#### **Research Article**

# NATIONAL DISASTER MANAGEMENT AUTHORITY IN PAKISTAN: ROLE OF PAKISTAN ARMY IN DISASTER MANAGEMENT

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## **Abstract**

Pakistan army as a institution has been playing various role in the development of the country. The history shows that army has played a very significant role in coping up the emergencies facing the nation. Government often turn to military, when there is a natural or man induced disaster in Pakistan. The Armed forces obviously need to be involved in humanitarian emergencies and disaster management operations. The Pakistan army plays a vital role in the disaster management in history of Pakistan.

Pakistan army is full equipped with organized management to assist the government in the emergencies in medical services, rescue operation and support activities. Army has well trained personnel with professional skills to provide assistance in the emergency situation facing the country in collaboration with National Disaster Management Authority. Moreover, as an army organization, it has an enormous to serve as an additional instrument for effective delivery of emergency assistance. The objective of this research paper is to describe the role of the army institution in providing a coordinated and prompt response to any disaster situation a country is facing.

The paper examines the types of disasters, a country is facing and highlights the role of Pakistan army in coping the types of disasters that may be natural disasters or man-made disaster. The research paper a covers following areas in details, Hazards profile of Pakistan, Disaster management system in Pakistan and role of Pakistan Army in disaster Management and concluded with the Recommendations. In the end, the paper provides recommendations for building up an effective coordination between the related agencies in coping with the disasters.

Keywords: Disaster Management, Pakistan Army, Natural Hazards, Man-made Hazards, developing country

#### **Hazard Profile of Pakistan**

The hazard is a dangerous situation that creates a potential threat to cause damage to life or property or the environment." There are two broad categories of these hazards i.e natural disaster, and man-made disaster. Term disaster and hazard is used synonymously but hazard is the potential danger whereas disaster is the impact of a hazard. It is evident from the history that Pakistan has been much vulnerable to the natural disasters such as floods, earthquakes, avalanches, cyclones, avalanches, storms, droughts, epidemics, glacial lake outbursts, land-slides, pest attacks, river erosion and tsunami. Similarly, in the category of human induced disasters that threaten the country, includes transport accidents, industrial, oil spills, urban and forest fires, civil conflicts and internal displacements of communities due to multiple factors. Amongst them, flooding, earthquakes, droughts and landslides have high frequency impact that have caused extensive damages and losses in the past. In the recent past terrorism related disasters have been added in the list. Some of the contributory factors for increased risk of natural and man-made hazards. The magnitude of Natural disasters is such that some 75 per cent of the world's population live in areas affected at least once by earthquake, tropical cyclone, flood or drought. Besides natural disasters, man-made disasters also pose significant threat to human and environment security as well. No country in the world is completely immune to the disasters. Recent earthquake coupled with ensuing Tsunami in Japan, enormous devastation caused by Hurricane Katrina in United States and Asian Tsunami in 2004, are some of the examples of devastating disasters in developed/developing word. In case of any disaster, poor/under developed nations suffer the most, in terms of human cost, whereas developed nations suffer heavily in terms of material losses. Examples of such cases are earthquake of October 2005 and floods of July 2010 in Pakistan. Disaster Risk Management has become more complex because previously there used to be natural disasters whereas later, man-made disasters also started posing greater threat to human being. Of the man-made hazards, disasters can be caused willfully by terrorists that may range from cyber terrorism to chemical biological & radiological terrorism (Singh 2009).

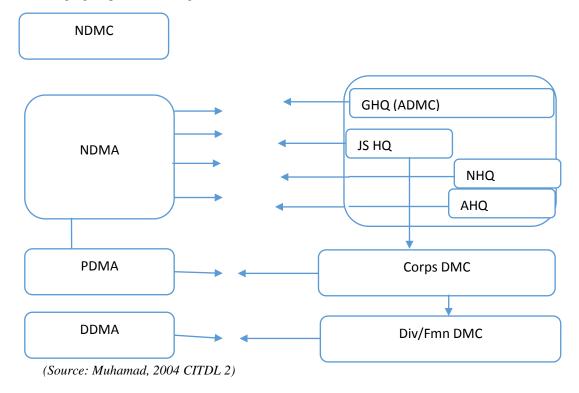
Pakistan faces risk of almost all types of natural disasters and multitude of man-made hazards. Traditionally the country is vulnerable to wide-ranging hazards like floods, earthquakes, landslides, droughts, cyclones, industrial/technical accidents etc. In the recent years, terrorism related disasters are causing colossal loss of human life and material. Pakistan, being densely populated country with a large percentage living below the poverty line, whenever struck with a disaster, suffers heavy loss. Before the devastating earthquake of 2005, instead of wholesome disaster management, focus in Pakistan generally remained on relief and rescue efforts. In the event of a disaster, armed forces in general and Army in particular used to be employed to conduct relief and rescue operations. Pakistan has been following an emergency response approach whenever hit by disasters. History's largest relief operation was launched in the wake of the worst natural disaster i.e. earthquake of 8th October 2005. This fateful event highlighted weaknesses of the age old system and establishment of a robust and well-orchestrated system. The natural disasters are those which are caused because by the natural phenomenon, such as cyclones, tsunamis earthquake, and volcanic eruption. Besides that the disasters like land-slides, floods, drought, fires are socio-natural hazards, their causes are both natural and man-made, such as flooding may be caused because of heavy

rains, land-slide or blocking of drains with human waste. Man-made hazards occurs due to human negligence such as industrial leakage of toxic waste, pollution, dam failure, wars or civil strife etc. that disasters traumatize society, economy, and environment. These include industrial accidents, urban fires, oil spills, nuclear and radiological mishaps, and civil and communal conflicts (Sethi, 2006).

# **Establishment of National Disaster Management Commission (NDMC)**

Pakistan history's worst disaster i.e. earthquake of 8 October 2005 has compelled the government of Pakistan to establish a National Disaster Management Authority (NDMA) at federal level and Provincial/District Disaster Management Authority (PMDA/DDMA) at provincial and district levels respectively. This is aimed at synergizing all efforts for meeting the goal of better disaster management. The establishment of disaster management organizations at all administrative levels are directed to respond to disaster proactively and take drastic measure to reduce the further risk. Traditionally, armed forces form core of a state's response to a disaster situation. Reliance on armed forces is greater in case of Pakistan for a number of reasons like instructional strength, sense of sacrifice, altruism, organizational abilities etc. Notwithstanding myriad of factors, because of deterioration in almost all institutions and lack of accountability, comprehensive instructions issued by NDMA remain wanting in their effect for proper disaster management. Hence, onus continues to be on relief and recovery efforts, chiefly undertaken by Army. In view of establishment of Disaster Management Authority at all administrative levels, Army's role, contingency plans/schemes need to be reviewed for effective disaster management. National Disaster Management Commission (NDMC) was constituted through an ordinance. The main objective of establishing of this national disaster management of authority is to reduce risks and vulnerabilities of the poor and marginalized groups and recovering them from, disaster impact". National Disaster Management Authority with its entire structure from national to district/local level, is primarily responsible for disaster management in Pakistan (Majeed 2009).

The following figure presents the organizational structure of the NDMA.



Presently, because of lack of expertise and resources, the system of NDMA/PDMAs is not fully geared up for proper forecasting, mitigation, preparedness and response/rehabilitation. Notwithstanding weak implementation, policy/strategy laid down by NDMA/PDMA and plans formulated by DDMA are well thought out and workable. NDMA has specified Army's role during 'Response phase' of disaster management. As envisaged by NDMA, role of Army is supportive in nature. It includes relief and recovery, management of displaced persons and provision of security, if required. Though important, yet Army has secondary role in disaster management. Therefore, Army would continue to be most potent state institution to conduct effective relief/rescue operations during all types of disasters. Relief and rescue operations conducted by the Army during floods of 2010 and 2011 evidenced that despite establishments of NDMA/PDMAs greater reliance continues to be on the Army. There is variation in the role and methodology specified for the Army by NDMA and the one highlighted in official website of the Army. Therefore there is a need to update instructions, plans and methodologies. Army should contend with assigned tasks and there is no need to seek over enthusiastic role in disaster management. NDMA has established National Institute of Disaster Management (NIDM) which is to act as central training institute and research facility. There should be enhanced collaboration and coordination among military training institutes like National Defense University, Command & Staff College, School of Infantry & Tactics and other Army level school of instructions (Muhamad, 2004).

# **Research Methodology**

The data for conducting this research has been taken from the yearly reports published by the National disaster management authority and Provincial disaster Management authority, Green books published by Pakistan army and International Journals issued by United States Army and their advisory council. The study has synthesized these yearly reports to examine the role of Pakistan army in the disaster management efforts in coordination with National Disaster management.

## **Role of Army in Disaster Management**

Disaster management is function of governance; it includes mitigation, preparedness, response and rehabilitations. Pakistan Army has a rich experience in conducting relief operations in almost all possible types of disasters. Besides, it has unique expertise in handing technical hazards like chemical, biological and radiological disasters. All such experiences/skills need to be shared with NIDM, which is focal research & development institute on disaster management. Inter-operability between Army and a large number of other stakeholders in the disaster management needs to be improved with greater interaction, joint training/simulation exercises. The National Disaster Response Plan 2010 formulated by NDMA has also stated that Pakistan Army has been contributing greater role in emergencies operations and provided instant relief by utilizing their air and ground efforts. The Pak Army has been performing followings responsibilities before and after the disaster occurrences;

- a. To support the civil administration in relief, rescue and evacuation work.
- b. To Liaison with the civil administration in search and rescue operations and provide available public/national resources like helicopters, airplanes, ships etc, for evacuation, relief and recovery.
- c. To Help to prepare flood contingency and relief operation plans.
- d. To assist the civil administration in setting up camps and tent villages and organize medical camps in close coordination with relevant health ministry/department for affected population.
- e. To provide security during the disaster..

f. Assistance to civil administration is secondary role of the Army. (Majeed, 2011)

# **Army's Employment during Disasters**

Since inception of Pakistan, Army was employed in relief and recovery operation in almost all disaster situations. Brief history of army's employment during disasters is as under:-

- **i. Floods.** Most common disaster in Pakistan has been floods. Army was employed for relief and recovery operation during 1948, 1950, 1955, 1956, 1973, 1975, 1976, 1978, 1998, 1992, 1995, 1998, 2001, 2003, 2010 and 2011 to help local population and civil administration in relief and rescue operations.
- **ii. Earthquake**. Army was called in aid of civil administration during almost all earthquakes in the country. It provided invaluable services like recovery, rescue and evacuation of the casualties, provision of medical support to the injured, provision of relief goods, maintenance of law and order, restoration of communication infrastructure, coordination of the activities of foreign NGOs and management of Internally Displaced Persons' (IDPs) camps. Army personnel were also employed for conducting survey for damage assessment.
- iii. Anti-Locust Operation. During 1951, Army conducted anti locust operation in NWFP, Bahawalpur and Sindh. Later during 1952 and 1954 similar operation was launched in Bahawalpur/Sindh and Quetta/Chapman respectively.
- iv. **Relief Operation during Famine and Drought.** During 1955-56, East Pakistan faced a disastrous famine. Army launched a massive operation for provision of food items in the entire province. Army launched a relief operation during drought in Thar Desert and Baluchistan during 1999-2000.
- v. **Relief Operation during Cyclones.** In 1954, cyclones and floods covered 25% area of East Pakistan and Army was called upon in aid of civil power. During 1999, Army conducted relief and recovery operation in Badin and Thatta districts, when these areas were hit by Cyclone Phet which took toll of about 400 human lives and left about 60,000 homeless. Army managed relief camps, provided medical services and also helped civil administration in conducting survey to ascertain damage to property. Cyclone Yemyin hit Baluchistan Province in June 2007, bringing heavy rains and flooding. An estimated 1.5 million people were affected and 250,000 people have been left homeless. Army provided relief and recovery services to people during this disastrous event.
- vi. **Relief Operation during Chlorine Gas Disaster in Lahore.** In January, 1996, the Chlorine Gas disaster occurs when a truck carrying drums of Chlorine gas slid into a ditch in a densely populated slum area in Lahore. In this disaster event at least 30 people were killed and nearly 950 injured. Army personnel evacuated hundreds from the affected area (Majeed, 2011)
- vii. **Management of Internally Displaced Persons' Camps**. During counter terrorist operations in Swat and FATA, a large number of people had to be evacuated and lodged in camps. Army managed these camps in a befitting manner till completion of operations/safe return to their homes. Likewise, Army also managed a large number of relief camps for a long time during earthquake of 8<sup>th</sup> October 2005 and floods also (Majeed, 2011).

### Recommendations

For better disaster management following recommendations are offered:-

a. **Implementation of National Strategy/Plan**. NDMC must ensure that the national strategy, plan and guidelines issued by NDMA are fully implemented. Proper mitigation and preparedness strategies would be an essential step towards developing disaster resilient society. That would also enhance capacity of the institutions to manage the disasters at tactical level. A system of

feedback on the implementation should be chalked out and followed, Chairman NDMC (Prime Minister) should hold meeting of the commission to monitor the progress on implementation of national plan on disaster management regularly. Impediments, in the implementation, should be identified and removed through mutual consultation.

- b. Good governance is the key to success in better disaster management. **Good Governance.** Quality in governance must be ensured to instill confidence among masses. All state institutions should perform their roles and functions properly. Well organized actions, regarding mitigation and preparedness, would help making the nation more disaster resistant/resilient. Effective predisaster measures would also require less effort during Response Phase of disaster management.
- Training improves capacity and efficiency of the people in their respective c. Training. professional field. Training modules on all aspects of disaster management should be prepared by NDMA/PDMAs for field staff. Joint training of all stakeholders should be conducted. Short training courses for capacity building should be organized. Training of search and rescue teams should be conducted on modern lines. Army personnel should be given vacancies in the training courses conducted at national, provincial and district levels.
- d. Search and Rescue. Relief and rescue assumes great importance in the event of a disaster. Specialized dogs are of an immense value in such operations, therefore dog squads to search live bodies in case of earthquakes/similar situations should be organized.
- e. Simulation Exercises/Mockup Drills. Simulation exercises at various levels management/leadership must be conducted and remedial actions should be initiated to make up for the short comings. Likewise mock drills on myriad aspects of disaster management would help assessment of the implementation and practicability of the plans. Such exercises of various departments should be conducted which should be reported in media to create awareness of general public. Army units/participate in such activities to foster greater understanding and cooperation.
- f. Information Technology. Use of information technology for better forecasting and warning of the disasters must be ensured. Maximum possible data should be made available to general public through mass media and internet which itself improves awareness, brings a system of transparency and accountability.
- Coordination. Better coordination improves efficiency and multiplies the output. Improved g. coordination with large number of local and international Non-Governmental Organizations (NGOs) should be done to get optimal benefit of these organizations.

## Conclusion

Pakistan is vulnerable to almost all types of natural and man-made hazards. Floods, earthquakes, land-slides, droughts, cyclones, industrial/technical accidents and terrorism related disasters are common phenomenon. A large percentage of Pakistani people are already in a disastrous situation because of poverty and shortage of energy resources. Whereas man can neither control nature nor can ensure that disasters don't occur. We can only prepare to mitigate the ill effects of the disasters. With better planning, good governance and sincere implementation strategy effects of disasters can be mitigated. The journey towards making safer Pakistan requires cooperation of all concerned ministries, departments, technical agencies, armed forces, provincial governments, UN agencies, media, NGOs, donors, private sectors. The concept of Disaster Risk Management has been transformed from reactive to

proactive one by establishing Disaster Management authorities as Provincial and district levels. It has been concluded from the research study that Pakistan army has played a significant role in the tackling the disaster management of the country. Army though has supportive role in disaster management but has always gone an extra mile in the national cause. People of Pakistan expect their Army to provide relief and rescue during disasters and Army has always come up to their expectation, to make Pakistan safer, peaceful and prosperous country in the world.

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