



# Preparedness for Response

Southwest Monsoon (May-Sep) -2024

Disaster Management Centre

Ministry of Defense,, Sri Lanka

15<sup>th</sup> May 2024

# Outline



01

## Seasonal forecast of the DoM

Southwest Monsoon.

02

## Disaster Impact Analysis

Disaster Impacts during the SW monsoon period

03

## Potential Impact Scenario

Potential scenario, actions taken before and during SW monsoon.

04

## Preparedness for response SW monsoon

preparedness action, Emergency Response arrangements, NFI

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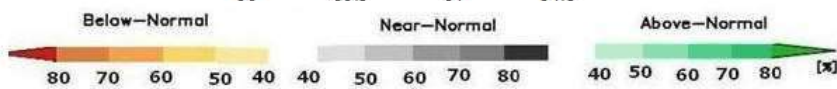
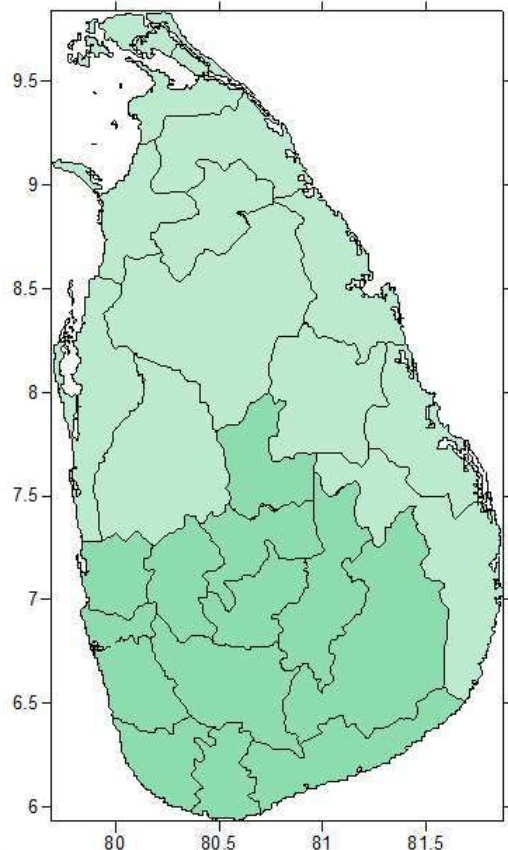
preparedness action, Emergency Response arrangements, NFI



# Seasonal forecast for Southwest Monsoon 2024

**There is a higher possibility for above-normal rainfalls are likely over Western, Southern, Central, and Sabaragamuwa provinces and near or slightly above-normal rainfall over remaining areas.**

- Above-normal rainfall is likely over Western, Southern, Central, and Sabaragamuwa provinces and near or slightly above-normal rainfall is likely over the remaining areas.
- Currently, moderate El Niño conditions are prevailing over the equatorial Pacific region. It is likely to weaken further to neutral El Niño Southern Oscillation (ENSO) conditions during the early part of the monsoon season, and La Niña conditions are likely to develop during the second half of the monsoon season.
- La Niña is favorable for more rain activity over the western slopes of the central hills, and a Positive IOD is favorable for less rain activity over the western slopes of the central hills.
- Above normal Maximum & Minimum Temperatures is likely over the country.
- There is a possibility of the formation of Low pressure/Depression/Cyclonic storm over the Bay of Bengal between May 12 and 15. The DoM will closely monitor this system
- Stay connected with updates every 10 days and weekly forecasts



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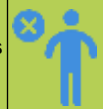








Potential scenario, actions taken before and during SW monsoon.

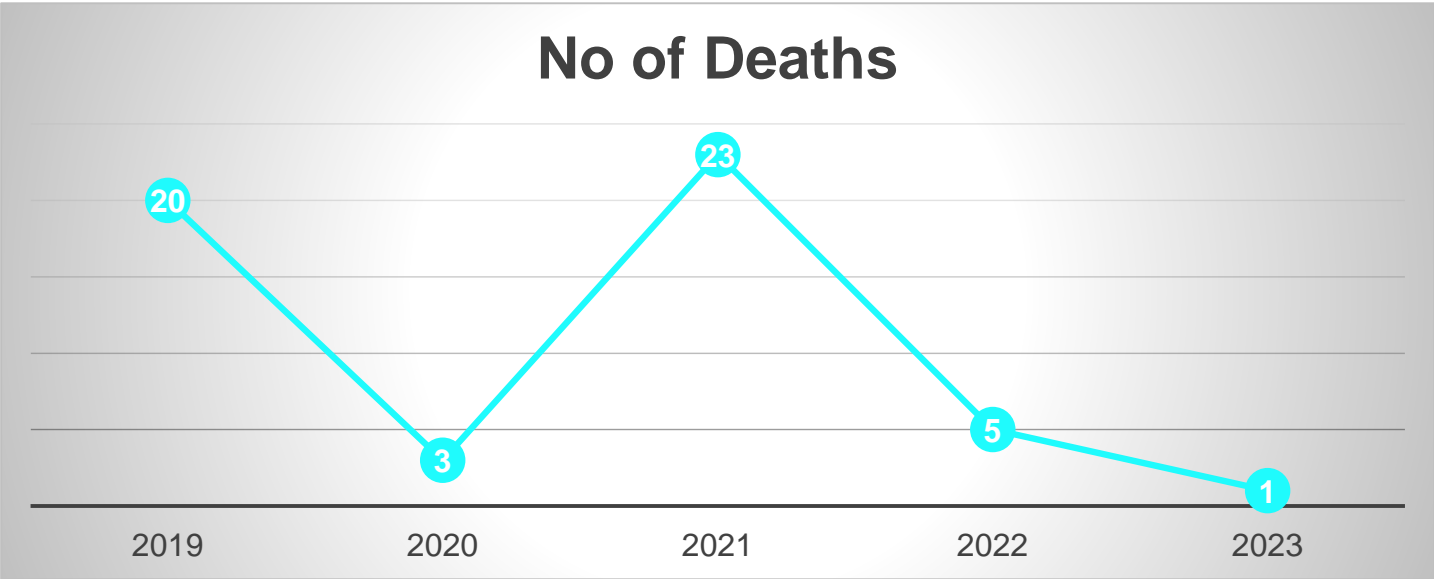
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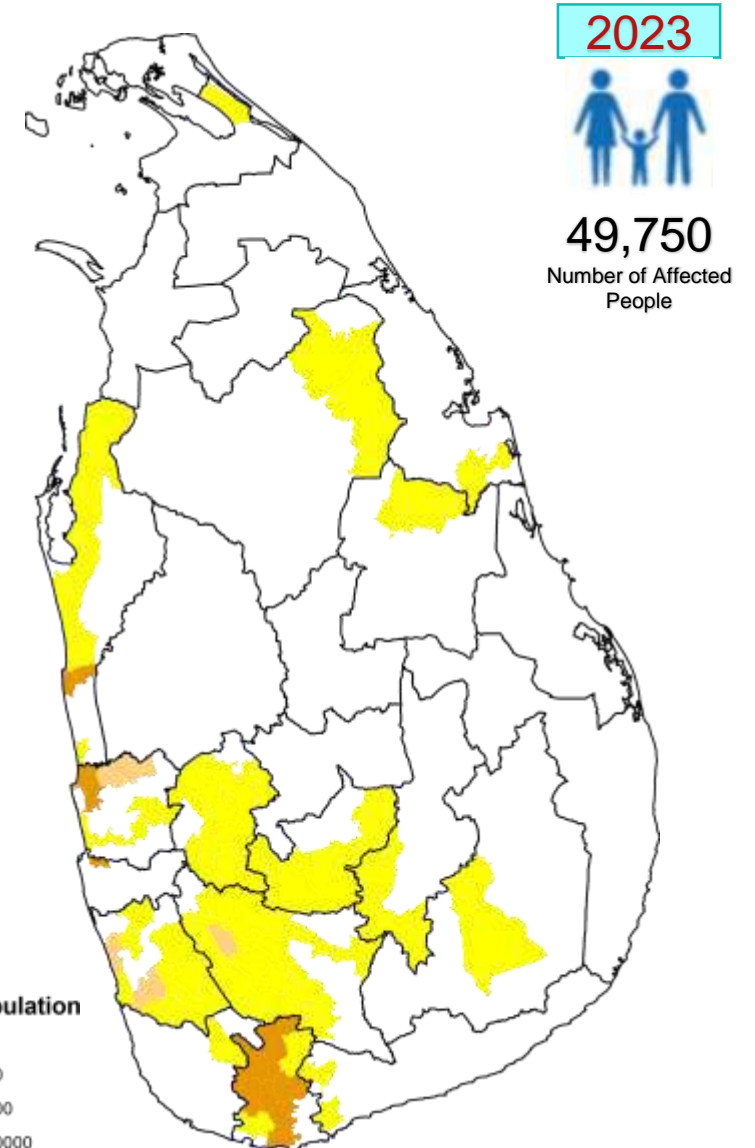
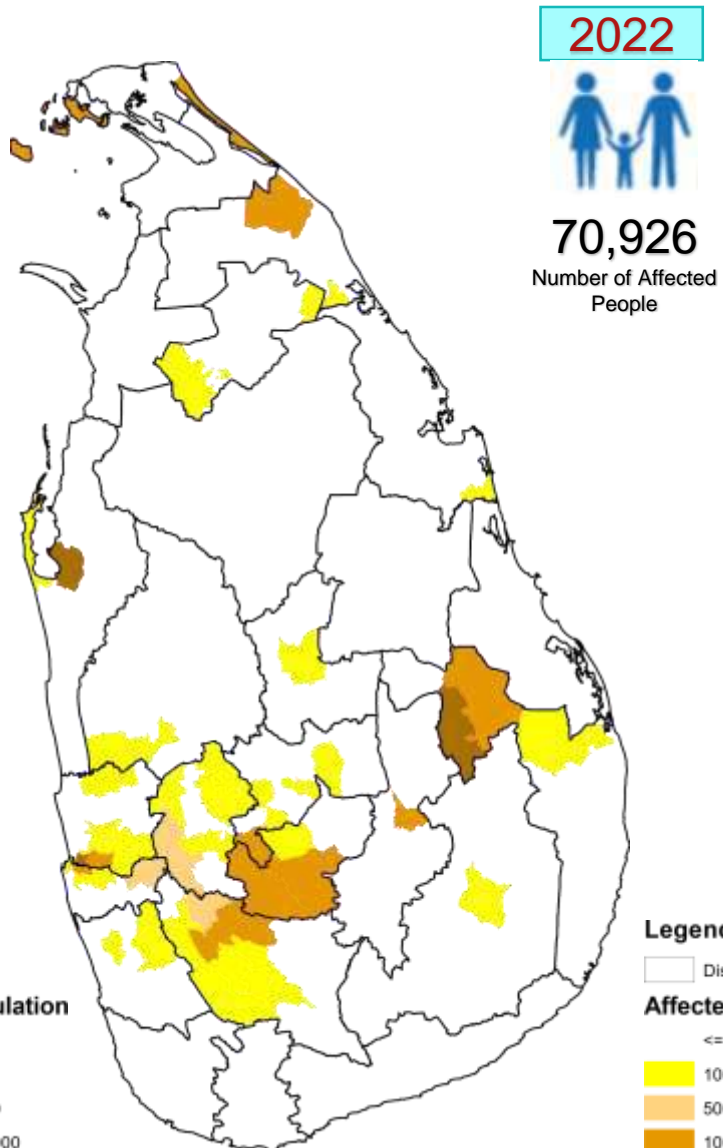
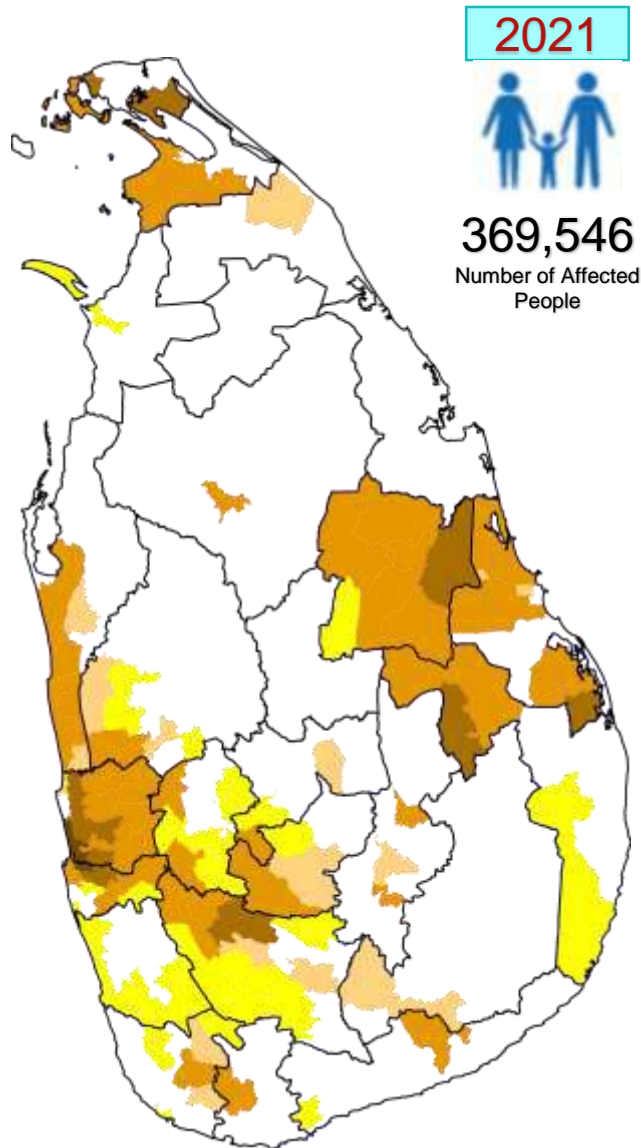
# Disaster impact analysis during the SWM season from 2019-2023

Year	2019			2020			2021			2022			2023		
Event	No of Events			No of Events			No of Events			No of Events			No of Events		
	12	0	447	28	1	311	51	7	2,680	79	1	1,164	55	-	652
	253	18	14,828	283	0	15,905	340	2	11,998	359	1	6,977	585	1	16,938
	7	2	1,957	27	2	12,321	153	14	354,868	81	3	62,785	84	-	32,160
<b>TOTAL</b>	<b>272</b>	<b>20</b>	<b>17,232</b>	<b>338</b>	<b>3</b>	<b>28,537</b>	<b>544</b>	<b>23</b>	<b>369,546</b>	<b>519</b>	<b>5</b>	<b>70,926</b>	<b>724</b>	<b>1</b>	<b>49,750</b>



Source : DesInventar

# Flood and landslide impact comparison area-wise





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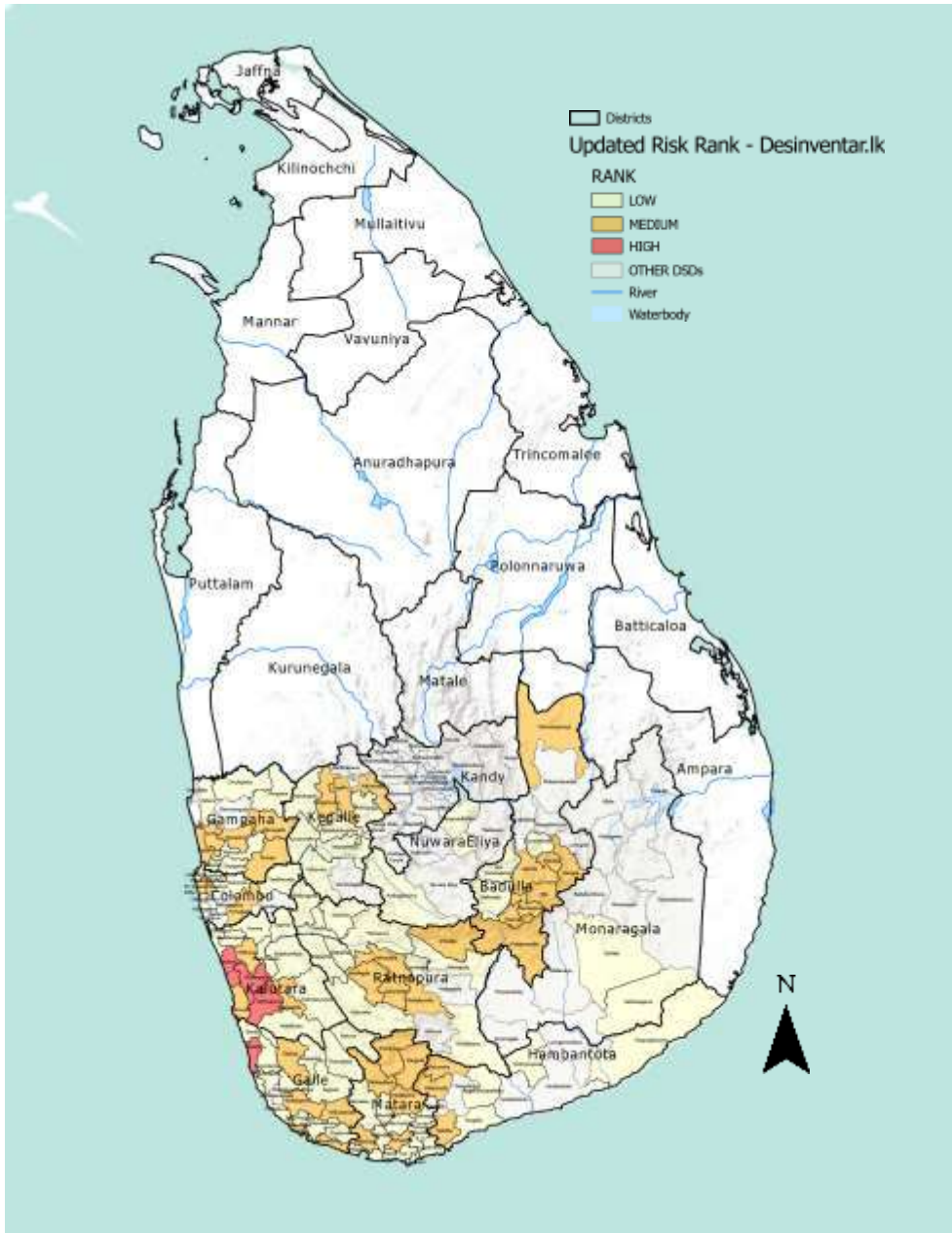
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# Potential Impact Scenario for SWM 2024



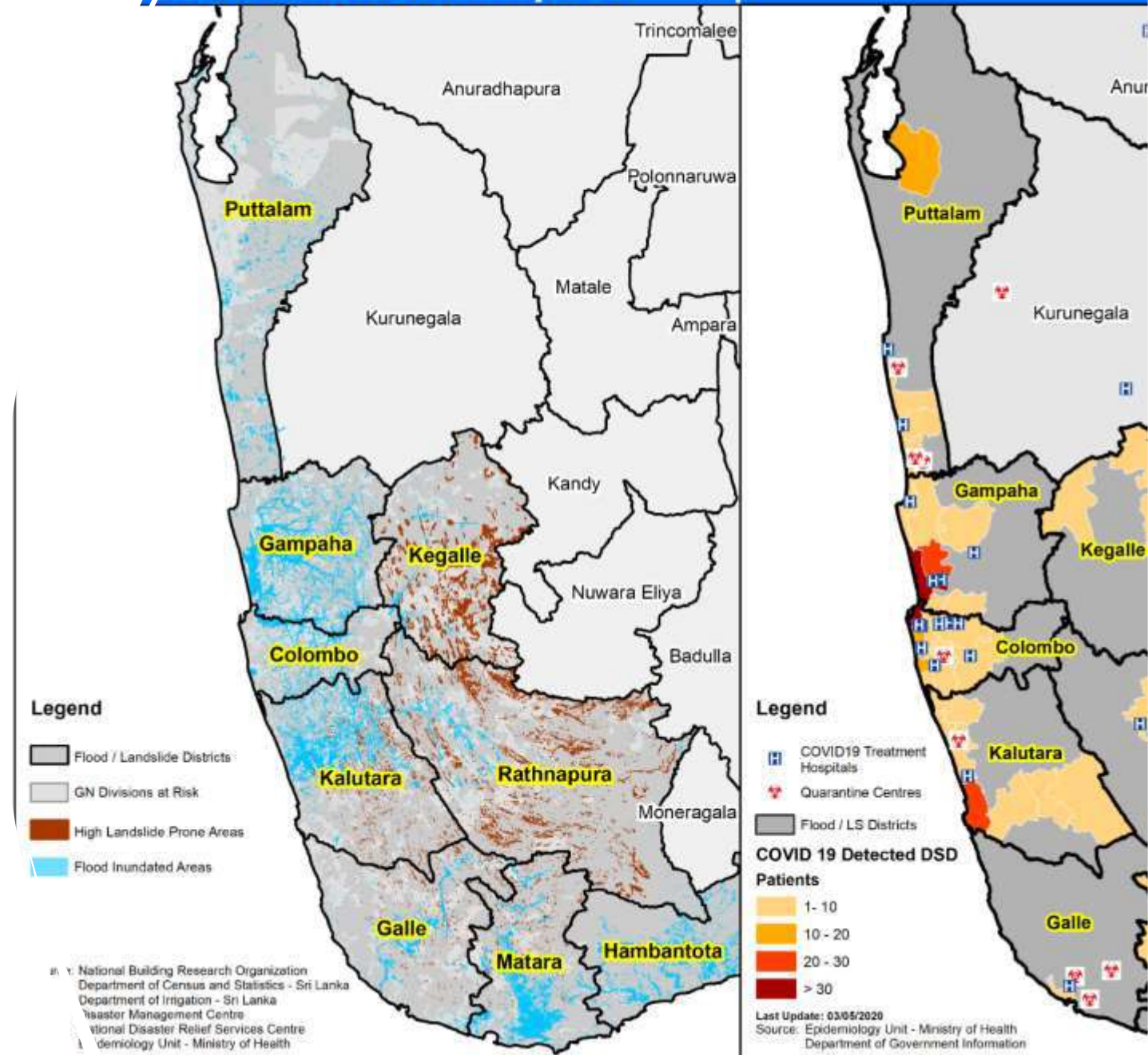
District	Likely impact	
	# families	# individuals/ persons
Badulla	627	2,508
Colombo	7,521	30,084
Galle	396	1,584
Gampaha	19,784	79,136
Hambantota	273	1,092
Kalutara	537	2,148
Kegalle	724	2,896
Matara	1,831	7,324
Moneragala	140	560
Nuwara Eliya	454	1,816
Ratnapura	3,046	12,184
<b>Total</b>	<b>35,333</b>	<b>141,332</b>

Based on Desinventar Past datasets and DoM's forecasting

# Potential threats

- Riverine or Flash Flooding
- Land Slides/Mud Flows
- Population Displacement from Flood affected areas
- Health; leptospirosis, Dengue
- Road blockage and Collapse of Bridges
- Interruption of Utility services
- Impact on Livelihood and Food Insecurity
- Human and Livestock Casualties
- Lightning
- Drowning

## West Monsoon Impact



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# Preparedness planning for SWM 2023

- Preparation of SWM Plans and Scenario Based Plans by ADs of 12 DDMCUs
- Issuing guidelines to all 12 DDMCUs on preparedness for emergency response to SWM
- Resource management and capacity enhancement – informing all INGOs, NGOs, Humanitarian agencies, and volunteer organizations to coordinate with DMC
- Issuance of Wind speed (Beaufort scale) posters for impact base EW in the coat and Land in tri-language

Scale	Conditions at Sea	Wind Speed
0 Calm	Sea like a mirror.	1 km/h or less 1 knot or less
1 Light Air	Scaly ripples without foam crests.	1 – 5 km/h 1 – 3 knots
2 Light Breeze	Small wavelets, crests have a glassy appearance, not breaking.	6 – 11 km/h 4 – 6 knots
3 Gentle Breeze	Large wavelets, crests begin to break, scattered whitecaps.	12 – 19 km/h 7 – 10 knots
4 Moderate Breeze	Small waves becoming longer, numerous whitecaps.	20 – 29 km/h 11 – 16 knots
5 Fresh Breeze	Moderate waves taking longer form, many whitecaps, some spray.	30 – 39 km/h 17 – 21 knots
6 Strong Breeze	Larger waves begin to form, whitecaps everywhere, more spray.	40 – 50 km/h 22 – 27 knots
7 Near Gale	Sea heaps up, white foam from breaking waves begins to be blown in streaks.	51 – 61 km/h 28 – 33 knots
8 Gale	Moderately high waves of greater length, edges of crests begin to break into spindrift.	62 – 74 km/h 34 – 40 knots
9 Strong Gale	High waves, sea begins to roll, dense streaks of foam.	75 – 87 km/h 41 – 47 knots
10 Storm	Very high waves with overhanging crests, heavy rolling, reduced visibility.	88 – 101 km/h 48 – 55 knots
11 Violent Storm	Exceptionally high waves, sea covered with white foam patches, very poor visibility.	102 – 117 km/h 56 – 63 knots
12 Hurricane	Huge waves, sea is completely white with driving spray, air filled with foam.	118 km/h or more 64 knots or more

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Scale	Conditions on Land	Wind Speed
0 Calm	Smoke rises straight up.	1 km/h or less 1 knot or less
1 Light Air	Smoke drift indicates wind direction. Wind vanes do not move.	1 – 5 km/h 1 – 3 knots
2 Light Breeze	Wind felt on face. Leaves rustle. Wind vanes begin to move.	6 – 11 km/h 4 – 6 knots
3 Gentle Breeze	Light flags extended. Leaves and small twigs in constant motion.	12 – 19 km/h 7 – 10 knots
4 Moderate Breeze	Dust, leaves and loose papers raised up, small branches move.	20 – 29 km/h 11 – 16 knots
5 Fresh Breeze	Created wavelets form on inland waters. Small trees begin to sway.	30 – 39 km/h 17 – 21 knots
6 Strong Breeze	Umbrellas are difficult to control. Whistling heard in telegraph wires. Large branches move.	40 – 50 km/h 22 – 27 knots
7 Near Gale	Inconvenience felt when walking against the wind. Whole trees in motion.	51 – 61 km/h 28 – 33 knots
8 Gale	Difficult to walk against wind. Twigs and small branches blown off trees.	62 – 74 km/h 34 – 40 knots
9 Strong Gale	Slight structural damage may occur (slates blown off roofs).	75 – 87 km/h 41 – 47 knots
10 Storm	Structural damages likely. Trees uprooted.	88 – 101 km/h 48 – 55 knots
11 Violent Storm	Widespread damage to structures.	102 – 117 km/h 56 – 63 knots
12 Hurricane	Severe structural damage to buildings. Widespread devastation.	118 km/h or more 64 knots or more

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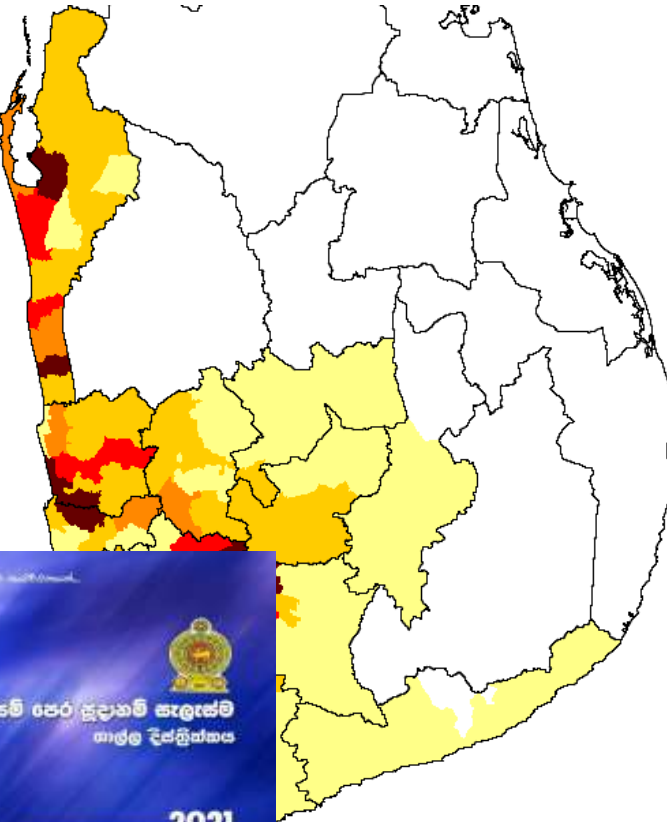











# Specific guidelines - at safety center's

- Pamphlets and booklets printed and distributed with specific guidelines to be followed
- Distributed sanitizers and face masks
- Awareness and health screening (e.g. temperature)
- Apply health guidelines such as social distancing
- Arrangement of meals as per medical advice
- Evacuees not allowed to move in and out from safety centres without medical advice
- Established Police/ Military security and other safety arrangements
- Upon returning to homes all evacuees to take medical advice (e.g. random PCR tests)

# Plan of Actions



## Plan of actions – Southwest monsoon 2024

- 
 Monsoon Operational plans being reviewed and updated
- 
 District/ Divisional meetings have been conducted
- 
 Potential impassable roads Identified and mapped
- 
 Regional resource hubs of Tri forces and other institutions being identified
- 
 Pre-positioning of response and relief items being coordinated
- 
 SAR teams identified and to be deployed based on SW forecast
- 
 Emergency communication tested and installed
- 
 Small mitigation projects are identified

# Emergency response equipment requested by districts

Emergency Respose Equipment Request 2024		
S/N	Equipment	Quatinty
1	Axe	21
2	Boat	7
3	Boat With engine	3
4	Boat engine (OBM) 25HPs	5
5	Fiber Galss Boats	1
6	Catamaran	28
7	Chain Saw	26
8	Crow Bar	8
9	Chain Blocks (5T)	3
10	Concreete Cutter	1
11	Emergency Whistle	105
12	First Aid Kit	5
13	Gloves	126
14	Gum Boot	868
15	Genarator (2.5 KV)	2
16	Goggles	135
17	Gas Mask	60
18	GPS	7
19	Hydraulic Jack	8
20	Hydraulic Cutter	1
21	Harness	10
22	Hook and Line	12
23	Head mount Torch	196
24	Life Jacket	499
25	Loud Speaker	2
26	Mats	50
27	Mana Kathi	21

28	Mamoty	8
29	Mega Phone	10
30	Overall kit	15
31	PA System	3
32	Polysack (50KG)	5500
33	Protective Hand Gloves	105
34	Pen Torchs	105
35	Rappelling Glovse	10
36	Rain Coat	927
37	Roap	2
38	Roap (100m)	14
39	Roap (200m)	6
40	Manila Ropes (100m)	17
41	Rescue Bags	12
42	Rescue Board	13
43	Rescue Tube	19
44	Search Light	98
45	Shovel	18
46	Safety Helmet With Light	26
47	Safety Belt	12
48	Safety Helmet	145
49	Tent 8 Man	220
50	Torch	9
51	Water Motor	7
52	Water Pump	5
53	Submersible Water Pump	1
54	Wire Cutter	33

# Specific focus for Southwest Monsoon 2023

## Warning

- Verification (messaging from upper catchment areas through DoI, Police etc.)
- Nighttime dissemination (Police and military communication modes)
- Communication equipment backup (standby power generators, charged batteries, fuel stocks )

## Evacuation

- SAR at night (Pre-deployed SAR teams with PPE and equipment)
- Adequate number of safety centres to maintain quarantine standards
- PPEs (To be distributed to all SAR teams and camps and high-risk areas)
- Safety centre facilities and special security plans

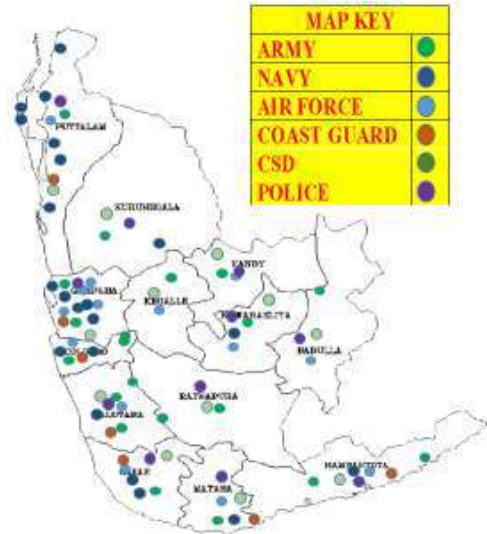
## Coordination

- Impact data collection and assessments (Divisional sub-groups are formed on data management)
- Emergency mapping (use of satellite imagery and 72-hour approach for impact assessment)
- Stakeholder discussion at national and district level (District and divisional level stakeholder discussions completed and disseminated the plans for emergency management)



# Emergency response

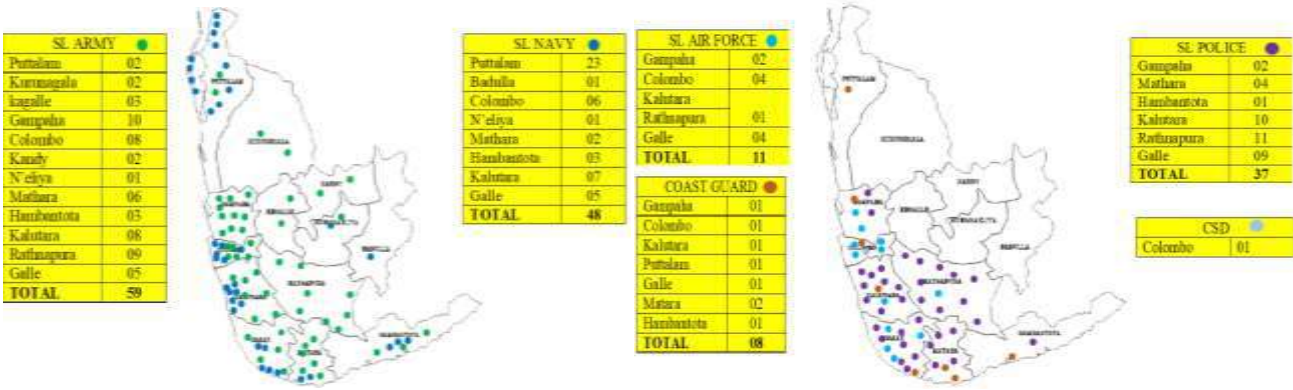
Emergency operation center is coordinating response agencies 24\*7 to respond for any disaster in Sri Lanka with all district disaster management coordinating units. For the southwest monsoon they have allocated troops from all try forces, police, coastguard and civil Security Defense.



District	Army	Navy	Air Force	Police	Civil Defence	Coast guard
Badulla	35	04	16			
Colombo	278	28	16	118	10	08
Galle	105	15	16	54	10	05
Matara	62	06	16	50	10	08
Gampaha	140	40	48	50	07	04
Hambantota	92	08	16		10	04
Kalutara	191	21	16	105	20	04
Kandy	124		16		20	
Kegalle	93		16	50	10	
Kurunegala	69		16		10	
N'eliya	62	40	16		10	
Puttalam	68	101	16	78	07	
Ratnapura	105		16		10	
<b>TOTAL</b>	<b>1424</b>	<b>263</b>	<b>240</b>	<b>505</b>	<b>134</b>	<b>33</b>

## TROOPS DEPLOYMENT FOR SOUTH WEST MONSOON

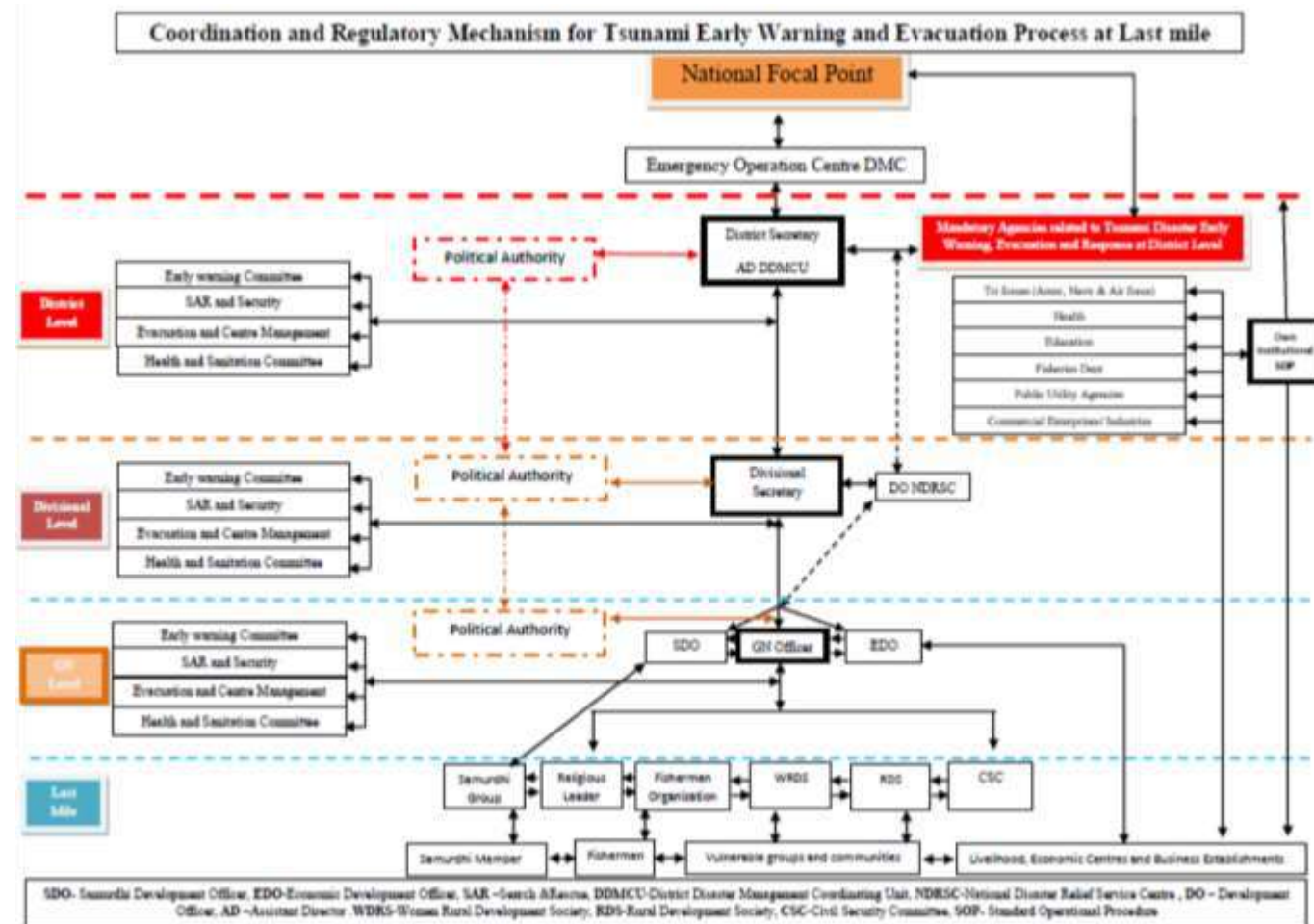
Search & rescue Boat deployment for the south west monsoon response are shown in below



## Early Warning Dissemination

Early warning dissemination and the community evacuation during an emergency will be carried out by the DMC as per Disaster management the act no 13 of 2005 . Therefore, DMC had developed SOPs and National emergency operation plan with all stakeholders for better response during a disaster. So the early warning mechanism of the DMC as shown below and the mechanism for disseminating EW down to the last person of the community are as follows,

- Through Various Channels – Reaching to District Administration Levels. (DS, DIV.SEC)
- Through Media Channels (Printed Media, Electronic Media, Social Media, Web Based Media)
- Short Messaging Service & Cell Broadcast (DEWN Application)
- Military & Police Communication Networks.
- EW Warning Towers in Coastal areas (Cyclone/Storms/Tsunami).
- Community Based EW Methods (Self Evacuation Methods, Traditional Methods, DM committees)
- Through Local Government Officials and CBO's (especially at night).
- Call Centre -117.
- VHF and HF communication methods.



# THANK YOU



## EMERGENCY CONTACTS

- ✓ **Emergency Call Center - 117**
- ✓ **Emergency Operation Center - 0112670002 / 0112432364**
- ✓ **Virtual Private Network (VPN) - 0773957900 / 0779117117**

**Emergency Operation Center Police Station - 0113138109**

- ✓ **Emergency Operation Center (Fax) - 0112670079 / 0112671458**
- ✓ **National Disaster Relief Services Centre (NDRSC)- 0112665258**