

## Flood Response and Civil-Military Coordination in Pakistan

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ARTICLE INFO	ABSTRACT
<p><b>ORIGINAL ARTICLE</b></p> <p><b>Article history:</b> Received: 01 Mar 2020 Revised: 20 Mar 2020 Accepted: 24 Feb 2021</p> <p><b>*Corresponding author:</b> Ali Arshad</p> <p><b>Address:</b> CE Wing, MCE, National University of Sciences and Technology, Islamabad, Pakistan</p> <p><b>Email:</b> aliarshad08@yahoo.com</p> <p><b>Tel:</b> +92-31-37142741</p>	<p>It is an established fact that Pakistan is prone to disasters and damage caused by these disasters is immeasurable and varies with the geographical location, climate, and type of earth surface, geology and degree of vulnerability. The paper focus on underpinnings of flood response, however, emphasis will be on role of Corps of Engineers (Army), Civil-Military coordination in 2010 Floods and prolonged employment of Army on such tasks. The main focus of this paper is on the existing role of military, their relationship with the civil set-up and the expectations of both the group from each other. Moreover, this paper also reviews about the existing frameworks and mechanisms of coordination between the two groups. The paper may help managers, policy makers and army engineers and government authorities to realistically evolve flood response, and decentralized mode of operation should be adapted from national to regional level in order to follow an integrated framework for bringing all stakeholders and victims together for developing an organized response system. However, the prolonged employment of Army on mitigation of disasters must be avoided.</p> <p><b>Keywords:</b> Flood, army role, response, decentralized</p>

### Introduction

For the last ten years, natural disasters have affected more than 2.5 billion people in the world, equivalent of one third of the earth's population and they have brought over \$910 billion in damages, equivalent to approximately 18 percent of global GDP (Gross Domestic Product). Natural disasters affect not only individuals and communities but also economies, governments and the international system as well. The unprecedented flood of year 2010 rose to the highest levels in the recorded history [1,2]. The severity was so grave; especially the KPK (Kyber Pakhtoonkhawa) Province underwent greatest devastation of communication infrastructure, loss of life and private damages among all the

provinces. Owing to less warning time and lack of foresightedness, people of Charsadda, Peshawar and Nowshera were caught almost unaware. Armed forces were immediately mobilized for assistance of civil organizations for rescue of entrapped people, who did this noble task commendably well [3]. The aim of this paper is to carryout analysis of existing flood response system of Pakistan in purview of Floods-2010, with a view to recommend suitable measure for enhancement of role of Corps of Engineers (Army) in Flood response with special emphasis on civil military coordination and efficacy of prolonged employment of Army on such roles.

### Response of Military in Flood 2010

Alongside the local communities and civil authorities, the Army was amongst the first to respond to the crisis. Troops were mobilized immediately to evacuate people. Over 600 boats and many aircraft/helicopters, some belonging to foreign militaries, were used to reach all parts of the country. To respond pragmatically, Army Engineers hold and maintain flood relief equipment of provincial governments. Army provides training facilities to civil departments as regards to use/ maintain of flood relief equipment. Regularly engineer units carry out pre Flood Reconnaissance with Irrigation Department in respective Areas of Responsibilities to anticipate the damages likely to be occurred due to floods. Presently, Flood Cells are established in small Headquarters for flood season only, which manage day to day affairs pertaining to flood rescue preparations / operations [4]. Flash floods in NA (Northern-Areas), Swat and FATA (Federal Administrative Tribal Area) in 2010 washed away most of the temp/ permanent bridges, which rendered complete areas cut off from the main communication arteries of the country and remained stranded for many days. 31 x Equipment Bridges were launched by Army Engineers to restore communication infrastructure in these areas. As of now, 11 x Equipment Bridges have been pre-positioning for any future contingency. For initial 2-3 days, military and civil administrative were working in isolation and integrated response supplementing resources of each other could not be ensured [5,6,7]. This happened due to lack of coordination in planning phase. However, some lateral shifting of 'Flood Relief Equipment' was carried out by army, but speedy provision of resources in worst affected areas by civil administration or Army could have been done in more systematic and speedy manner. PAF (Pakistan Air Force) and Navy also have significant capability to undertake Rescue / Relief works. During flood-2010, all three services rendered noble service to the nation; but mutual cooperation and exchange of information was lacking.

### **Community / Public Response**

Communities generally did not respond to the Emergency Warning issued by district officials. Flood warnings were taken lightly and no effort was made to vacate the houses / villages etc. People were found stranded and engulfed into flood water in pockets waiting for governments help. Organizational efforts at area level by public themselves were not visible. Any emergency response mechanism at area level did not exist at all. Inhabitants were not found cooperative with regards to security measures and capacity of boats [8,9]. Disciplined organization of rescue operation and control of public was a main source of concern for the rescue teams.

### **Grey Areas in Current Flood Response System**

- There was paucity of resources, both at federal and provincial level, to manage the flood disaster. The meager budget of Rs 0.65\$ M per annum did not allow for any additional persons or equipment [10].
- Coordination was one of the most challenging and complex aspects of the relief phase at various levels and tiers, between centre-province, Government, UN, inter-agency / departments or within the overall humanitarian community in general. Many stakeholders highlighted the coordination issues between NDMA (National Disaster Management Authority) and the PDMAs (Provincial Disaster Management Authority). Implications arising from the recently enacted '18th Constitutional Amendment' and the latest NFC (National Finance Commission) Award posed significant challenges between the centre and the provinces.
- Current Civil-Military guidelines, established by UN-OCHA are based on international humanitarian principles for disaster response or complex emergencies. These are important to give some structure to what is considered to be best conduct of all actors. However, they often fail to reflect the ground reality [11].
- NGOs had little knowledge of preparation of documents for donor funding, making it difficult if

not impossible for them to receive support. The relationship between the civil and military sectors was mostly effective and harmonious. However, there was a lack of clarity on some issues with regard to sharing of information between the military and humanitarian community.

- During initial days of the emergency, the media was focused on criticizing the government and highlighted poor management. This detracted from the impetus to contribute to the relief efforts by the public and donors.

#### **Underpinnings of Civil– Military Relations in Flood Response**

- The military will more frequently be called to respond to abrupt onset of natural disasters. Military think tanks anticipate that as last resort military assets to be used in disasters. However, owing to increasing number of disasters, military has become the first option. This role will increase in future in many folds, why because; military has specific assets that are needed in major disasters. They have capacity to respond more quickly and efficiently as compared to civilian actors.

- Broadly there are fewer political tensions in civil military relations at times of natural disaster. However, some argue that the blurring of roles, when the military becomes involved in humanitarian work during conflicts has an impact on the way the agencies operations are perceived by the population and can adversely affect their security.

- There is also a growing thought that international actors, military or civilian, simply are not and perhaps cannot be fast enough in immediate response than local capacity. Local responders will always be on the front line. Most of the lives saved are the result of local efforts, often by communities themselves rather than government, the military or non-government organizations.

- Some also anticipate that in the disaster management cycle, the military's role is most needed and wanting in the response phase and least in the recovery phase. Nevertheless, the prolonged

stay of the Army to mitigate the disasters will be having more disadvantages.

- This leads to an emphasis on the importance of building local capacity in disaster response, including building the capacity of local and national military and police forces. It also leads to recognition of the importance of response both by civilians and military.

#### **The Contemplation**

- The present inventory of flood equipment is not enough to match the rescue efforts required for floods like 2010. Also the present flood relief equipment has very limited capacity of functioning at night.

- Flood prone cities/garrisons either do not have flood evacuation plans or they have not been revised or rehearsed for many years. During floods of 2010, Nowshera Garrison was badly hit by flood and most of area was submerged in flood water.

- Coordination between military and humanitarian actors is essential in large scale natural disaster like flood 2010. The national government has the lead in coordinating response efforts in this regard.

- International humanitarian agencies need to invest more in sensitizing national authorities to internationally recognized humanitarian principles through respectful and participatory engagement, and not simply assume that these principles will be automatically respected and adopted by the national authorities.

- During the flood response, responders who saw they addressing a pure natural disaster tended to have a more lax approach to civil military relations, while agencies who viewed the crisis as part of a larger complex emergency tended to take a stricter line with regard to the use of military assets.

- Existing international guidelines were developed in regard to international agencies and international militaries. The experience of Pakistan shows that these guidelines are not necessarily fit for application to national militaries and local organizations, although the process of developing

the ‘country specific’ guidelines tried to address these issues.

- Greater clarity is needed on the principle of ‘last resort of using the Army assets and the manpower. As a riser clause the prolonged employment is not advocated owing to the host of ill effects.
- Natural disasters occurring in conflict areas pose greater difficulties for humanitarian agencies in gaining access to affected communities; hence calling of Army becomes a compulsion.
- NDMA role after 18<sup>th</sup> Amendment in Constitution of Pakistan has been marginalized and its current capacity in terms of staff and other material resources is not enough to match the mega disasters like Flood-2010.
- Civil institutions and current disaster management mechanism of government is not robust enough to withstand the disasters like Flood-2010. Therefore, in foreseeable future, Army will have to take lead role in fighting major disasters.
- PAF and Navy have significant institutional capacity to undertake Flood Rescue / Relief Operations, but all three services undertake rescue and relief activities independently through any mutual coordination / articulation of resources.
- Media has immense potential to mobilize public opinion in shortest possible time. Media, if properly dovetailed in overall concept of flood management system and public awareness, can play a vital role in flood management effort of nation.

### **The Way Forward**

#### ***At Government Level***

- A comprehensive review of the National Disaster Management Act is needed to further strengthen it and provide complete clarity on mandates, roles and responsibilities of NDMA, PDMAs and DDMA (District Disaster Management Authority) and all relevant state actors including Army.
- A strategic planning network on flood response should be established immediately to meet periodically (preferably quarterly in ‘peace

time) to prepare for a cohesive response. This will also help address shortfalls and also create a sense of ‘ownership’ among stakeholders including coordination.

#### ***At Military Level***

There is a need to stream line the procedures and exactly demarcate the responsibilities of various tiers to include:-

- Issues of requisition of troops by civil government.
- Move / deployment of troops for Flood Rescue/ Relief Operations.
- Liaison on progress of Flood Rescue / Relief Operations.
- Coordination with civil departments on issues like, Flood forecasting, Rescue Operations, Emergency plugging of breaches and sharing of Earth Move assets with concerned civil departments.
- Conduct / monitoring of ‘Rehabilitation Works’.
- However, prolonged employment of the Army be curtailed.

#### ***Coordination with PAF / Navy***

Peace time coordination of Army with PAF and Navy may be done for efficient execution of Flood Rescue / Relief plans. Likewise, Army Aviation resources may be dovetailed with respective Flood Rescue / Relief plans of formations.

#### ***Lateral Shifting of Flood Relief Resources***

Contingency plans must be formulated at Engineers Directorate level, whereby Flood Rescue / Relief resources can be immediately shifted from one province to another at the time of emergency. Such resources must be earmarked in peace time Flood Relief Schemes of respective formations.

#### ***Proposed Civil–Military Coordination***

Civil-Military Coordination arrangements provide forums for coordination at the strategic and operational levels, and for streamlining field liaison arrangements by reinforcing existing national, military and humanitarian institutional arrangements for emergency responses as under:-

- Civil-Military Coordination Steering Committee.
- Provincial Civil-Military Coordination Working Group.
- Field Liaison Arrangements.
- Humanitarian Working Group on Civil-Military Coordination.

### ***Establishment of Flood Management Consultancy***

Establishment of ‘Army Engineers Flood Management Consultancy’ at national level is recommended, which should conduct expert analysis and render advice to concerned civil departments on various aspects of flood management.

### ***Need of Permanent Flood Cell***

Permanent Flood Cell must be established in Engineer Directorate, which must remain abreast with developments pertaining to planning of ‘Flood Rescue Operation’ and concurrent data / information exchange with sister civil departments.

### ***Flood Zoning***

Flood maps of Pakistan may be prepared from the historic data of floods on the lines of traffic maps, which should have zoning in elaborate color codes.

### ***Establishment of DM Centre of Excellence at MCE (Military College of Engineering)***

Disaster Management Centre of excellence established in MCE should be given a role in Research & Development (R&D) subjects pertaining to flood management in Pakistan with special emphasis on role of Corps of Engineers. Such research topics must be tackled with indigenous expertise of MCE under the technical supervision of experts of NUST (National University of Sciences and Technology).

### ***Need of Joint Courses***

Joint courses of army and other departments concerning flood management and rescue should be organized at MCE. Besides better harmony and integration, valuable training of civil counter parts on various technical aspects will pay rich dividends.

### ***Flood Seminars***

Pre and post flood seminars may be held every year, which should be attended by representatives of formation engineers and concerned civil departments. Relevant conclusions may be extracted from this intellectual discourse and communicated to all concerned.

### ***Coordination at District Level***

Most of the flood rescue and relief activities are executed at district level. There is a need that engineer battalion of all the formations in their Flood Rescue Plans’ chalk out detailed mechanism of synergetic response at district level in collaboration with district administration.

### ***Pre-Positioning of Flood Equipment***

In the light of experiences of Flash Floods in NA and Swat, flood relief equipment and bridges should be pre-positioned, so that in the event of similar floods, communication infrastructure can be restored in minimum possible time.

### ***Community Level Flood Response Plan***

For better resilience, plan should include risk in community, response planning, mitigation measures and resource inventory. The community plan should be linked to the District or Sub-District DM Plan.

### ***Role of Media***

Public sentiment and opinion must be harnessed and used in disasters like floods. In this regard, a dynamic and working relationship may be established with print and electronic media, which may play positive role in times of emergency.

### **Conclusion**

The increase in the frequency, severity and impact of sudden natural disasters will challenge both civilian humanitarian agencies and military forces. Army being most organized and disciplined outfit is well suited for instantaneous response to face disasters. There is a need to generate a fully integrated response mechanism at national level towards this direction and all possible resources of civil government, armed forces and international community must be grouped and channelized to achieve optimum results. In this regard, Corps of

Engineers being a trained, well equipped and intellectually compatible outfit must spearhead all efforts for the national cause of flood management. Civil–Military Coordination can be improved, when relationships and roles are sorted out before disaster strikes.

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