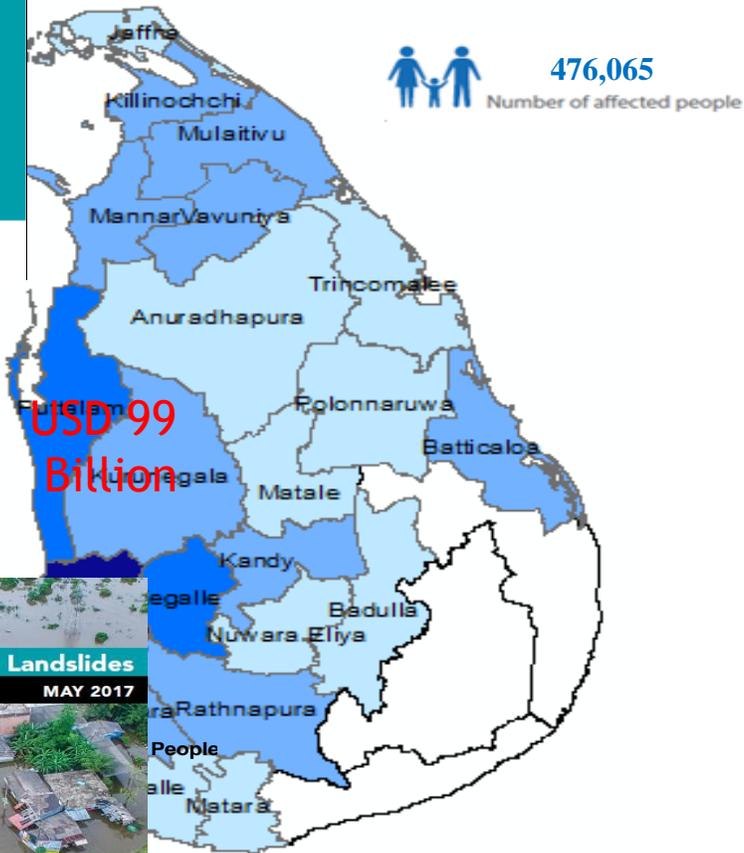
Floods and Landslides-May 2016

Ministry of National Policies and Economic Affairs
Ministry of Disaster Management

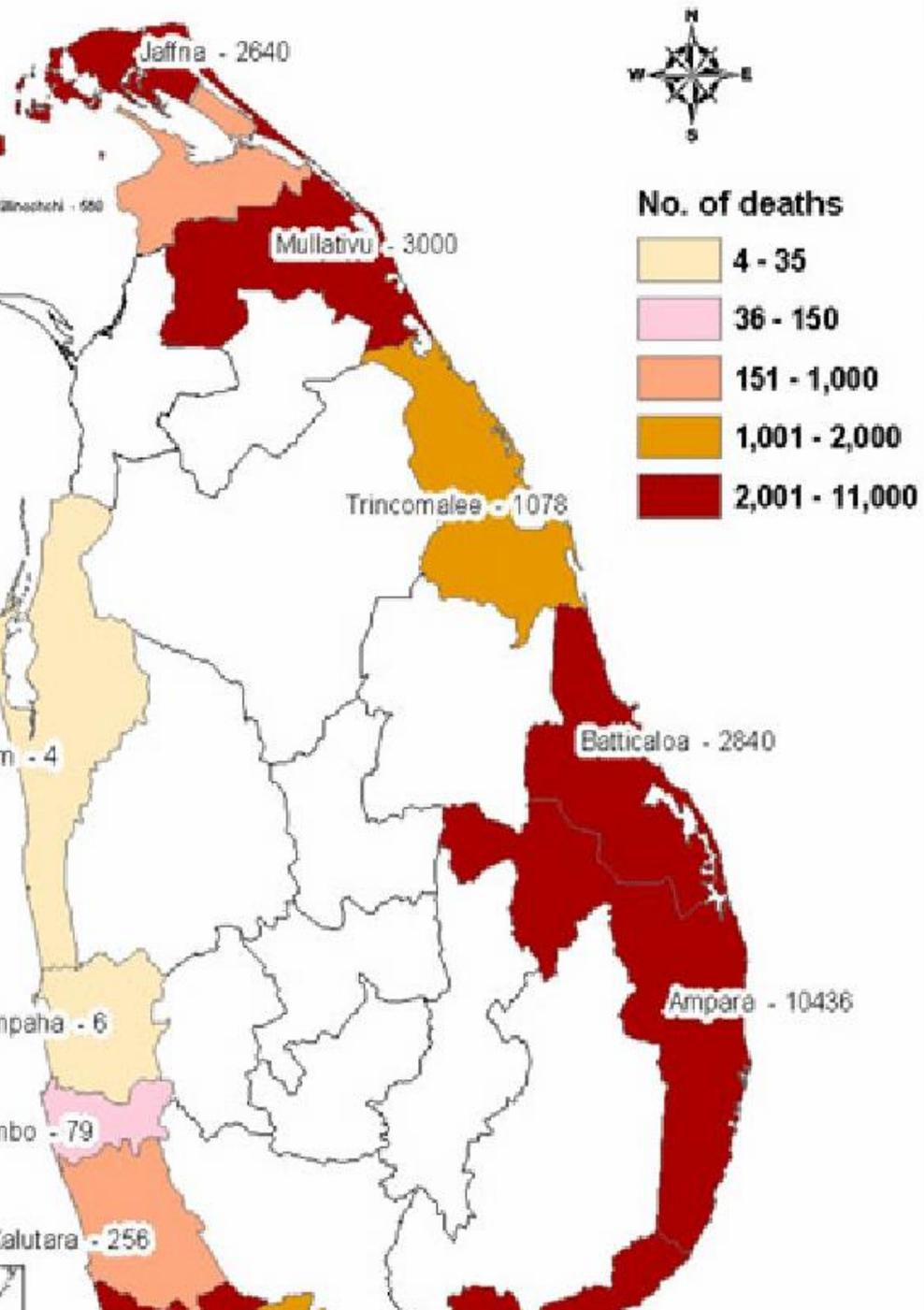
September 2016



Sri Lanka : Flood and Landslide Impact Comparison 2016 , 2017 , 2018



Indian Ocean Tsunami of 26-12-2004



Note: (9.1 Mw) Earthquake occurred at 06:58 am

- Number dead - 30,959
- Number missing - 5,644
- Number displaced - 500,669
- Injuries - 15197

House damage

Fully - 78378

Partly - 60187

Infrastructure - \$ 1000 billion in 2004

Post Disaster Need Assessment (PDNA)

Main Sector

Housing

Health and Nutrition

Education

Agriculture

Fisheries

Industry

Irrigation

Water and sanitation

Transport power supply

Environment

Livelihood

Gender and social inclusion



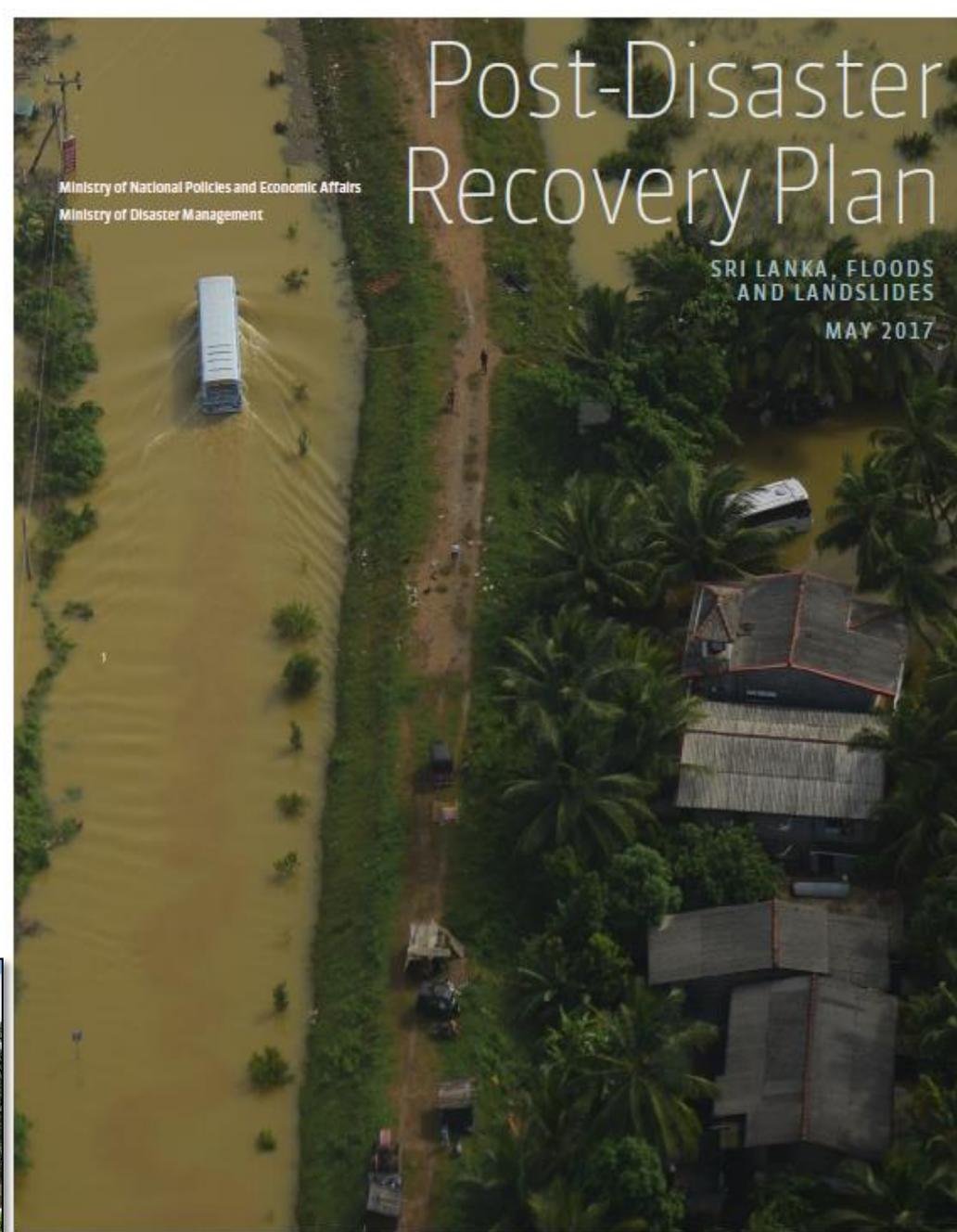
Sri Lanka Post-Disaster Needs Assessment

Floods and Landslides-May 2016

Ministry of National Policies and Economic Affairs
Ministry of Disaster Management

September 2016





Post-Disaster Recovery Plan

Ministry of National Policies and Economic Affairs
Ministry of Disaster Management

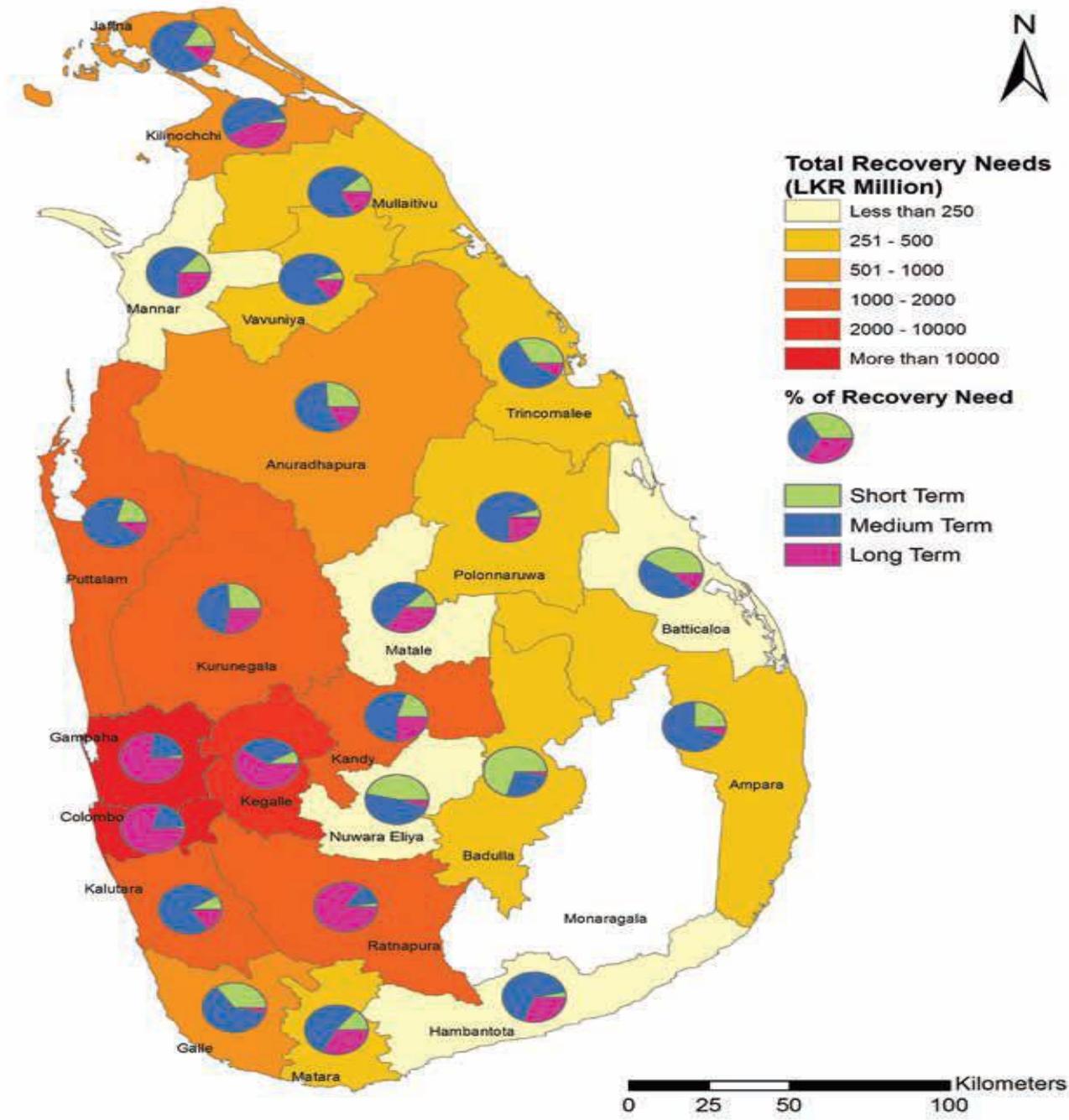
SRI LANKA, FLOODS
AND LANDSLIDES
MAY 2017



Housing Common Infrastructure Livelihood



PDNA - 216



Recovery Needs

- ▶ Grand
- ▶ Soft loan
- ▶ Food for work
- ▶ Conditional finance
- ▶ Un conditional finance
- ▶ Equipment
- ▶ Material
- ▶ Emergency goods
- ▶ Human Recourse
- ▶ Technical support





Recovery Actors

- ▶ Respective Govt
- ▶ Country to cc
- ▶ UN Agencies
- ▶ I NGOs
- ▶ L NGOs
- ▶ CBO
- ▶ Private
- ▶ Benifesaries



National Natural Disaster Insurance Scheme (NITF)



- ▶ Implemented island wide, since 1st April, 2016.
- ▶ The government has contributed an annual premium of Rs. 1,500 million.
- ▶ Annual Insurance coverage is Rs. 15 billion.
- ▶ Rs. 2.5 billion for immediate relief and
- ▶ Rs. 12.5 billion for compensation for the damaged property
- ▶ People affected by natural disasters such as tsunamis, earthquakes, floods, landslides, hurricanes, lightning and cyclones are covered by NNDIS
- ▶ NNDIS does not cover drought, fire and man-made disasters.

National Natural Disaster Insurance Scheme(NITF)

➤ Coverage by National Natural Disaster Insurance Scheme

01. Death

Rs. 250,000 / - compensation per Person.

02. Totally Disabled

Up to a maximum of Rs. 100,000 / - per person

03. Properties and Houses

- ▶ The maximum compensation for house and equipment is Rs. 2.5 million (Based on the Technical Committee's Damage Assessment),
- ▶ The maximum compensation for house equipment damage is Rs. 25,000.
- ▶ SMEs with annual turnover less than Rs. 10 million are entitled to a maximum compensation of LKR 2.5 million (depending on the damage assessment by the Technical Committee)
- ▶ The maximum compensation for loss of stocks is LKR 100,000.00.



Special Provision

▶ Re Location

- ▶ Basic infrastructure
- ▶ Land clearing
- ▶ Road
- ▶ Water supply
- ▶ Electricity
- ▶ Community center
- ▶ Land for land lessee
 - ▶ Rs 400,000 for purchasing land
 - ▶ Ground land
- ▶ Owner Driven
- ▶ Rs 1.2 million (4 installment)

Donor Driven

Full finance

Co- finance



Livelihood Recovery

Livelihood Opportunity

- Food for Work
- Cash for Work
- Livelihood Equipment
- Grant
- Loan
- Soft Loan



Minimum Standard/ Resilience feature

House Plan

House plans designed by NBRO and approved by the Cabinet were recommended for housing construction.

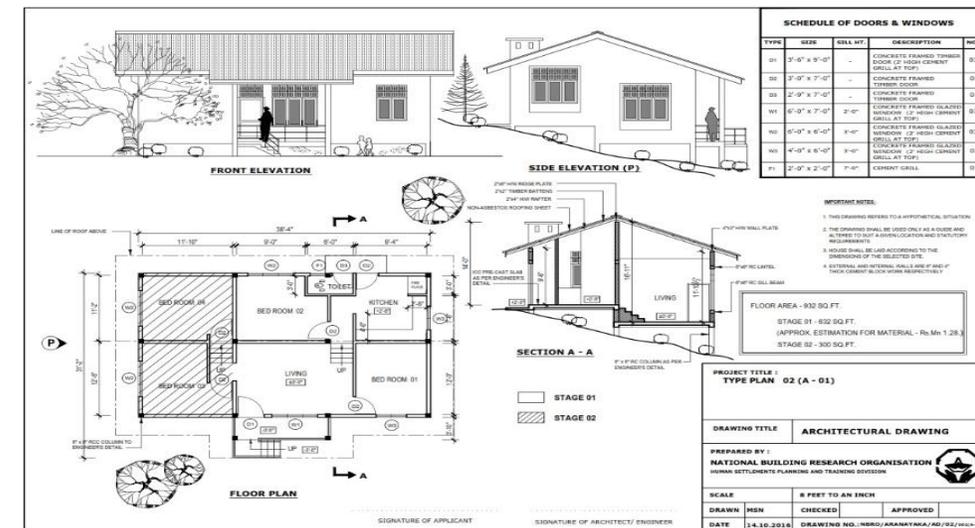
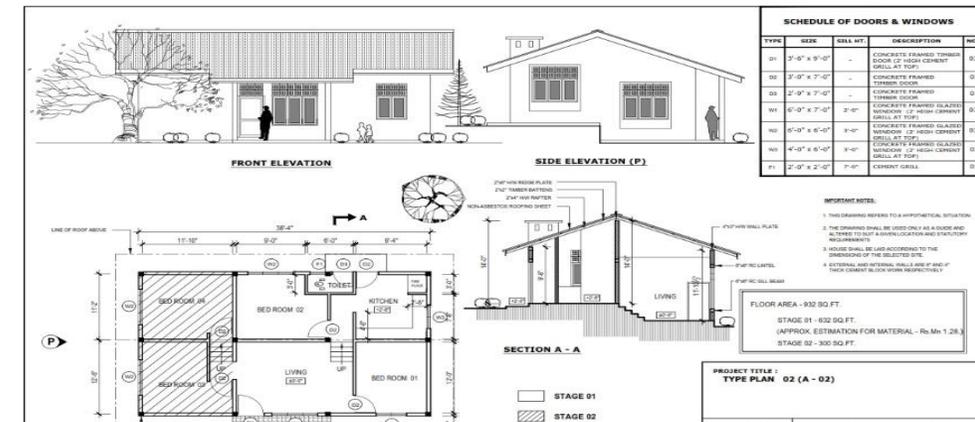
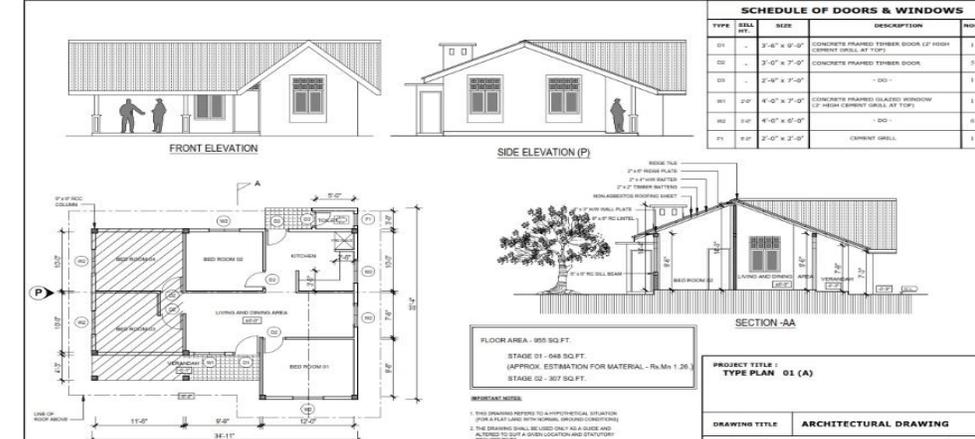
NBRO designed three type plans with the concept of “Disaster Resilient Housing Construction”

Three type plans were designed to;

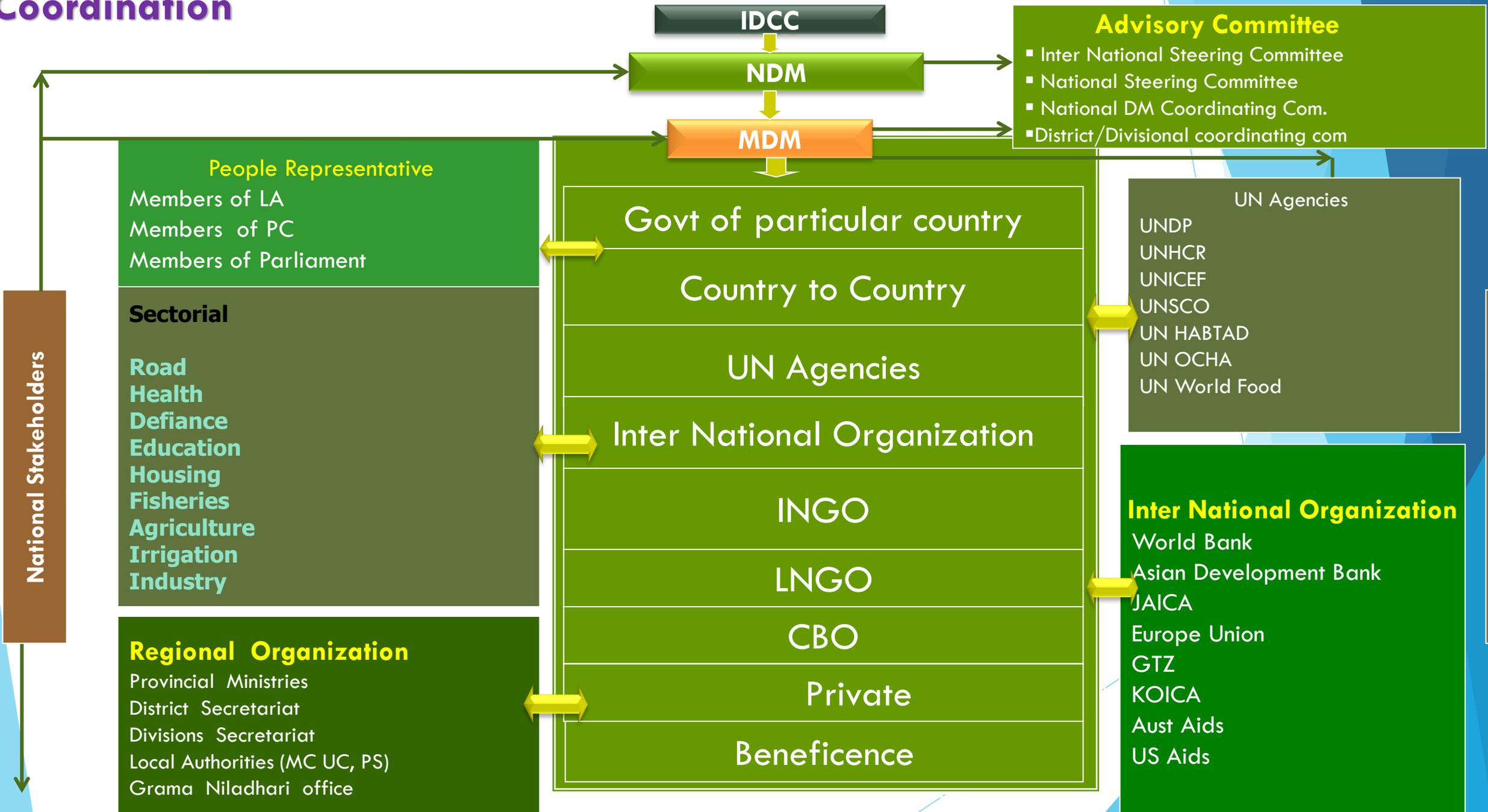
- meet relevant national and international standards,
- be culturally and climatically appropriate,
- durable and easy to maintain,
- allow for future adaptation

Beneficiaries also could had their own house plans with the approval of NBRO.

NBRO guided donors to integrate resilient features in their plans as well



Coordination



IDCC

NDM

MDM

Advisory Committee

- Inter National Steering Committee
- National Steering Committee
- National DM Coordinating Com.
- District/Divisional coordinating com

People Representative

- Members of LA
- Members of PC
- Members of Parliament

Sectorial

- Road
- Health
- Defiance
- Education
- Housing
- Fisheries
- Agriculture
- Irrigation
- Industry

Regional Organization

- Provincial Ministries
- District Secretariat
- Divisions Secretariat
- Local Authorities (MC UC, PS)
- Grama Niladhari office

Govt of particular country

Country to Country

UN Agencies

Inter National Organization

INGO

LINGO

CBO

Private

Beneficence

UN Agencies

- UNDP
- UNHCR
- UNICEF
- UNSCO
- UN HABTAD
- UN OCHA
- UN World Food

Inter National Organization

- World Bank
- Asian Development Bank
- JAICA
- Europe Union
- GTZ
- KOICA
- Aust Aids
- US Aids

National Stakeholders

Important of Sectorial Involvement

planning
Implementation
Monitoring
Co-ordination

- ▶ Road
- ▶ Health
- ▶ Defiance
- ▶ Education
- ▶ Housing
- ▶ Fisheries
- ▶ Agriculture
- ▶ Irrigation
- ▶ Industry



cluster coordination for the sector Road and Transport

Sectorial Cluster - 15

Cluster Member

Road Development Authority

Road Development Department

Provincial Road Development Authority

Ministry of Imperial & Local Govt

Ministry of high Ways

Ministry of Hill Country

Mahaweli Authority

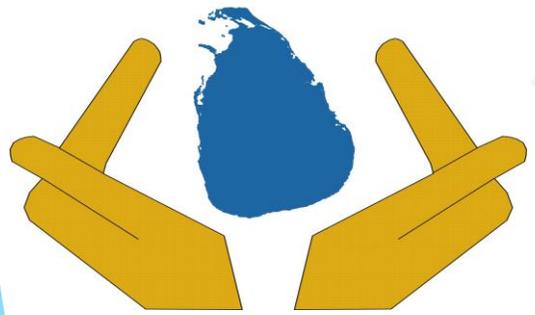
Ministry of ports Port Authority

Ministry of Transport & Aviation



challenges

- ▶ Assessment of losses and damages
- ▶ Resilience and build back better
- ▶ Lack of building material
- ▶ Recovery period
- ▶ Limitation of Insurance
- ▶ Inter National Co-ordination



Thank you.