
UNIT 6 ARMED FORCES IN DISASTER RESPONSE

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6.0 LEARNING OUTCOME

Upon studying this Unit, you should be able to:

- Understand the role of armed forces
- Explain their capabilities and resources
- Outline the principles and procedures for utilising the armed forces
- Examine their employment in disaster management

6.1 INTRODUCTION

The armed forces, as a resources of the country, represents unique technological and logistical capabilities that can be mobilized on short notice in a self-contained, self sufficient and highly mobile manner, to support lifesaving relief efforts. The military assets and capabilities are used for national disaster response and may also be done for international relief operations. These resources can protect and restore critical lifelines and services lost during sudden onset disasters as a measure of self-reliance to leverage the internal response capabilities by offering specifically targeted resources and services. During a severe disaster the normal community and administrative machinery is beleaguered by the enormity of humanitarian response required and the assistance of the armed forces is required for assisting the afflicted population.

The organisational strength of the armed forces, their high sense of discipline, the enormous manpower at their disposal and their excellent human resource management makes them exceedingly valuable in providing prompt relief such as dropping food, water and medicines to effected areas, erecting military bridge equipment and other services that save lives without delay. It may be noted that disaster management is the function of the civil authority and it is not desirable to use the troops too frequently or too long due to other ramification on its operational readiness. However, during an emergency the multifarious resources that can be mobilised by the defence services are called upon to bring prompt succour to the grief

stricken population and it becomes obligatory for every administrator, manager, social worker, and the general citizen to understand the role of the defence services in managing disasters.

6.2 UNDERSTANDING THE ROLE OF ARMED FORCES

Armed Forces or the Defence Forces generally mean the three services of the country viz. Army, Navy and Air Force, being apart from the police or para-military forces which are dealt in the next unit. Army is also referred by terms like ‘**troops**’ or ‘**military**’ and may sometimes extend to the Navy or Air Force when they are called upon to render aid. The primary role of the Armed Forces is to defend the country against external aggression and forces are trained for such a task, however, the constitutional and the legal framework provide for the Armed Forces to render assistance during disasters/ calamities when the situation is beyond the capacity of the civil administration to adequately respond.

The assistance is provided for various internal duties, both in peace and war as expressed under the subject "Aid to Civil Power" whereby instructions have been issued by the Central Government and the services to enable organised and clearly defined support from the Armed Forces and provide the financial or other necessary sanction for deployment of defence resources. In a restricted sense, "Aid to Civil Power" is applied for the maintenance of law and order, but its wider connotation can be applied to any type of assistance for maintenance of essential services; assistance during natural and other calamities such as earthquakes, floods, riots, famine and fires; and, any other type of assistance, including assistance in development projects. Normally, for assistance the State Government may approach the Ministry of Defence through the concerned Central Ministry. Anticipatory action may be taken in good faith by the military when requested by the local administration, with *ex post facto* sanction sought as soon as possible. The use of Armed Forces in aid to civil authorities must only be requisitioned under a central act and not under a state act e.g. assistance to run an essential service when it has been so declared to be an essential service by the Central Government.

The three wings of the Armed Forces have been involved in different disasters despite their primary commitment for the defence of the country. The Army being the largest is invariably involved with its proficiency and a range of resources. Its manpower is used for providing all kinds of support, control, guard and to restore infrastructure. The Air Force is obviously in the lead for providing aircraft and helicopters during a disaster. The Navy is called upon for providing divers, boats in the coastal areas, shipping and help at sea. All have trained and organised manpower for judicious employment during the emergency in quick response. However, all military units may carry out volunteer service in the vicinity of their locations as a development welfare activity and good will mission.

6.3 GUIDELINES FOR EMPLOYMENT

The guidelines for calling upon the armed forces for rendering aid would primarily depend on the civilian administration taking a deliberate decision to involve the

armed forces in a situation which seems to be getting serious enough so as to call the defence services for aid. The important issues to be kept in mind while working in aid of civil authority during disaster situations are as discussed below.

Cooperation: All agencies involved in disaster management operations must fully cooperate with each other. There would be a need for bring together all available resources at a particular place, understanding each other's capabilities, jointly undertaking all actions from preparation to operations with constant flow of information. Liaison, coordination and dissemination of plans should be ensured to the lowest level of administration and the military. Liaison during aid to civil authorities is essential and could best be achieved by placing headquarters of civil and military authorities together or having a joint control room along with exchange of liaison officers.

Planning and Preparation: Planning is carried out at various echelons i.e. at the national, state and local levels requiring close collaboration. The Ministry of Defence and the service headquarters are involved at the highest level. With the state governments, the command headquarters of the services interact through periodic civil-military conferences. It is at the local level that the sub-area/station headquarters and units coordinate with the local administration, police and others. Disaster management planning incorporating all the participants ensures a common agreement for all agencies to pool the resources and to take necessary actions. Full familiarity with the task is only possible by timely preparation. This involves joint planning, reconnaissance and rehearsals leading to constant updating. The State Government, having the primary responsibility for disaster management, should involve the Armed Forces in the planning process and to periodically update so as to enable the incorporation of changing operational responsibilities of the Armed Forces. To ensure the success of a plan concerning disaster management, the cooperation between the concerned civil and military authorities is essential and the plan should be issued with the signatures of both these authorities.

Humanitarian Ethos: The needs of the affected population should always be the foremost priority in any disaster-related action. Enforcing humanitarian principles require strict discipline and sacrifice, which the Indian Armed Forces have displayed time and again. While being fully committed at the borders and internal security duties, they have always responded to any disaster where human life is at stake. Special efforts have been made to inculcate humanitarian values amongst the Armed Forces due to their frequent involvement in sensitive and provocative issues. Seeking employment of the army for political or other superfluous expediency would set a dangerous trend and needs to be curbed.

Economy: Armed Forces should only be employed as a last resort when a disaster is beyond the coping capability of the civil administration as they are not only diverted from their paramount operational tasks but also these resources are more expensive than similar ones available in the country due to cost on multi-operational ruggedness and the military readiness. The cost for employing the military is borne by the concerned state government. Minimum essential military resources should be utilised in disaster response and their participation terminated at the earliest practicable time. Also, they must only be used as a last resort when other agencies are unavailable or unable to meet the contingency. For menial and labour intensive tasks, local labour must be utilised as it is cheaper and provide them with income generating

opportunities. For minor incidents where local police or volunteers could suffice, calling of the military should be avoided.

Principles of Utilising

Involvement of the armed forces for disaster assistance is guided by agreed principles that are also consistent with general military doctrine and could include the following:

- Armed Forces assistance will be requisitioned only when the situation cannot be handled by civil administration for **judicious use**;
- When needed, the Armed Forces will provide **immediate response**;
- **Operational requirement** of the armed forces will always take priority;
- While responsive to the needs of civil authorities, the military **chain of command** will remain in place and in force;
- Aid will be requisitioned by civil authorities **on task (mission) basis** and not on the number of troops;
- **Liaison and coordination** will be effected throughout the period of the disaster response mission;
- **Advance planning and training** will be conducted;
- Military (and civilian) **resources will be integrated** as needed to effectively accomplish tasks;
- The Armed Forces will be **derequisitioned earliest** i.e. released from the support mission as soon as the civil administration can take control of the situation.

Procedures

Armed Forces are always prepared to come to the aid of the disaster stricken population, however, it would be useful in overcoming avoidable difficulties if the civil administration follows the laid down rules and regulations for seeking their involvement. Assistance is provided by the Armed Forces with the approval of the Central Government, as the use of Armed Forces is a function of the Central Government. Whenever troops are called out for such tasks, the State Government, or the civil authority through the State Government, should report the fact to the Central Government (Ministry of Defence and Ministry of Home Affairs) without delay. For grave situations warranting immediate requisitions like maintenance of law and order, magistrate of the highest rank may requisition direct to the nearest military authority located in his jurisdiction. Sufficient information should be given while requisitioning troops so that the military commander can work out the resources required.

In a **strike situation**, State Governments may seek for military assistance for the maintenance of essential services. They must furnish information while requesting military assistance whether the strike has been declared illegal, furnishing the number and date of notification in this regard; and whether all civil resources have been explored before any military assistance is sought to run essential services.

Assistance by the Armed Forces during natural calamities would generally be provided on the sanction of the Central Government. In case of immediate necessity when reference to Central Government is not practicable, local military authority

may, at their discretion, comply with a request from the civil authority and report to the higher military authorities. The requisition should be in writing to avoid subsequent complications. Any assistance given by Armed Forces in these circumstances would be of an unseen or unexpected nature and consequently no previous plans can be made in such cases.

The military units remain under the command of its own commanders and works on the basis of task. The requisitioning of the Armed Forces should not be in terms of quantum but based on identified tasks. If the district and state plans incorporate the role expected from the Armed Forces and there is continuous flow of information, the procedure for deploying them would be quick and smooth. This would also enable the appropriate local military authorities to take necessary advance sanction of using certain critical resources. Apart from incorporating them in the planning stage itself, there should be a clear understanding of the specific administrative authority that should contact the appropriate military commander. The civil authorities have to ensure that when an Army column is requisitioned, their role is clear and the relief stores for distribution or special stores for a given task are provided to them.

When further aid is not required, the troops send a report to their service headquarters include details of number and type of troops employed, equipment used, duration of employment, brief report of work done, result achieved and all additional expenses incurred. All expenditure on the employment of Armed Forces for maintenance of law and order will be borne by the Central Government. For other aid in maintenance of essential services, assistance during natural calamities or execution of development projects, except for normal pay and allowances, rations, clothing, equipment and supervision charges, cost will be met by the State Government/ Union Territory Administration in respect of following:

- (a) Consumable stores.
- (b) Non-consumable Stores and Equipment including depreciation cost.
- (c) Incidental expenditure e.g., cost of move.
- (d) Hospitalisation and treatment of the service personnel injured whilst employed in these duties.
- (e) Any damage to crops or compensation payable to the local people.

6.4 CAPABILITIES AND RESOURCES

The Armed Forces have always been expected to be in the front in providing relief during different disasters. The Army being the largest and located all over the country including remote inaccessible areas, is invariably involved with its expertise and various resources in virtually all aspects of disaster relief ranging from logistic support, medical help to repair of roads and bridges. The Air Force is in the lead for providing aircraft and helicopters during a disaster primarily for transportation of personnel, stores, and equipment, for air dropping food, water and essential stores and for aerial survey for damage assessment. The Navy is called upon for providing diving assistance, for search and rescue at sea, for salvage of sunken ships and boats for clearing harbour areas, for transportation of relief material, both equipment and personnel by sea to the coastal areas, for medical assistance and for aerial

reconnaissance of coastal areas. All have trained and organised manpower for judicious employment during emergency response.

The Armed Forces are in a unique position to handle any type of situation due to the diverse professional personnel and multifarious equipment available with them. Due to their physical presence even in many remote areas they are well placed to assist the state government in relief endeavour. Even though the equipment with the Armed Forces is for their primary role, its resources are extremely useful during a crisis situation, however, any other specialist equipment should be planned and provided by the civil authorities. An overview of their capabilities and resources will give an indication to the diverse nature of tasks that they can be expected to perform.

Planning

Planning is carried out by the Armed Forces at various levels i.e. at the national, state and local. The Ministry of Defence and the Service Headquarters are involved at the highest level. At the State government level, the Command/Area Headquarters of the Services interact through periodic civil-military conferences with the local administration, police and other organisations. Once contingency plans for disaster management have been completed incorporating various actors, regular rehearsals are carried out and the contingency plans are also periodically updated. These plans are also generally graded at different levels catering for different types and intensity of a disaster calling for different approaches.

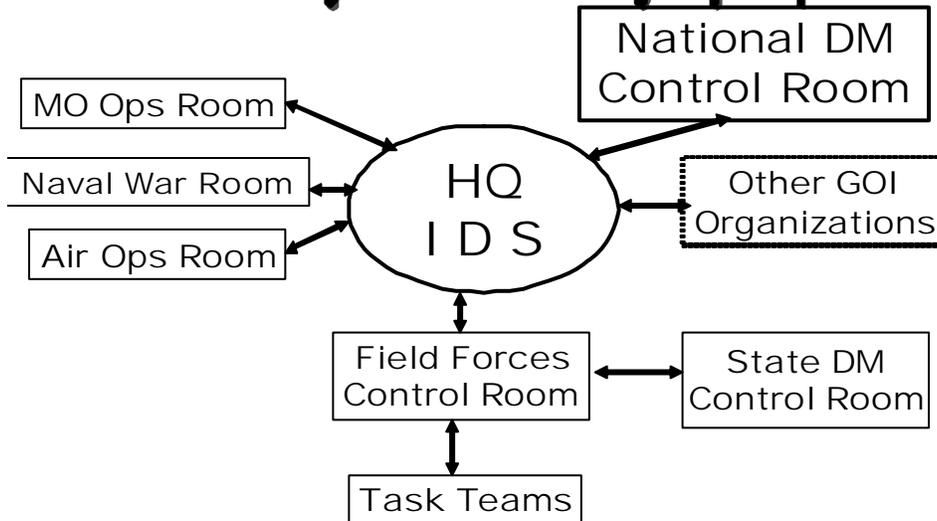
Internal Security Schemes are prepared on a Command basis and framed to meet such situations as are most likely to develop within their area. Each Headquarters, military station and other formations have a local Internal Security Scheme. These are drawn up in close collaboration with corresponding civil authorities and have their approval. Special schemes are designed by the local formation commander to deal with situations not covered by the local Internal Security Schemes.

Organization

The structure of the Armed Forces is on a brick or layered system of units and sub units that enable a force of any size to function and adapt to any situation. There are specialist teams that are trained to assist local governments and departments in coordination and liaison with outside agencies. An Operations Headquarters coordinates the operations in a particular area usually set up in the affected area. The organisational strength of the Armed Forces with their disciplined and systematic approach, make them crucial when large-scale disasters occur.

At the apex of the organisation is the Headquarters Integrated Defence Staff (HQ IDS), which has issued a tri-service joint response plan for disaster management. Also, interaction at Ministry of Defence and Ministry of Home Affairs level on various related issues at the national level has taken place and is proving to be extremely useful. HQ IDS is the nodal agency for coordinating disaster response at national level.

Inter-Service Organization for Emergency Response



Army is organised on the basis of geographical Commands distributed into a number of field formations supported by static formations called Area Headquarters, which further have Sub Area Headquarters. The field formations under the Command Headquarters, depending on the operational requirement, are a number of Corps, Division and Brigade Headquarters. The smallest independent organisation is a Battalion or a Regiment, which are of different arms (infantry, armour, artillery, engineers, signals and aviation) and service (supplies, ordnance, workshops, medical, etc).

Navy has Fleet Commands having its main component being various types of fighting and support ships with a complement of naval aircraft. There are on shore establishments for support of its fleet. In addition to maritime warfare, some of the peacetime tasks where Navy indirectly gets involved are fisheries protection, anti-smuggling, rescue and assistance at sea, protection of agencies exploiting the sea-bed. Marine survey, oceanography and meteorology are some of the fields in which the Navy contributes substantially. They also provide assistance to shipping in distress. The very fact that warships are fully self-contained as regards food, medical and other stores and can provide landing parties, makes it possible for them to be despatched to troubled areas at very short notice, to render assistance or relief until such time other forces arrive and establish themselves.

Air Force has regional Commands having a number of Wings each with particular type of aircraft viz. Fighter, Transport or Helicopter. In each Air Force location is a Station that provides all control to various components in its jurisdiction. For disaster management, the Air Force Stations should be contacted at local level. The main employment would be use of transport aircraft and helicopters for move of stores and personnel, aerial reconnaissance, air dropping of life-saving food, medicine and water and such tasks.

Response Time

The response time of the Armed Forces is very quick and short due to their organisation and training, which ensures rapid reaction to disasters. They should be requisitioned only when the scale of disaster is beyond the resources and capabilities of the civil administration, however, it should not be a graduated one but if the scale of disaster so warrants, all available resources must be requisitioned immediately for a speedy response.

Communication

There is a wide variety of equipment for short and long range communication including satellite based systems which immediately provide necessary communications in a disaster area where the engineering and supervisory specialists can quickly restore essential local communications. The sophisticated communication network of the Armed Forces can be utilised if there is a breakdown of the communication channels at the disposal of the civilian administration.

Engineering

Roads and bridges invariably get damaged during a disaster, which the engineering wing of the Army helps in repairing them or in constructing temporary bridges to facilitate the movement of goods and people. Earth moving and bridging equipment along with heavy recovery vehicles available with the Army is useful in most disaster situations to clear debris and restore road communications. Trained people are available to handle and dispose explosives and carry out demolition tasks. Clearing, construction or repair of roads to enable relief teams and material to reach affected area is undertaken when the situation arises. Some of the equipment available are:

- (a) Plant machinery (dozers, graders, excavator loaders, cranes, air compressors)
- (b) Water Crossing (boats, outboard motors, aerial cableway)
- (c) Water Supply Equipment (Pump set, tank fabric rubberised, water purification set, water tank tower)
- (d) Generator sets
- (e) Floating and dry bridges

Manpower

The trained and disciplined personnel are the basic strength of the Armed Forces. Their very presence provides security in the minds of the population, which gives them confidence for coming out of the traumatic situation. In the case of large-scale disasters, the entire force in an area is galvanised into action and everything is done on a war footing, with relief accorded top priority and all other activities in the Command taking a back seat. In addition to the various technical specialist in communication, power, engineering, medical, veterinary service, diving and hydrographic survey departments etc, they can be used for damage assessment, general administration, liaison, control, clearing debris, repair work, general management or any other activity for which no other manpower is available. The large number of disciplined ex-servicemen spread all over the country could be useful in harnessing the community efforts towards disaster management.

Search and Rescue

The Armed Forces capability for aerial search and rescue is indispensable in the event of disaster in remote areas. They invariably undertake this task on priority in all disaster situations. Assistance of the army is called upon for search and rescue in earthquake, flood or landslide situations and saving lives from the debris. Navy is called upon for search and rescue at sea and for underwater tasks.

Transport

Military vehicles, ships and large transport aircraft are useful for transporting large amount of relief supplies and for evacuation of personnel in addition to moving their own men and material. Air transport especially helicopters are of immense use in evacuation of critical cases and for reconnaissance. Army motor boats and naval rubber motorised boats are extensively employed in flood situations. Aircraft, both fixed wing and helicopters are also used extensively for aerial assessment and dropping food, water and supplies. Naval ships have also been used in carrying stores to cyclone hit coastal areas. Helicopters are pressed into service to evacuate the injured requiring medical treatment.

Medical and Health

The Army Medical Corps has rendered signal service in providing medical relief to people affected by disaster; Emergency medical treatment and field hospitals can be established in any area for immediate care to the injured and the sick and subsequent evacuation to civil hospitals. Sanitary engineering, decontamination and disease control can also be undertaken. A point to note is that these medical teams are self-contained units and can provide immediate assistance in any area without depending on the local area for food/water/accommodation. Army field formations has units with capability to provide combination of advance dressing station, forward treatment centre, medical aid post, staging post, detachment at helipad/ airfield/ railway station and dental unit. In addition there are various military hospitals.

Protection of Life and Property

The Army assists the civil administration in maintaining law and order on specific request by the civil administration. This happens when the state police is over-stretched and is not able to cope with the problems thrown up by a crisis. Troops could be used for effective cordoning of vulnerable areas.

Shelter and Camp

Tented camps for emergency shelter can be provided along with arrangements for mass feeding, water, power supply and allied arrangements. Management of camps can be effectively undertaken by the Armed Forces. The engineer units can construct temporary shelters with provisioning of water and electricity. One of the columns could be tasked for its management including field kitchens, hygiene and sanitation etc. Medical resources would be utilised for the people taking shelter in these camps. The construction material and daily supplies should be provided by the civil administration.

Territorial Army

Territorial Army is a voluntary part-time civilian force having departmental units (raised from employees of government departments and public sector undertakings) and non-departmental units. The units are Infantry Battalions, Railway Engineer Regiments, General Hospital Units, Indian Oil Corporation/ Oil and Natural Gas Commission units, Dock Companies, ASC Battalion, Ecological Battalions and Wasteland Development Units. In addition to providing units for the regular Army when required, the role of Territorial Army is to relieve regular Army of static duties, aid to civil power in dealing with natural calamities, maintenance of essential services in situations where life of the community is affected or the security of the country is threatened and to provide support to national effort. Territorial Army units, which are like reservist force, can be embodied to meet special situations. In times of need Territorial Army Railway units help in running rail services. Similarly, there is medical TA a unit. The Ecological Battalions are tasked on project basis with restoring the ecological balance of a degraded area by forestation, arboriculture and similar works.

Border Roads Organisation

The Border Roads Organisation staffed largely by personnel from General Engineer Reserve Force with some representation from the Army Engineers, have been set up for accelerated development of infrastructure in the remote areas along the Eastern, Northern and Western borders. Director General Border Roads at Delhi work through Project Chief Engineers for a geographical area, which further have a number of Border Road Task Force. A Border Road Task Force consists of one or more road construction companies with specialised platoons and labour force provided by pioneer companies along with stores company, field workshop and medical units. As these units are located in remote areas and have large amounts of plant and equipment with responsibility for construction and maintenance of roads, they are constantly involved in land slides and other natural hazards in their areas of responsibility where they must be incorporated in all disaster management plans. They are working round the clock to keep the difficult road communication open in difficult and hostile areas and constantly dealing with disasters.

Coast Guard

In India, Coast Guard organisation was set up to undertake maritime duties and also for better ocean management. Coast Guard is a statutory body under the Ministry of Defence. Protection and preservation of maritime waters and pollution control in the Indian Exclusive Economic Zone is one of the main responsibilities. Under this function, the Coast Guard organisation are responsible for combating oil pollution occurring due to tanker activities and accidents within Indian territorial waters and high seas surveillance of Indian maritime zones against intentional discharges of oil or oily wastes has also been assigned to the Coast Guard organisation. The Director General Coast Guard is the Central Co-ordinating Authority for marine oil spill response activities in the maritime zones of India who delineates the duties and responsibilities of each participating agency.

The Coast Guard's four main missions are maritime law enforcement, maritime safety, environmental protection and national security. These missions mandate

Coast Guard remain constantly ready to defined Indian waters while also ensuring national security and protecting national interests. The service also claims to minimize loss of life and property, personal injury and property damage at sea in Indian, waters, ensuring safety and security of maritime transportation, seaports and shore facilities. Coast Guard also protects the marine environment, its wildlife and assists other agencies (State and local) in performance of their duties and cooperates in joint maritime exercises to establishing effective maritime communications system during disaster/crises within the Indian maritime zones.

Veterinary

The Army veterinary services come to the aid of the population by saving their animal wealth through treatment, zoonotic disease control, food inspection and evacuation. They are also involved in research to improve the breed of the animals. Their prompt assistance for veterinary services is useful during disasters.

Bomb Disposal

Army also undertakes disposal of bombs and improvised explosive devices and anti-terrorist measures. Bomb Disposal Unit is a specialised unit for this purpose. They work in close liaison with the Civil Defence and Police organisations and also undertake their training. In many terrorist related incidents these provide indispensable help.

Nuclear, Biological and Chemical

The Armed Forces have some capability to meet nuclear, biological and chemical threats. They have specially trained personnel and specialised equipment for monitoring and decontamination in case of such incidents.

6.5 EMPLOYMENT FOR DISASTER MANAGEMENT

Each service within the Armed Forces would be employed for specific tasks as per its capabilities with the Army being predominantly engaged for assistance. Every service will be independently responsible to render aid for the maintenance of essential services, during natural and other calamities (e.g. floods and fires) and other type of assistance (e.g. for development projects) when asked by the civil authorities. Coordination will be done in joint meetings of the representatives of the Services and the civil authorities concerned, where resources of more than one service are required.

For maintenance of essential services, the assistance provided by the Armed Forces will pertain to the provisioning of technical personnel and specialised equipment. The Corps of Engineers, Corps of Signals, Army Medical Corps and Corps of Electrical and Mechanical Engineers are likely to be called upon to provide such assistance. The Air Force would mainly be used for transportation of stores and personnel by fixed and rotary wing aircraft, while the Navy would best be employed for all activities at sea and provision of divers. Generally, the tasks undertaken would be provisioning of

machinery and equipment which is not readily available with civil authorities, provisioning of technical personnel, and provision of supervisory staff who should coordinate and guide the work of civil agencies.

Army assistance should not be called for work mainly involving unskilled or manual labour which should be provided from other sources like voluntary organisations, paid labour, Home Guards, police or the civilian government staff. In case troops have to be detailed to save life or on humanitarian grounds at short notice, they should be withdrawn as soon as possible.

Army Formation

A formation is a Headquarters with other subordinate formations and/or units under its command. The Area and the Sub Area are the static formation, which are geographically distributed and would also be involved in disaster management planning on a continuous basis. For operational purposes, a Command has a number of Corps, which further has two or three infantry, mountain or armoured Divisions under it. A division is the basic formation employed in war that combines a force of all arms and services for undertaking sustained operations over protracted periods generally having three infantry or armoured brigades and an artillery brigade. It has the combat elements of infantry, armour, artillery, engineers and signals; and also logistics elements of Army Service Corps, Army Medical Corps, Divisional Ordnance Unit, Electrical and Mechanical Engineers, Corps of Military Police and Army Postal Service. The Army Aviation Corps and Air Defence Artillery are other combat units under a Command.

Each formation has a headquarters with the staff broadly organised as General Staff Branch (operations, intelligence and training), Adjutant General's Branch (personal administration, discipline, medical service, pay, welfare, etc) and Quarter Master General's Branch (supply of all material need, accommodation and move of troops). The General Staff Branch would coordinate all aspects of disaster management where as the others would provide support as required.

Unit

A unit would be generally a battalion or a regiment of an arm or service under the independent command generally of a Colonel. These further have sub-units called company, squadron or battery which form a column for aid to civil authorities. The number of columns that a typical unit could provide is generally three to four. There are some minor units that may be able to provide only one column. The units are integrated into the disaster management plan and respond as per the need and situation.

Typical Army Column

Generally the Army is employed in self contains, self sufficient and mobile columns when taking action whether it is during a natural calamity or in restoring law and order. A column may be built around an administratively self contained Company of about a hundred men with additional resources attached of signal detachment, medical team, repair and recovery element, and other functional requirements like boats during floods. These columns may function independently for limited role or a

number of them may function under a designated headquarters. The role assigned could be one or a combination of evacuation, medical, distribution, security, search, rescue, clearance, shelter, or any other, but the material required to be expended for the affected population should be provided by the local administrative authority.

Ex-servicemen

A large number of disciplined and trained men are available in all parts of the country after having retired from the Armed Forces. Amongst these men are people trained and experienced in different aspects who could be the key persons at local level for disaster management. They have qualities of leadership, skills, expertise and dedication for community work. The Director General Resettlement formulates and implements scheme for their resettlement with the Soldiers, Sailors and Airmen Board functioning under it and having its branches in all states and districts of the country. The ex-servicemen must be involved at the local level in the planning and implementation of disaster management activities within a district.

Type of Assistance

From the above it is clear that the armed forces could be generally considered for the following type of assistance:

- a) Command & Control infrastructure including communication.
- b) Medical Aid.
- c) Logistics backup for transport of relief.
- d) Relief camp establishing.
- e) Construction/repair of roads & bridges
- f) Maintenance of essential services.
- g) Evacuation.
- h) Diving effort.
- i) Handling of international relief.
- j) Aerial reconnaissance

NBC and Terrorist Related Disasters

The army could provide limited assistance in the eventuality of nuclear, biological and chemical (NBC) related disaster or acts of terrorism in a reactive scenario. The types of disasters for which possible assistance could be called are toxic chemical accidents result in its spreading, use of lethal toxic agents by terrorists, nuclear facilities mishap, and biological sabotage to assist in water testing and detection. The limitations of armed forces in the expected response should be understood as they have inadequate resources to handle large-scale intervention and the equipment available only for their small teams.

Likely tasks for armed forces

- a) Rescue Missions – provide spec list troops
- b) Detection – chemical/biological agents
- c) Monitoring – radiation state, advice to evacuate and restrict hazard
- d) Decontamination – sanitize contaminated personnel and area
- e) First Aid

The existing bomb disposal units could earmark Quick Reaction Teams (QRT) and Quick Reaction Medical Teams (QRMT)

QRT would function for:

- Detection & identification of source of contamination
- Neutralize the source if possible
- Determine likely extent of hazard to enable evacuation
- Immediate decontamination of affected persons
- Evacuation of casualty to Disaster Treatment Centre (DTC) of QRMT

Functions of QRMT are:

- Provide immediate first aid
- Evacuate casualty out of contaminated area with co-opted troops to DTC
- Limited decontamination of casualties
- Provide specific treatment
- Evacuate casualties to earmarked hospitals

6.6 CONCLUSION

The catastrophic impact of disasters can be reduced only if there is coordination and cooperation from all sections of the society belonging to varied sectors. The Indian armed forces are one of the most dedicated and professional organisations with a rich tradition of being involved in the socio-developmental roles of nation building. Their services should be utilised as a last resort and be called upon to intervene and take on specific tasks only when the situation is beyond the coping capability of civil administration as it involves high costs.

The High Powered Committee on Disaster Management had included the following recommendations for Armed Forces related to disaster management:

1. The Armed Forces should have a dedicated component of personnel and equipment at the battalion level for disaster management.
2. All five army commands may have fully equipped centres in each of the command regions at appropriate locations that may have heavy equipment necessary to carry out relief and rescue activities in the region at short notice.
3. Use of Territorial Army to be incorporated in disaster management plans. In highly disaster prone states, it could be considered raising specialised Disaster Management Battalions similar to Ecological Battalions.
4. Border Road Organisation, where available be suitably incorporated in disaster management plans.
5. A Military Coordinating Officer should be part of the disaster management team at the national and state level.
6. The potential of ex-servicemen available throughout the country be tapped for disaster management. They should be employed for creating disaster task force at the local level.

Their role in providing the Emergency Support Functions such as communications, search and rescue operations, health and medical facilities to the victims, transportation, power, food and civil supplies, public works and engineering and information and planning at the time of disasters is extremely beneficial. Since

various agencies operating in the field of disaster management rely on the armed forces for timely assistance it is to be ensured that disaster specific training be provided to the personnel and incorporated into their training programmes. Each disaster management plan may incorporate the available assistance that could be provided by the armed forces.

6.7 KEY CONCEPTS

Armed forces: These are organized as standing forces consisting of Army, Navy and Air Force that are government sponsored as fighting forces for defense. It provides protection from foreign threats, and from internal conflict.

Aid to Civil Authorities: Assistance provided by the armed forces to the civil authorities when requisitioned by the latter in situations beyond their means and control.

Territorial Army: This is a voluntary part-time force having departmental units and non-departmental units.

Border Roads Organisation: This has been set up for accelerated development of infrastructure in the remote areas along the borders and staffed largely by personnel from General Engineer Reserve Force with some representation from the Army Engineers.

Ex-servicemen: Those who have retired from the Armed Forces. These people are trained and experienced in different aspects that could be useful at local level for disaster management.

6.8 REFERENCES AND FURTHER READING

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6.9 ACTIVITIES

- 1) What are the principles generally agreed for employing Armed forces in disaster response?

- 2) What are the general capabilities of the Armed Forces for providing immediate assistance for disasters?

- 3) Discuss the types of assistance provided by Air Force and Navy in disaster response