Session 3

Disaster Management in the Context of Sri Lanka

Training Course in Disaster Management for Armed Forces & Police

Session objectives

To	provide an awareness to the participants about,
	Disaster situation in Sri Lanka
	Legal and institutional framework for DRM
	Establishment of the DMC and Ministry of Disaster Management
	Overall country-wide disaster risk management framework
	National and sub-national level institutional frameworks for DRM
	DM committees functioning at different levels

DM Committees at Community Level and CBDRM

The Disaster Situation in Sri Lanka

- □ Sri Lanka is prone to natural disasters caused by floods, cyclones, landslides, rock falls, mass movements, land subsidence, drought and coastal erosion with increasing instances of environmental pollution related hazards
- □ Land covering about 10,000 sq. km., in seven districts of Sri Lanka, is prone to flooding, landslides or land subsidence

- □ Coastal areas are prone to storm surges, sea erosion and tsunami
- □ Pressures and forces due to strong winds, heavy rains, flooding, landslide, erosion, ground failure, strong tsunami waves, flash flooding via river damming and extremely high intense rains etc.

On facilities can cause damage to structures such as

Buildings, public and industrial structures, water tanks, highways, railways, transmission and telecommunication towers etc.

- During the severe flood and landside disaster in 2003 May, it was seen that severe losses were incurred to infrastructure and other public utilities
- The devastation caused by the Indian Ocean Tsunami of 2004 highlighted that Sri Lanka is also vulnerable to hazards of low frequency and high impact that cause extensive damage and reverse years of development gains
- The experience of tsunami was that the people were taken unawares
- It was a rare disaster, the characteristics of which were not known widely

- When the Tsunami struck People did not know what was happening
- The most important lessons learnt were that, preparedness for events of this nature is vital
- All segments of population including the community and all levels of officials must be made aware of the peculiar characteristics of tsunami
- As this is a very rare occurrence it is important that the knowledge is passed on to the next generation

Legal Framework and Institutional Framework for DRM in Sir Lanka

- Sri Lanka Disaster Management Act No.13 of 2005 was enacted in May 2005, and
- Provides the legal basis for instituting a DRM system in the country
- Addresses Disaster Management (DM) holistically, leading to a policy shift from response based mechanisms to a proactive approach
- Provides for the establishment of Institutional and Legislative Framework for DRM

National Council for Disaster Management (NCDM)

- * H.E. President: Chairman
- * Hon. Prime Minister: Vice Chairman
- Leader of the Opposition
- * Ministers in charge of the subjects:
 - · Social Welfare
 - Rehabilitation & Reconstruction
 - Environment
 - · Home Affairs
 - Health
 - Science & Tech.
 - Defense
 - Police
 - Finance
 - Land

- Housing
- Coast Conservation
- Irrigation
- Power
- Fisheries and Aquatic Resources
- Foreign Affairs
- Water Supply
- Highways
- Urban Development
- Education
- * Chief Minister of each provincial council
- Five members of parliament of opposition

DRM Institutional Framework in Sri Lanka

- National Level: National Council for DM

Ministers in charge of **Social Services** Rehabilitation & Reconstruction Home Affairs Health Science & Technology Housing **Coast Conservation** Irrigation Power Defense

National Council for Disaster Management Chair Person: H.E. President Vice Chairman: Hon. Prime Minister Opposition Leader Chief Ministers Opposition MPs (5)**(7)** Minister in charge of Disaster Management

DMC

Ministers in charge of

---{Police

Finance

--- Land

Fisheries & Aquatic Resources

--- Foreign Affaires

--- Water Supply

----{ Highways

--- Urban Development

--- Education

--- Environment

According to the Act, disasters include,

- A Flood
- A Landslide
- An Industrial Hazards
- A Tsunami (Seismic Wave)
- An Earthquake
- An Air Hazards
- A Fire
- An Epidemic
- An Explosion

- Air Raids
- Civil or Internal Strife
- Chemical Accidents
- Radiological emergency
- Oil Spills
- Nuclear Disaster
- Urban and Forest Fire
- Coastal Erosion
- Tornadoes, Lighting strikes,
 Severe Thunder Storms

In Implementing the Provisions of the Act,

- The National Council for Disaster Management (NCDM) was established under HE the President
- The DMC was established under the NCDM as the lead agency on DRM in the country in implementing the directives of NCDM
- ❖ In November 2005, the Ministry for DM was established under Hon. Prime Minister
- In January 2006 a separate Minister of Human Rights and DM was appointed
- * DMC presently functions under the Ministry of DM

Disaster Management Centre (DMC)

Vision:

Safer communities and sustainable development in Sri Lanka

The Broad Mission

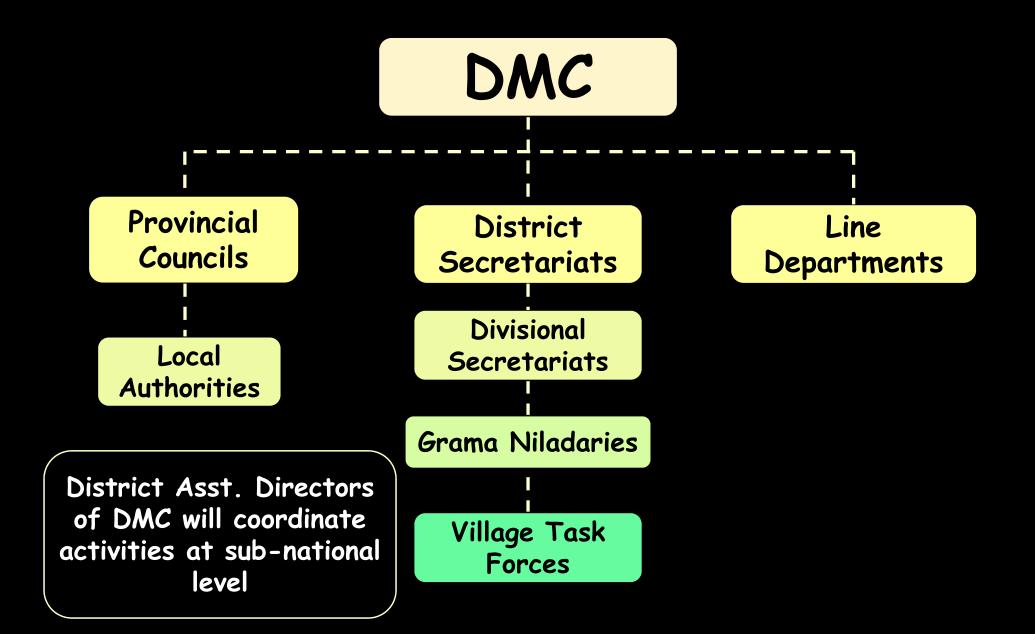
To create a culture of safety among communities and the nation at large through systematic management of natural, technological and man-made disaster risks

Objectives:

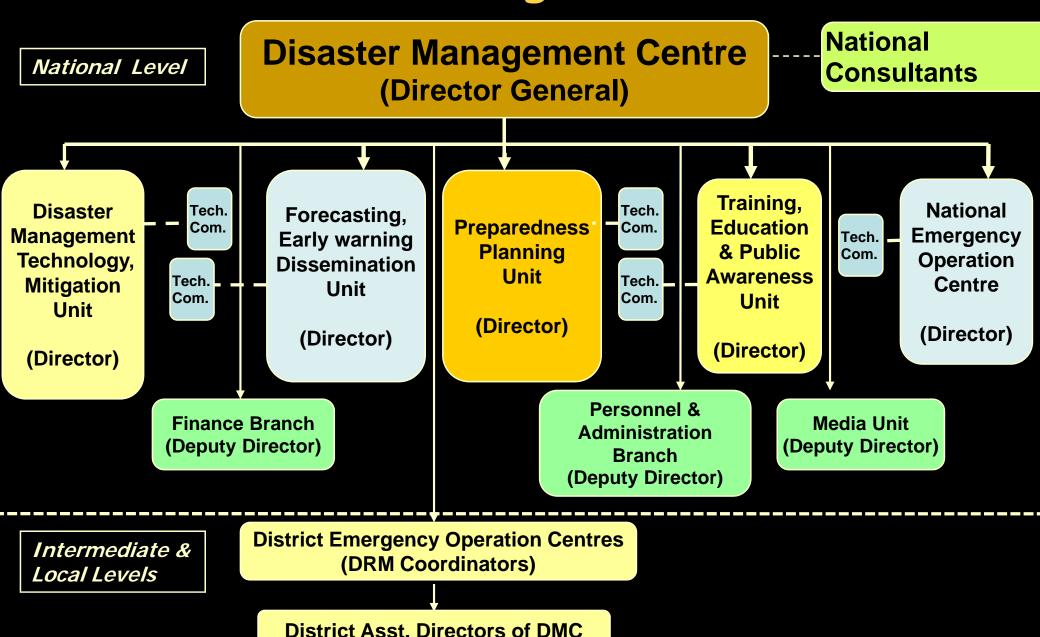
Through countrywide ministries; departments and public corporations; Provincial Councils and local authority administration; and district, division and GN administration; to enforce, coordinate and monitor activities related to,

- 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

DRM Institutional Framework in Sri Lanka



Organizational Structure Disaster Management Centre



DMC will serve as the national focal point and coordinating body for all

- International fora related to disaster risk reduction;
- Initiatives of development and donor agencies; and
- *NGOs and INGOs

Broad Activities of DMC

- Coordinating and collaborating with the main ministries, departments, agencies, authorities and LAs at national, intermediate, and village levels, the armed forces, police, international and national NGOs in managing the total DRR process in the country; and
- Directing, issuing guidelines, facilitating, coordinating, monitoring and where necessary directly implementing or enforcing activities related to its main objectives

Agencies Involved in the DRM activities

- DMC
- Atomic Energy Authority
- Colombo Municipal Council
- Central Environmental Authority
- Ceylon Electricity Board
- Coast Conservation Dept
- Dept. of Agriculture
- Fire Service Dept.
- Irrigation Dept.
- Mahaweli Authority
- Health Sector Agencies
- Dept. of Meteorology
- Ministry of Finance & Planning
- Urban Development Authority
- National Planning Department
- Department of Social Services
- NARA

- NBRO
- National Institute of Education
- SL Army
- SL Navy
- SL Air Force
- Sri Lanka Telecom
- SLIDA, CHPB, SLILG
- Survey Dept
- Water Supply and Drainage Board
- NGOs, SL Red Cross Society
- Universities
- NSF
- RDA, PRDAs
- UNDP / UN Agencies
- District / Divisional Secretariats
- Provincial Councils & LAS

Identified & Prioritized Needs for Disaster Risk Reduction (DRR) in Sri Lanka

- Capacity building for Forecasting, Early Warning and Dissemination
- Capacity building for Emergency Operations and Response
- Dam safety, down-stream mapping and risk assessment
- Preparedness for Response including Preparedness Planning
- Development and regulations for adoption of planning and constriction guidelines in development activities in disaster prone areas
- Disaster related training & Public Awareness
- Community Based Disaster Preparedness

Present & Future Activities of DMC

- Hazard, Vulnerability and Risk Assessment
- Information Management
- Long-term disaster mitigation and mainstreaming disaster mitigation in development
- Multi-hazards risk reduction programme at local level
- Forecasting, early warning and information dissemination
- Training, Education and Public Awareness
- Donor & NGO Coordination
- Preparedness to respond to disasters when they occur
- Community based Disaster Management
- Emergency Operations Management
- Establishment of Emergency Operations Centre & Resource Network at provincial and district levels
- Management of the post-disaster activities after a disaster

Community Based Disaster Preparedness Programme

- ❖ 15 District DM Coordinators to liaise and coordinate with District Secretariats, Divisional Secretaries, Police and Forces, Local Authorities and GNs, Civil Societies etc.
- Coordinate and implement Community Based Awareness Programme, Capacity Building, Risk Reduction, Community Contingency Plans & Evacuation from vulnerable areas.
- DMC is initially focusing on Tsunami affected districts and will gradually concentrate in other districts vulnerable to hazards such as floods, cyclones, landslides, dam related hazards, droughts etc.

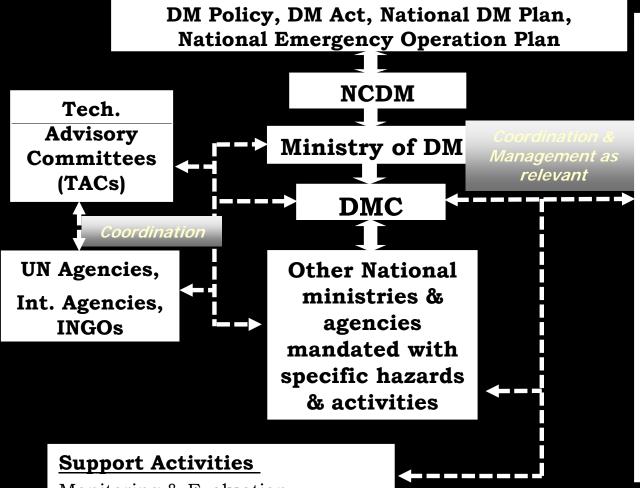
DMC is working with the following key sectors

_	Physical	-	Health	-	Marine Area
	Planning				Management
-	Urban	_	Sanitation	_	Tourism
	Development				
-	Forestry	_	Education	-	Industry
	Lands	_	Housing		Fisheries and
					aquatic
					resources
-	Agriculture	-	Drinking Water Supply	-	Power
_	Land		Roads	_	Transport
	Development				
_	Mining	-	Environment	_	Communication
_	Irrigation	_	Coastal Area	_	Others
			Management		

Overall Country-wide Disaster Risk Management (DRM)

- The proposed overall Country-Wide DRM Framework will fulfill the need for a multi-disciplinary, multi-sectoral, inter-ministerial and inter-agency approach, with the full involvement of all key sectors, as spelt out in the DM Act and the National Policy
- Such a framework is illustrated in Fig. 1
- This framework takes into consideration that "Primary responsibility for dealing with disasters will rest with the national government, but decentralised to Provincial Council, Local Authority, District, Divisional, GN, Village and Community levels

Fig. 1 - Overall Country Wide DRM Framework



Main DRM Activities

Hazard, Vulnerability and Risk Assessment

Mitigation, Mainstreaming DRR in Development, Climate Change Adaptation

Consideration of elderly, children, disabled, gender/women

Community Based DRM (CBDRM)

Preparedness Planning for Emergency Response

Forecasting, Formulating Early Warning, EW Dissemination

Emergency Management (Emergency Operations, Response etc)

Relief, Immediate recovery, Rehabilitation & Reconstruction

Training, Education and Public Awareness

Monitoring & Evaluation, Performance Review, Revisions

Mainstreaming DRM

Loss & Damage Assessment, Needs Assessment

Databases, websites, use of space technology etc.

Research & Development

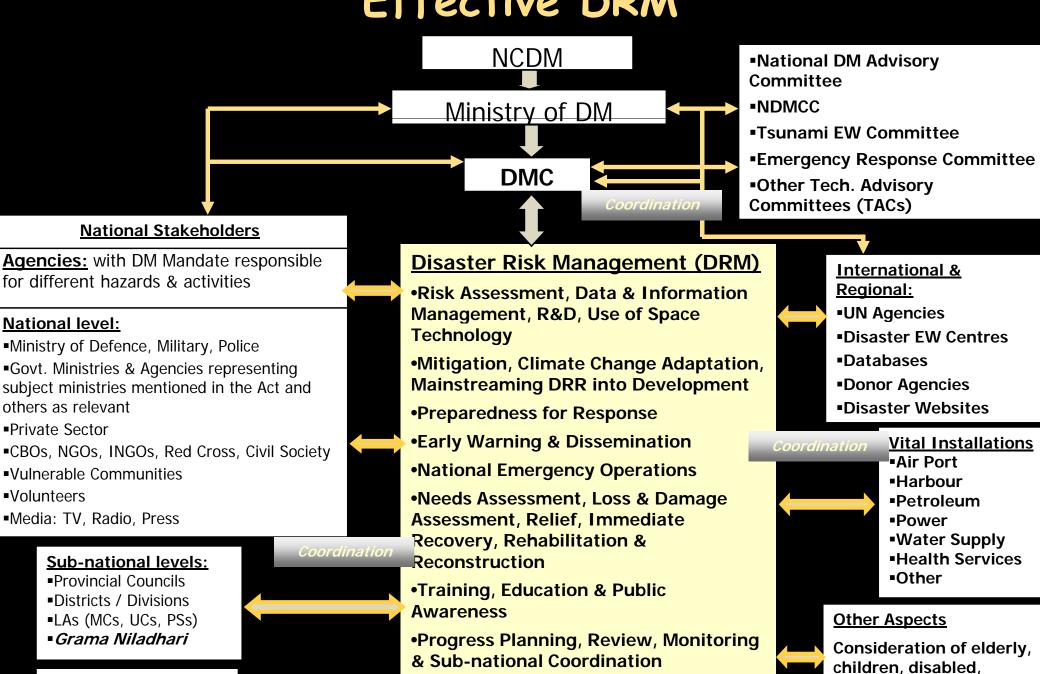
Stakeholder Contribution through Participatory Action

- Relevant National/Provincial Ministries/Agencies –
 Covering all possible hazards and all sectors
- ❖ Districts/Divisions/GN Divisions, PCs / LAs
- ❖ Media, UN Agencies, SL Red Cross, NGOs, INGOs, CBOs, Vulnerable Communities, Volunteers, Private Sector

National and Sub-National Level Institutional Frameworks for DRM

- ❖ National Institutional Framework for effective DRM in Sri Lanka conforming to the above requirements is illustrated in Fig 2, highlighting the above levels and the District DM Coordinating Unit (DDMCU)
- Sub-national Level Institutional Framework with District DM Coordinating Units is illustrated in Fig 3
- During response in a disaster situation, the personnel from the Armed forces will have to work hand in hand with these parties

Fig. 2 - National Institutional Framework for Effective DRM



Community Based DRM (CBDRM)

gender /women

Communities





24 x 7 National Emergency Operations Centre (EOC) at DMC





Fig. 3: Institutional Framework at Sub-national Level with District DM Coordinating Units

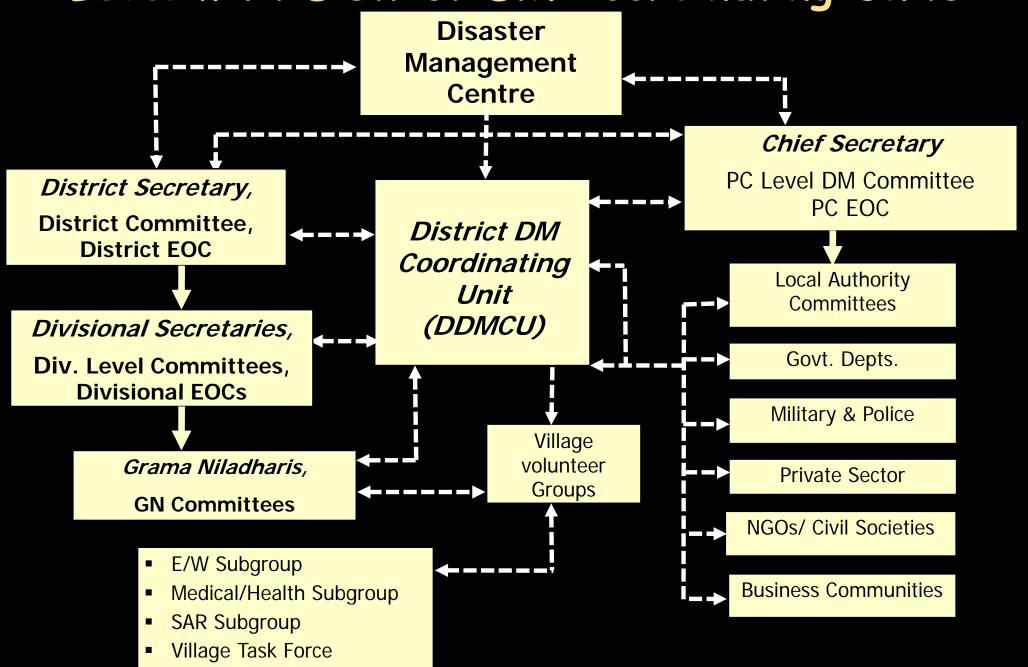
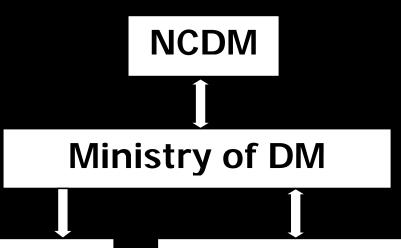


Fig. 4 - Coordination and Functioning of Various Advisory Committees at National Level



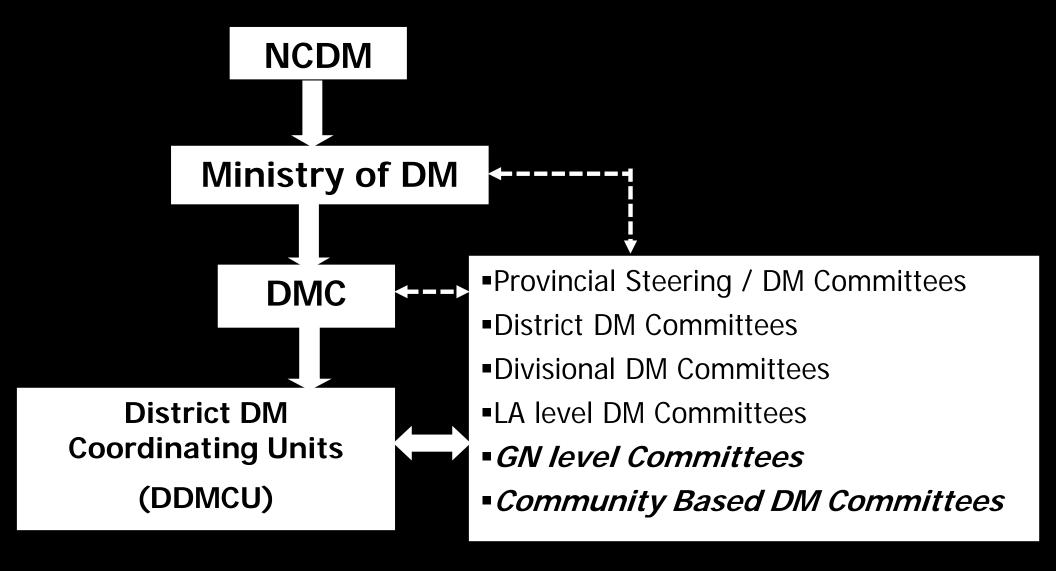
DMC - Coordination

- Director General
- Directors relevant for the subject area

Technical Advisory Committees

- National DM Advisory Committee chaired by Minister of DM
- National Disaster Management Coordinating Committee (NDMCC) chaired by Secretary, MDM
- Tsunami EW Committee
- Emergency Response Committee
- Building Guidelines Committee
- Other TACs for relevant aspects

Fig. 5 - Coordination of DM Committees at different levels by the District DM Coordinating Units of DMC



GN level DM Committees

- ☐ Main GN Committee
- ☐ Sub-committees for specific tasks:
 - Hazard, Vulnerability and Risk Assessment
 - Disaster Mitigation
 - EW Dissemination
 - Search & Rescue and Evacuation
 - Shelter and Relief Management
 - Health, First Aid & Sanitation
 - Village Security
 - Post Disaster Rehabilitation and Reconstruction

GN level DM Committees - contd...

- □ GN, Chairman, DM Committee convener and coordinator
- Or another responsible person may be appointed convener and coordinator, by agreement, delegating to him/her the relevant responsibilities
- Meetings of the committee will be held regularly
- ☐ GN will be responsible for all documentation, correspondence, coordination with sub-committees, updating all information in the planetc.
- ☐ This subject will be a part of the responsibilities of the GN

GN level DM Committees - contd...

- ☐ If requested, the GN and / or selected members will participate in DM Committee meetings at other levels in case of a disaster warning, emergency or disaster occurrence, on a need basis, as applicable
- During a disaster at any given location, the Div. Level Committee will initiate activities for responding to the disaster
- ☐ In such situations the GN of affected GN divisions will be in the active committee
- ☐ It is essential that members of the GN level DM Committee coordinate with the following in all phases of the DM cycle
 - District DM Coordinating Unit (DDMCU) and
 - The District / Divisional EOC

DM Committees at Community Level and CBDRM

DMC promotes CBDRM to

- Promote communities to form DM committees in all vulnerable locations and a system of registration of such committees with divisional secretariats
- Develop a plan for undertaking CBDRM activities covering all phases of the DRM cycle, namely, pre-disaster; EW and emergency; evacuation; post disaster relief; rehabilitation and reconstruction
- Give consideration for elderly people, children, disabled people, gender/women, especially in evacuation. Encourage civil society organisations, CBOs, NGOs and INGOs to consider this aspect
- Develop a database of community volunteer groups to be maintained at divisional / LA levels
- Regular training and motivation
- Encourage the communities to develop CBDM Plans for vulnerable villages, facilitated by the DDMCUs

Preparedness and Emergency Response at Different Levels

Preparedness at National and Sub-national Levels

Early Warning (EW) Coordination Framework

- The EW mechanisms and systems have been established by the DMC for effective issue of EW of an impending disaster at national and sub-national levels
- The EW Coordination Framework is illustrated in Fig.
 6 in the Manual. This includes mechanism for dissemination down to the last mile to the communities

Preparedness and Emergency Response - contd...

Emergency Response at National and GN / Community Levels

Emergency Response Coordination Framework

- Emergency operations system has been established at national level for effective response during a disaster
- All relevant groups of people will coordinate and work together, for which response preparedness is required
- Emergency Response Coordination Framework at national level is shown in Fig. 7 in the Manual

Involvement of Armed Forces in Emergency Response

 DMC has coordinated with the Ministry of Defence and established National and District S&R teams; and equipped and trained them. Arrangements are being made to plan out and select platoons of the Armed forces in different locations of the country so that in case of a disaster the military platoon in the closest vicinity will be contacted for assistance in response. Under preparedness planning for emergency response these would have already been selected and necessary awareness given to selected teams about the likely hazards in the respective geographical areas and specific preparedness measures etc.

Involvement of Armed Forces - contd...

- DMC has coordinated with the Military and established an evacuation plan for Tsunami vulnerable coastal districts where the detachment commander takes the initiative to activate the evacuation plan even at mid night when all others are fast asleep
- With such an arrangement, availability of trained manpower, communication equipment, transport etc. will be guaranteed and discipline will be ensured
- Such camps are there in all districts and linking up with them will be very easy
- In a disaster with the training and contact pre-arrangements having done the required teams can be called without any delay at all and directly by the provincial / district administrations or the DDMCU
- The Police, Sri Lanka Army, Sri Lanka Air Force and Sri Lanka Navy will have to be strengthened for undertaking such activities

Search & Rescue (S&R) Teams

- Military S&R teams at National and District levels have been established and trained to ensure prompt response operations to save lives in case of an emergency
- DMC has coordinated with the Military and established an evacuation plan for Tsunami vulnerable coastal districts, where the detachment commander takes initiative to activate the evacuation plan even at mid night when all others are fast asleep

1st Responders Teams for Man-Made Disasters

- A Rapid Response Team at national level has been trained and will be equipped for effective response in case of an emergency, such as an oil spill, hazardous material accident, chemical and industrial accidents, radiological emergency etc.
- These will be in collaboration with the respective mandated agencies, SLRCS and NGOs
- Refer Table 1 in the Manual for Ministries / agencies mandated for various types of technological hazards/accidents
- Response team personnel will be from Sri Lanka Police, Fire Brigade,
 Armed Forces, Health, Atomic Energy Authority, SLRCS and NGOs
- For disposal of lethal, toxic and adverse chemicals etc. after a technological disaster the mandated technical agencies will work with CEA, Police, Military and other agencies as appropriate
- It is vital to expedite and complete the formulation of the methodology to ensure safe transportation of hazardous chemicals that is in progress.

Emergency Response Coordination Framework at Sub-national Levels

- Mode of response to disasters will depend on the severity of the event
- In a local event, District EOC will coordinate and respond
- If the magnitude is larger and cannot be responded by the District EOC, then support from national level is requested. If the national level intervention is required to control the situation then the national EOC will take over and coordinate outside resources as necessary
- Emergency operation system has been established at district, divisional, local and GN levels. There will be a role for all of these provided in the DM Plans. For effective response during a disaster all these groups have to coordinate and work together, for which response preparedness is required. In the response preparedness the roles of above stakeholders must be described depending on their expertise
- Emergency Response Coordination Framework at Sub-national / Local Level is shown in Fig. 8 in the Manual

Thank you