

ARMED FORCES IN DISASTER MANAGEMENT

“Natural disasters continue to strike and increase in magnitude, complexity, frequency and economic impact. Whilst the natural phenomena causing disasters are in most cases beyond human control, vulnerability is generally a result of human activity. Therefore, society must recognized and strengthen traditional methods and explore new ways to live with such risk, and take urgent actions to prevent as well as to reduce the effects of such disasters. The capacities to do so are available.”

The word of the mouth passed on to generation after generation of Sri Lankans was that their motherland is a land of safe heaven from dreadful natural hazards in comparison to many other states that earthquakes, tsunamis, tornadoes and likewise natural disasters are frequent and more or less annual events. Although history stands with evidence of past events the effects of those might have been considerably less with little urban encroachment to disaster prone areas. Lately, low intensity high impact natural hazards have been frequent with enormous destruction, unparallel to past events. The 2004 Indian Ocean tsunami that struck almost two third of the island's coastline and unprecedented devastation reminds us that we are no longer safe. In the light of these increasing disasters, revelation of the heinous truth was that our mechanism for disaster management was obsolete and need immediate revival. A major stake holder in this mechanism, the armed forces need to play a lead role in disaster management process. Certainly, armed forces earned notable achievements in alleviating the suffering of affected masses in past disasters. But the question is whether more output could have been possible.

A definition that has been accepted on disaster according to United Nation Secretariat for International Strategy for Disaster Reduction is situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering. Disasters may be broadly categorized as natural and technological; while there is a rational argument to say that natural disasters too are induced by over bearing human activities, a subdivision entails to hydro-meteorological disasters, geo physical disasters, biological disasters, industrial accidents, transport accidents and miscellaneous accidents.

In Sri Lanka major floods are associated with the two monsoonal seasons. Typically during South West monsoon season the Western, Southern and Sabaragamuwa provinces are vulnerable to floods. During the North East monsoon the Eastern, Northern and North Central provinces are prone to floods. Excessive rainfalls, typical landforms and geology, deforestation and unplanned land use practice combined to create landslides. The districts of Badulla, Nuwaraeliya, Rathnapura, kegalle, Kaluthara, Kandy and Matale have been frequented with landslides. Low rainfall during monsoons is the cause for droughts in south-eastern, north-central and north-western areas of Sri Lanka sometimes experiencing consecutive droughts, making lasting impacts on livelihoods. The Eastern and North Eastern parts of Sri Lanka are highly vulnerable to cyclones especially in the months of November and December. Some parts of the North Central and North Western areas have also been subjected to an occasional cyclone impact in the past. In general natural disasters in Sri Lanka are commonly caused by floods, cyclones, landslides, droughts and coastal erosion. However after the tsunami, it was realized that high impact disasters cannot be overruled and even seismic activities have been recorded over past 400 years.

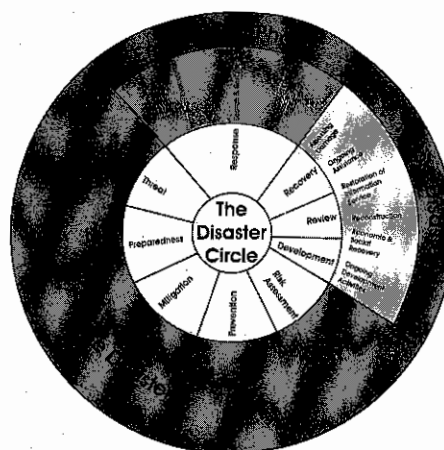
¹Disaster statistics 1994-2004 <http://www.unisdr.org/disaster-statistics/introduction.htm>





The concept of disaster management has been given prominence in countries where disasters have taken place, and the development of an academic and professional interest in the context of disaster management has resulted in introducing a variety of techniques and technologies required for disaster management. A definition to Disaster Management is "an applied science which seeks, by the systematic observation and analysis of disasters, to improve measures relating to prevention, mitigation, preparedness, emergency response and recovery." Therefore disaster management aims to reduce, or avoid the potential losses from hazards, assure prompt and appropriate assistance to victims of disaster, and achieve rapid and effective recovery. The Disaster management cycle illustrates the ongoing process by which governments, INGO's, NGO's and community plan for and reduce the impact of disasters, react during and immediately following a disaster, and take steps to recover after a disaster has occurred.

Fig 1 Disaster Management Cycle



Appropriate actions at all points in the cycle lead to greater preparedness, better warnings, reduced vulnerability or the prevention of disasters during the next iteration of the cycle. The complete disaster management cycle includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property, and infrastructure. The disaster management cycle divides an event of a disaster in to sections of response, recovery, mitigation and preparedness and carries a significant importance in realization of stakeholder's responsibility in each event.

How do the armed forces of a country fit in to this disaster management process? Certainly, main partners in the disaster management process are the armed forces of a country and as anywhere in the world armed forces possess human and material resources for immediate response. Evidently, in Sri Lanka the military has been performing a major task in disaster response, relief supply and rehabilitation from the times of the British Imperial administration. Encompassed in the role of military forces, is to provide a sound strategy, efficient allocation of resources and an effective crisis management organization, capable of providing a balanced response to any situation. However Sri Lankan armed forces that have been engaged in defence of unitary state against separatist terrorism for two decades, hold less institutional preparations in other crisis management. Nonetheless Army, Navy and the Air force have hitherto shouldered considerable and much appraised responsibility in disaster management. Yet, effective military and civil defence integration in disaster management seems to be somewhat absent at the initial stage of response mainly due to deficiency in contingency preparedness.

Carina Warfield, The Disaster Management Cycle, http://www.gdrc.org/uem/disasters/1-dm_cycle.html

Military Capabilities in Disaster Management

- The authoritative, chain of command organization and management system of military forces make them ideal for operating under disaster conditions. In addition many of the normal activities parallel to those in the public emergency services. Thus military services offer invaluable support in engineering, communications, transport, rescue, emergency medical services, field sanitation, cooking, water supply and etc.
- Military units to provide these services are usually deployed throughout the country and proximity to population centres where disaster would impact most. These military forces can respond rapidly with independent administrative, communication and logistic system and extremely mobile. They are well trained in individual skills necessary to perform professional and functional activities in demand under disastrous circumstances.
- Add to this the capability to sustained operations away from their home base in all weather and whole day compared to other government agencies.
- Most importantly the population values the military as uncorrupted, professionally efficient, impartial and free from local political manipulation.

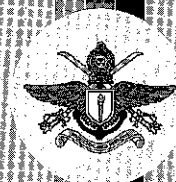
Constraints to Military in Disaster Management

- Although armed forces possess the capabilities described above, it is often the case that there is lack of adequate arrangements in legislation to ensure that they are readily available to support the civil community and administration in response to disasters arising from natural or man made causes. Matters are usually complicated by the fact that armed forces are outside the normal chain of command and communications link of the central or local government and their public and emergency services. The situation may be made more difficult as military commanders may have different set of responsibilities, and loyalties from those of the local government officials and administrators requiring their support. Also there is the complication of being subjected to different financial authorities, budgeting, and procurement and accountability systems.
- Most of the time military commanders at all levels are less likely to rehearse operation with civilian authorities, hence unfamiliar with their system of decision making, authority and responsibility. Further the incompatibility in equipment and less experience in collaborating for common task under multiple authorities would lead to further complications.
- Another factor is the wariness which civilian authority bears on military super control. A situations arising out of major disaster frequently lead to political instability thus providing opportunities for military take over of government as it has been proved in many occasions.

Deficiency of integrated framework to obtain military services to work in coordination with civilian authority is the main factor deliberating on most of the above constraints.

A rapid progress in disaster management began just after the 2004 tsunami and long awaited disaster management mandate was brought in to effect. The Sri Lanka Disaster Management act of 2005 came in to force on 13th May of the same year and is the legal instrument that provide for the establishment of the national council for disaster management; the Disaster Management Centre, appointment of technical advisory committees, preparation of disaster management plans, declaration of disaster and the award of compensation etc. The road map for disaster risk management evolved through this mandate with a progressive strategic plan to face disastrous event in future. Yet considerable deficiency in armed forces involvement in the strategic plan is a notable short coming that needs to be revised.

³Ritchie GN, Lieutenant Colonel, The Military Role in Disaster Relief, Preparedness and Prevention, Cranfield Disaster Preparedness Centre, UK



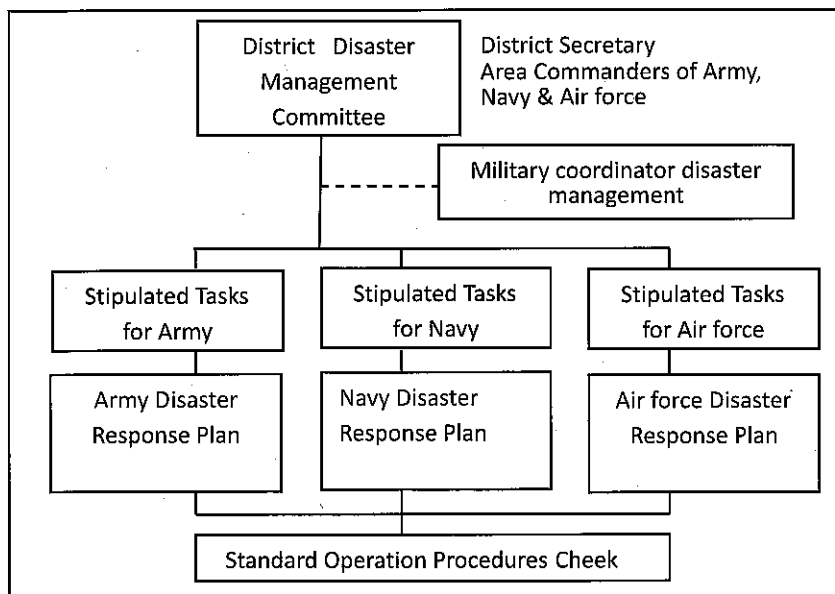
Following that hinder successful implementation of the Road Map for Disaster Risk Management are essential to be improved in order to measure the benefits derivable from the disaster management organization.

- Institutional and professional differences exist, impeding the essential coordination and collaboration expected and essential in bringing the strategy to expected success.
- In certain cases functional level definition on procedures; especially standard operation procedures are lacking due to absence of specific tasking. For instance, there are very less defined responsibilities to armed forces in disaster response plans although in times of disasters much of the initial evacuation, rescue and relief work falls under the purview of armed forces.

Therefore, now a question exists how the core competencies of armed forces could integrates in to the national disaster management structure eliminating constrains on both organs. The revitalization of the existing structure certainly requires some changes in order to be highly productive in disaster management in Sri Lanka. Unless a clear structure presenting the authority of military and civil leadership and at levels of disasters in which these leadership supersede each other as well as how reversion to normal administration on the passing of disaster, are addressed, the system will never perform to the wishes and expectation of the government and the public.

The integration of armed forces in local disaster management organization carries a high significance in disaster response as the local authorities are the first to involve in alleviating the suffering of affected population inhabited in the area of impact. Previously district level disaster management committees were led by the district secretary. Today a permanent military presence in the district disaster management committee is a fact as a representative from one of the armed forces is actively involving in highly vulnerable districts. Their primary task is to prepare the disaster risk assessment and response plan in coordination with all stakeholders and liaison with sister services to collaborate with others for effectiveness in disaster response. However the military presence at present calibre is a mere coordinating function and successes in disaster management totally depend on designed response plans proving effective disaster event.

Fig. 2 Integrated Frameworks for Armed Forces in Local Disaster Management



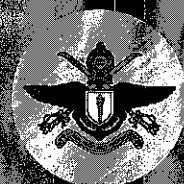
Therefore senior military leadership and decision making is a primary need at district disaster management committee for they are at ability to direct available resources under their command or obtain specialized assistance from service headquarters. Their participation along with the military coordinator is essential in defining tasks for each force avoiding overlap and without stepping in to other's specialty. Once the tasks are adequately defined the respective forces must prepare their standard operation procedures and check lists to various disaster events.

Using these operation procedures frequent rehearsals are essential to measure the outcome, followed by updating and remedial action to the original procedure. Whenever necessary combine action may be more productive than individual action and the military coordinator has responsibility in liaising. Some responsibilities in respect of evacuation and search and rescue that armed forces may be allocated in district disaster response plan, to which respective services must prepare standard operation procedures, are as follows.

- Identification and marking of evacuation routes and planning transport and other requirements for evacuation.
- Evacuation drills.
- Make arrangement for registration of displaced personnel at shelters/ temporary camps.
- Mobilize and coordinate work of volunteers ensuring community participation.
- Initiate necessary action to prevent looting and theft in villages in the event of evacuation.
- Training of SAR Teams at village levels, provide and arrange rescue kits at risk areas.
- To mobilize SAR trained teams for search and rescue depending on the type of impending disaster and type of SAR missions that would be required.
- Ensure availability earmarked basic equipment and material for SAR.
- Carrying out of joint drills with other parties to minimize response time.

In national level disaster management organization, the supreme command will be still held by the Commander in Chief who is the President and the Chairman of the National Council of Disaster Management. However the Disaster Management Council will be the coordinating agency in all disasters in the country, hence essentially collaborate with armed forces to define tasks and responsibilities expected within the strategic plan; the road map for disaster risk management. In the armed forces the higher level coordination with the Disaster Management Centre is imperative and therefore senior level Disaster Managers need to be appointed. The specific capabilities of each armed service need to be considered in defining the tasks and responsibilities of armed forces in a state of disaster. Tasking of armed forces in the response component in the disaster cycle would be more effective thus armed forces shall enter, serve and then vacate allowing other organizations; central or local government institutes, INGOs, NGOs and others to fill the vacuum in recovery and mitigate phases. At each force headquarters, the senior disaster manager and his organization must prepare standard operation procedures and checklist for various disaster contingencies for sustainable operations to meet objectives of defined tasks.

Once the disaster management strategy as per the Act No. 13 is set on full motion the tsunami warning centre, multi hazard warning centre, and the national emergency operation centre under the umbrella of disaster management centre will exercise national level dissemination of warning and subsequent activities of probable disaster as well as at the aftermath of disaster. The presence of senior officers from tri



services is compulsory at the national emergency operation centre of which the prime duty is to coordinate response activities at state of disaster and at other times to be available to liaise with the respective force and immediate professional assessment of situations. The emergency operation room will coordinate with local disaster management centers too to assess situations and coordinate with local armed forces units. This way the emergency operation centre could liaise with heads of the armed forces to provide deficient resources at local forces depending on urgency and essentiality and also in obtaining support from respective services.

Moreover emergency rapid response teams are core teams of multiple special skills that are essential in immediate response at disaster impact that is capable of conducting sustainable rescue operations, emergency medical support, limiting and controlling the disaster impact and capable in advising local disaster management authorities in response procedures, until arrival of larger teams at scene. A rapid response team should be capable to wind up alone in case of smaller impacts and in wide spread impact; to control the situation until reinforcement arrives with special capability and man power. The teams shall constitute skilled personnel in search and rescue; surface, water borne and air, medical, chemical and oil spill control, explosive ordnance disposal, diving and salvage, etc. They should be able to respond in saving life in various disaster scenarios resulting from flash floods, landslides, earthquakes, cyclones and many other events resulting from man made and technical disasters such as ship wreck, air crash, collapsed mines, dam leaks etc. Obviously such events need various specialized equipment. However they may not necessarily belongs to a single unit but available with parental services for immediate deployment according to the specialty demanded by the circumstance. The national emergency operation centre should be able to dispatch teams by expeditious transport, be it ground transport or air lift together with equipment by having direct links with disaster managers of respective forces and rapid response teams. The composition of emergency teams may not be entirely military, as others experts such as nuclear, biological experts, structural engineers, epidemiologist and specialists from diversified fields are crucial in coping disasters.

With an increased trend of disaster strike in Sri Lanka the future remains uncertain. Therefore it is paramount to rejuvenate the disaster management system in the country. Sri Lanka Disaster Management Act, No. 13 of 2005 introduced ground breaking provisions, but the truth is apart from the act and the incorporated National Disaster Management Council, provisions must be made to involve the armed forces more productively at national level, local level and through formation of disaster rapid response teams.

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