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A Paradigm Shift from Emergency Response to Reconstruction and Rehabilitation: Creation of Peak National Body for Disaster Management in Pakistan

Shahed Khan^{*}, Fida Ashori

School of Built Environment, Curtin University, Australia *Email: s.khan@curtin.edu.au

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Contact Number: +618 9266 3276 (S. Khan)

ABSTRACT

The earthquake of 8 October 2005, an unprecedented disaster in the history of Pakistan, led to an equally exceptional national response. Reconstruction and rehabilitation of affected areas was indeed a herculean task. The Earthquake Reconstruction and Rehabilitation Authority (ERRA) was immediately established as a peak national body with extraordinary powers and mandate to ensure coordinated actions for rescue, relief, reconstruction and rehabilitation. The national institutional set up was forced to readjust rapidly to convert this adversity into an opportunity to improve its capability to deal with disasters. This paper aims to provide an overview of the institutional strategy and measures undertaken in the wake of the 2005 earthquake. It looks at the strengths and weaknesses of installing an efficient entity largely adopting a command and control approach to efficiently and effectively deliver reconstruction projects on the ground. The paper seeks to derive lessons that can be useful for governments considering the setting up of comprehensive proactive disaster management systems.

1. Introduction

Increasing incidence of hazards and rising levels of human vulnerability tend to lead to increasingly intense and frequent disasters. Each disaster impacts on various sectors of development and the effectiveness of infrastructure. In developing countries like Pakistan, this could lead to serious social and economic setbacks to development, undermining poverty reduction strategies. Seen globally, disasters also pose as a real threat to the achievement of Millennium Development Goals (MDGs).

Pakistan straddles over a recognized seismic belt bordering various active tectonic plates, characterized by its seismic instability. Geological and geo-morphological evidence of many seismological sources have been found in Pakistan (Kazmi and Rana, 1982). There is a high probability of several massive earthquakes of magnitude greater than 8.0 on Richter scale occurring in the future due to the energy stored along the Himalayan arc (ERRA-GoP, 2011). The land has been affected by some major disasters including the 1935 Quetta earthquake (30,000 deaths), the 1974 Kohistan earthquake (5,300 deaths) and the 2005 earthquake affecting the northern regions (73,000 deaths) (GFDRR, 2014).

The devastating earthquake of October 2005 in Pakistan highlighted the lack of government preparedness to respond to the disaster. It also underlined the need to develop disaster preparedness, prevention, response and recovery plans to minimize threats to human life and property. The 2005 earthquake in its immediate aftermath led to the creation of Earthquake Reconstruction and Rehabilitation Agency (ERRA), the subject of this paper. ERRA was conceived almost spontaneously, in a mater of weeks, as a means to fill in the obvious and almost unsurmountable void within the required governance structures,

planning and management capacity, incidence control mechanisms and policy implementation capacity.

By creating ERRA in 2005, with international guidance and assistance the government of Pakistan sought to take on board the recommendations of the Hyogo Framework for Action (HFA) that it had become a signatory to earlier that same year. HFA emphasizes prioritization of disaster risk management and reduction at all levels of government and the creation of understanding and awareness across the society (UNISDR, 2005). The framework facilitates integration of disaster risk management (DRM) and disaster risk reduction (DRR) strategies into all development activity, including those involved in reconstruction and rehabilitation. These strategies for disaster preparedness and mitigation planning need to recognise and reflect the country's environmental and socio-economic concerns. DRM contributes to developing a culture of safety and creating disaster resilient communities. The pursuit of comprehensive plans and strategies for disaster management and their effective implementation requires robust governance mechanisms and implementation agencies. These agencies need supportive administrative and legislative frameworks within which to operate.

This paper describes the approach and strategies adopted in the creation of ERRA and subsequent governance mechanisms and legislative framework that came about, seeking to draw key lessons that emerge with particular reference to governance in disaster management. The aim of this paper is to analyze the governance and institutional aspects of the creation of a high-powered agency to provide top-down administration of disaster management policies and strategies. It provides a review of ERRA's achievements, seeking to highlight positive and negative aspects of this bold, large scale attempt

to turn unprecedented disaster into an opportunity to install effective control mechanisms within the national planning and administrative set up for effective disaster management.

In conclusion, the paper draws lessons from Pakistan's experience of setting up ERRA as a centralized, top-down, peak national agency dedicated to dealing with all aspects of earthquake related disasters.

2. Top-Down Approach to Disaster Management

Some authors, while acknowledging the importance of bottom up grass roots approach, argue that the 'management' part of disaster management requires a fundamentally top-down approach. Others, however, suggest top-down approach is equally important from the emergency manager's view-point when disasters and their impacts have to be managed. As King (2008) suggests:

"In a post-modernist world, the top-down approach is easily labelled an old paradigm of command and control. The reality for emergency managers is that they are necessarily at the top and have the responsibility to manage and plan for diverse and complex crises, through a layered and hierarchical system."

King 2008 quoted in Cerqua and Rapicetta 2014, pp.251-252: "While defending the top-down approach, King (2008) seems to suggest that it's effectiveness would depend on the extent to which it percolates and engages all levels of community and stakeholders." This suggests there is a case for adopting a top down approach if conscious effort is made to ensure that initiatives are tied down to the community level and are inclusive. However, it is contended that this essentially requires equally strong bottom-up efforts to ensure connection from the grass roots level. In other words, where the governance structures positively include civilian institutions and community organizations, the desired percolation and engagement could be conceived to make top-down initiatives succeed. In the case of developing countries with weak democratic set ups, however, such integration is less likely to materialize.

In analyzing the case of South Korean situation, a fairly developed economy with moderately established democratic traditions, Kwon et al. (2011) conclude that public participation in the area of disaster management is often reduced to 'pseudo' participatory practices. The essentially 'bottom-up' policies deliberately promoted by the government often translate into 'pseudo' bottom-up planning practice because the extent of people's autonomous participation and cooperation with the public sector remains partial at best.

Kwon et al. (2011) attributed this situation to shortcomings both of the government as well as the community. The government seems to find it difficult to resist the efficiency and convenience offered by top-down approaches; and it lacks trust in the private sectors' willingness to participate and contribute. Meanwhile, the community largely fails to see natural hazard mitigation as a human rights issue, leading to apathy within some sections of the community. Many of those not directly afflicted by the disaster refrain from participating as they view the government's disaster management initiatives as just another construction program meant to expend the recovery and relief budget.

The case of ERRA in Pakistan presents a case where the top-down 'command and control' approach for disaster management was attempted in a context characterized by weak governance institutions and democratic traditions. ERRA, with its military-influenced organizational set up, has been generally hailed as a successful initiative in terms of delivering clearly defined targets efficiently and effectively.

Coppola (2007) maintains that the coordination of disaster management tends to adopt the 'command and control' model whereby the operations are conducted through strict hierarchy. These operations often tend to be controlled by experts who could be police or military personnel (Coppola 2007 in Megan Krolik, M). Meanwhile, Albert (2011) maintains that command and control is "an essential part of all emergency management operational activity" .. and it "helps the incident commander achieve organized engagements in emergency management through coordination of the incident management team, application of resources, and dissemination of information."

The paper seeks to determine whether the experience of setting up ERRA and subsequent development of authorities and planning systems have improved the effectiveness of governance of disaster management overall in the country.

3. The 2005 Pakistan Earthquake

On 8 October 2005, an gigantic earthquake measuring 7.6 on the Richter scale struck Pakistan. The death toll was a staggering 73,000 people while another 130,000 were injured. Approximately 600,000 homes were destroyed, rendering 3.5 million people homeless. Around 6,000 schools and colleges and 574 health facilities (amounting to almost 75% of total health facilities in the area) were destroyed. There was also extensive destruction and damage caused to roads (affecting around onethird of primary roads in the affected area). Sanitation facilities, power supplies, telecommunication infrastructure and other amenities were similarly destroyed. The earthquake also caused widespread environmental damage in the shape of land shearing and landslides, flooding, blocked rivers and springs, and destroyed woodland (ERRA-GoP, 2010). The epicenter of the quake was 90 km northeast of the capital city, Islamabad. While the devastation it caused was both massive and widespread, nine districts - five in Khyber Pukhtun Khwa (KPK) and four in Azad Jammu & Kashmir (AJK) - were worst affected.

While the enormity of the impact of the disaster due to the 2005 earthquake necessitated an immediate and large-scale response, Pakistan did not have the institutional capacity to undertake the tasks involved. The immediate emergency rescue and relief phase was handled by the hastily created Federal Relief Commission along with existing agencies of the Federal and provincial governments, the Army, and international aid organizations, among others. It was soon realized, however, that recovery, reconstruction and rehabilitation phases would require dedicated institutions operating over the medium to long term that had requisite skills and capacity. It was this realization that led the Government of Pakistan to create of the Earthquake Reconstruction and Rehabilitation Authority (ERRA) on 24 October 2005 (ERRA-GoP, 2010).

The approach towards dealing with disaster is constantly evolving. From a 'fire fighting' emergency response primarily concerned with providing relief, the focus has shifted to reconstruction and rehabilitation. There is increasing emphasis on disaster risk reduction through preparedness. The focus has shifted from helping victims to reducing vulnerability through disaster preparedness.

3.1 The Creation of ERRA

At the time Pakistan faced 'the most debilitating natural disaster in its history', there was barely any adequate administrative or institutional capacity to handle natural disasters. Yet, the feared second and third waves of deaths following the massive catastrophe due to disease epidemics and the onset of winter could be averted. This was no mean achievement. This can be attributed to the effective response and relief activities that were promptly undertaken pursuant to the establishment of an effective institutional set up in the shape of the Earthquake Reconstruction and Rehabilitation Authority (ERRA) to administer the immediate response and relief operations. ERRA was established on 24 October 2005 through a notification with the specific mandate to carry out early recovery, reconstruction and rehabilitation tasks. Given the scale of devastation, this was a daunting task. ERRA devised a model for the resettlement and rehabilitation of the affected areas and initiated the creation of a disaster risk management authority.

ERRA was set up as a statutory authority at the federal government level with the mandate to handle all early recovery, reconstruction and rehabilitation work in the earthquake-affected areas. The authority was thus responsible for policy planning, financing, project approval, quality control and monitoring and evaluation. It was also given the task of coordinating and facilitating collaboration between various implementation agencies. The physical implementation of projects was assigned to the relevant provincial governments.

4. The Evolution of Approaches to Disaster Management in Pakistan

The conception of ERRA has played a significant role in the way disaster management policies have evolved in Pakistan. It may be said that prior to the setting up of ERRA, the concept of disaster risk management was not established as an essential feature of planning and administration in Pakistan. In this section we trace the changes to the way disasters have been dealt with over the decades since the creation of Pakistan. During the 1950s, conventional emergency services relied on institutions such as police, fire services and civil defense agency. When faced with disaster situations, as and when required, ad hoc institutional arrangements were created sometimes in the form of emergency relief cells or crisis management cells. For larger scale emergencies the armed forces were called upon to play the role of disaster management and response.

Disaster management was largely focused on providing timely and effective response to an impending event, or the mobilization of resources and provision of urgent services to restore basic public service and facilities and functions in the wake of a disaster. The approach to dealing with disaster management during the early decades could be largely described as providing emergency response. Some initiatives had been undertaken to revamp emergency services and enhance their capabilities in responding to disasters. In 2003, for example, the Interior Ministry set up a task force to look at ways to enhance the capacity of emergency services to respond to disasters in a more comprehensive and effective manner. The recommendations of the task force were still under consideration when the 2005 earthquake struck.

Table 1 provides a brief chronological list of significant disaster management related initiatives in Pakistan. As can be seen in the table, beginning with incoherent and fragmented approach towards dealing with disasters, serious attempts were made as far back as 1958 as legislative framework was put in place and specific cells were created with the Federal Cabinet. However, most of the earlier initiatives can be seen as reactive responses to emergency situations, with a focus on managing the provision of disaster response in the form of relief and

Year	Disaster Management related initiatives	Scope/ Nature of initiative	Approach
1952	Establishment of Civil Defence Department under Civil Defence Act	Scope limited to fire fighting services.	Conventional (casual, incoherent)
1958	Enactment of National Calamities (Prevention and Relief) Act	Focus mainly limited to relief and compensation, rather than prevention	Fragmented, isolated coverage
1958 to 1960	Establishment of Emergency Relief Cell (ERC) within the Federal Cabinet Secretariat; and Establishment of Relief Commissions at provincial government level	Steps towards organizing disaster response at the federal government level with some lower level delegation (provincial government)	Reactive-Emergency response
1970 to 1975	Initiation of Floods Control Program in the 4th Na- tional Five-Year Plan	Application of a national scale planning approach to deal with emergencies – with generally insignificant outcome	Reactive-Emergency response
1974	Drafting of National Disaster Plan by the Federal Emergency Relief Cell	Attempt to create organizational set-up; define functions of implementing agencies and establish standard proce- dures for the monitoring of disaster operations - not finalised nor implemented.	Comprehensive disaster management
2002	Drafting of Pakistan Emergency Service Ordinance & Pakistan Emergency and Fire Code in 2002	Following a massive fire in Islamabad, a new national safety code dealing with fire, explosions and other haz- ardous materials was enacted – not seen to have any effective outcome.	Reactive- Emergency response
2005	Signing of Hyogo Framework for Action 2005-15.	Pakistan became a signatory to international disaster risk management protocol	International compliance & benchmarking
	Magging Fauth	8 October 2005 quake leads to Paradigm Shift	
2005	Setting up of Federal Relief Commission – immedi- ately followed by formation of Earthquake Recon- struction and Rehabilitation Authority (ERRA)	Spontaneous centralisation of relief, recovery, recon- struction and rehabilitation tasks under one agency	Sudden shift from reactive to proactive approach
2006	Merger of FRC within ERRA in March 2006 Promulgation of National Disaster Management Ordinance National Disaster Management Act 2006 was enacted	A comprehensive legal and institutional system of disas- ter management created to enable a comprehensive disaster management framework for the entire country	Consolidation of Proactive approach

Table 1 Chronology of Disaster Management Initiatives in Pakistan

Note: This Table is developed by the Authors by using data from various sources

compensation to victims. Later attempts to develop more comprehensive response capacities to disasters were generally inconclusive. The October 8, 2005 earthquake brought about a paradigm shift in the approach towards disaster management in Pakistan. This led to the creation of ERRA that consolidated and centralized relief, recovery, reconstruction and rehabilitation tasks under the purview of a single agency. It also ushered in a shift from the reactive to a proactive approach towards disaster management. The establishment and successful performance of ERRA has led to the eventual setting up of a National Disaster Management Authority tasked with the comprehensive management of disasters across the country, thereby consolidating the proactive approach through DRR.

It can be concluded, therefore, that the creation of ERRA allowed the government to turn the devastating earthquake into an opportunity to reform the approach towards disaster management within the national administrative and governance set up.

5. ERRA – Organizational Structure

ERRA is an entity created from scratch and formulated relatively recently with international guidance and support. While its conception and timing was purely random as it was created in reaction to an unexpected and unprecedented earthquake, it happened soon after Pakistan had signed the Hyogo Framework for Action. This provided an opportunity for international organizations such as the United Nations and its agencies to promote the adoption of HFA principles into the design of its mandate.

ERRA is a top-level national peak agency with a hierarchical organizational structure. The ERRA Council, chaired by the country's Prime Minister, provides general policy direction. The ERRA Board comprises senior bureaucrats from Federal and Provincial governments and some civil society representatives; it is responsible for the overall implementation of approved policies and plans. Like many government peak agencies in Pakistan, ERRA is organized into a number of wings (or sections) and cells, each with specific functions and areas of responsibility. Such arrangement aims to facilitate specialization and development of expertise in specific areas, promoting organizational efficiency. The precise division of responsibilities and sub-structures

within ERRA's elaborate hierarchical organizational structure seeks to ensure its readiness and ability to best respond to the issues and deliver tasks.

The creation of ERRA was largely funded by international donor agencies. A positive aspect of donor-driven agenda was the donor agencies' concern with ensuring good governance practices. The design of the organizational structure of ERRA thus reflects its concern with good governance in terms of transparency and accountability. Along with the various wings of the agency, a Monitoring and Evaluation Wing has been also been set up. This wing has a two-fold purpose: it is responsible to not only ensure accountability in terms of implementation of programs but to also allow course corrections in terms of direction setting as needed.

ERRA's flagship program, Rural Housing, sits within the Executive Wing. This is central to its core business of reconstruction and rehabilitation in the earthquake affected areas. The Executive Wing also includes a Project Implementation and Coordination Unit (PICU) that is tasked with trouble shooting and ensuring timely completion of projects. This is evidence of the concern for performance levels in terms of implementation.

Moreover, there are two cells that are not very commonly found in the organizational structures of government agencies in Pakistan. One of them is the Knowledge Management Cell, charged with the documentation and dissemination of experiences and lessons learned. It produces annual reviews and sectoral case studies and disseminates the information through newsletters and the ERRA website. The other cell is the Media Cell responsible for handling public relations and the publicity and projection of ERRA's performance. It handles all media related issues and organizes media coverage and response through press conferences, etc. While these cells are not uncommon per se, they are rather rare to find within the Pakistan bureaucracy.

Another important aspect of the organizational structure is the tasking of one of the four Planning Wings with the softer side of planning, that is, the social sector. Rather than focusing on the technical issues of dealing with the design and provision of infrastructure, or land and housing or dealing with planning and the legal frameworks, it deals closely with the community. This Social Security Planning Wing deals with provision of social protection; consideration of environmental and

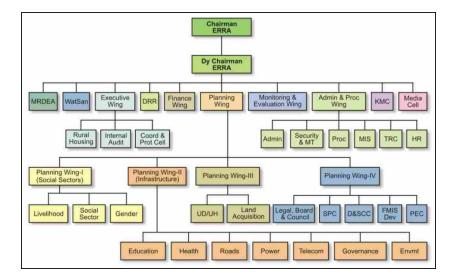


Figure 1 ERRA's Organisational Structure (Source: ERRA, 2005)

gender issues; and the restoration and enhancement of livelihoods and economic development. The inclusion of such elements within the organizational structure is perhaps reflective of the concerns of international agencies concerned with promoting HFA and related principles.

ERRA may be defined as a hybrid organization. While the Prime Minister holds the chair and Deputy Chair responsible for the day-to -day operations is a serving army general, ERRA holds the status of an autonomous body corporate. The human resource pool that services ERRA, meanwhile, comprises personnel with varied backgrounds. In addition to active and retired members of armed forces, there are also those coming from civilian outfits including public service as well as private sector. Among private sector personnel, many had previously worked for professional consultancies, donor agencies or NGOs. The staff thus includes "civil servants, technocrats, armed force personnel and contractual employees". Their diversity of backgrounds presents the organization with a wide range of expertise, perspectives and experience from which to draw its management strategy towards earthquake response.

6. Integration of HFA's Disaster Risk Management Principles

The Hyogo Framework for Action (HFA) principles have been integrated into ERRA's operational mandate. The emphasis on prioritizing disaster risk management is reflected in the organizational structure in the form of a DRR section reporting directly to the office of the Deputy Chair.

Pakistan had become a signatory to the HFA in January 2005, a few months prior to the earthquake. With international attention still focused on Pakistan following the 2005 earthquake, ERRA initiated its disaster risk management (DRM) program in line with Priority-5 of the HFA. It secured funding for this purpose from the World Bank and technical assistance from the United Nations Development Program (UNDP). The DRM program aims to promote community resilience in the face of disasters in the future through increased awareness about disasters and enhanced institutional capacity. The three-fold objectives of the DRM program include: raising awareness for enhancing community resilience by developing awareness response tools; mainstreaming disaster risk reduction within the planning processes at the district level; and, making available hazard and risk maps and related information to district authorities.

Through its DRM program, ERRA sought to put in place disaster reduction policies designed to help communities become resilient in the face of natural hazards as well as to ensure that development activities do not contribute to increased vulnerability of the community to hazards. This amounted to introducing a fundamental shift in approach whereby risk reduction was seen as an ongoing task across the broad spectrum of activities across social, economic, governmental and professional sectors. This was a significant break from the conventional approach towards risk reduction as a specialization of the armed forces or emergency services.

With ERRA operational in the earthquake affected across KPK and AJK, there was a growing popular opinion that a more permanent state of institutional preparedness was needed in the longer term. In 2006, the President of Pakistan promulgated the National Disaster Management Ordinance (NDMO), introducing a multi-tiered

national disaster management system in the country. This eventuated in the establishment of the National Disaster Management Authority (NDMA) in 2007. The NDMA was tasked with providing a comprehensive disaster management framework for the entire country, supported by a comprehensive legal and institutional system. The stated purpose of setting up NDMA was to enhance the country's capacity to handle subsequent disasters by incorporating DRM as a comprehensive framework for planning and management of all stages of disaster preparedness and management. The creation of NDMA was seen as a consolidation of a country-wide system of disaster management through at all levels of government from federal to provincial to district. While both NDMA and ERRA coexisted, there was no formal demarcation or reconciliation of the mandate of the two authorities.

7. ERRA's Achievements

ERRA has proven its capacity in terms of efficient and effective delivery of set targets. The authority boasts high rate of success in achieving performance targets in terms of delivery of reconstruction projects at the ground level in the face of almost unsurmountable challenges since its inception. ERRA has undertaken a wide range of projects clustered into three areas: outreach; social services; and public infrastructure. Throughout these projects, it focuses on disaster risk reduction (DRR), gender equality, and environmental safeguards (http://www.recoveryplatform.org/). Changes in political leadership during the operation of ERRA meant changing political priorities. This is reported to have impacted the pace of reconstruction activity. According to a report, ERRA enjoyed strong support from the national leadership during its initial years when it could "take quick decisions without having to go through the usual bureaucratic bottlenecks" (GFDDR 2014, p.28). This seems to have changed with the change of government in 2008.

Despite this, the performance in terms of delivery of projects on ground has been impressive. Out of a total of 14,243 projects targeted, between October 2005 and January 2013, as many as 9,162 projects had been completed (ERRA Newsletter, February 2013). The current status as reported on the ERRA website (http://www.erra.pk/) as on May 27th, 2015, shows that number of projects completed had increased reaching up to 9,824 projects. It reported that 96% projects were completed; 3% were under construction; and 1% projects were in the planning phase. The ERRA Newsletter also reports that having constructed 600,000 earthquake resistant houses, it had won the United Nations' SASAKAWA Award.

Notwithstanding its impressive track record of achievements in an efficient and timely manner, ERRA was beginning to be seen by some quarters as redundant or having run out of its expiry date. While the creation of NDMA after ERRA had consolidated disaster management operations was largely seen as the logical next step of evolution of a comprehensive national disaster management governance system, it was also being seen by some to have made ERRA redundant.

8. ERRA and NDMA – Duplication of mandate

ERRA originally came into being by means of a notification by the Prime Minister's Secretariat (notification number F. 1(4)/2005, dated 24th October, 2005). This was followed a year later by the creation

of the National Disaster Management Ordinance (NDMO) 2006 by the President of Pakistan that created NDMA.

A couple of years following the change of government in 2008, the National Disaster Management Act 2010 was introduced in April. This act consolidated the legal status of NDMA and ushered in a national system of disaster management governance. Through the 18th amendment to the national constitution, the way was paved for delegation of a number of federal functions to the provincial governments through the enactment of National Disaster Management Act 2010. As a result, the provinces have been given specific disaster management responsibilities within the overall national framework. Each Provincial Disaster Management Authority (PDMA) has thus been charged with the responsibility to administer disaster risk management (DRM) tasks within their jurisdiction.

The following year, another act was passed, called the ERRA Act 2011. This act consolidated the legal status of ERRA, which had originally been conceived through a notification by the Prime Minister. Both acts were applied retrospectively from 2007. The ERRA Act 2011 provides sweeping powers to ERRA as an autonomous body corporate to override other laws as required, and make rules and regulations. It also empowers ERRA to disregard provisions of the Industrial Relations Ordinance 2002. It is also reported in the media that the government considered renaming ERRA as "National Reconstruction & Rehabilitation Authority (NRRA) with a mandate to work countrywide in case of any natural calamity instead of being limited to KP and AJK" (Business Recorder, Feb 27 2015).

Meanwhile, there has been a widespread feeling that the original conditions creating the need for ERRA were of a one-off nature. The unique set of factors that created the context for ERRA's creation had lost their relevance over time, much of that being attributable to the very existence of an efficient ERRA. In other words, having achieved its objectives, the utility of ERRA was diminished. Another criticism against the continued existence of ERRA was its narrow focus, being mandated to deal with earthquakes rather than other forms of disasters. This point was perhaps highlighted and amplified by the recurrent floods between 2011 and 2013. Such ideas may also have been promoted due to changing political climate within the country.

8.1 The Enactment of ERRA and NDMA

The NDMA and ERRA enactments in 2010 and 2011 respectively have created a situation whereby ERRA and the NDMA co-exist. Soon after the enactment of ERRA in 2011, a newspaper article in 2011 reported concerns raised at the National Assembly over the co-existence of two organizations with a similar mandate. According to the news report, the NDMA advised the government to disband ERRA. It maintained ERRA Act created an institutional anomaly whereby both NDMA and ERRA shared the same responsibilities regarding earthquakes (The News, December 11, 2014).

The point to be noted here is that while ERRA focused on earthquakes, NDMA also covered earthquakes due to its broader ambit of responsibility. The news article also reported NDMA as stating "ERRA was created as a time-bound organization for reconstruction in the nine affected districts after the 2005 earthquake, thereafter it had to be dissolved." The NDMA reportedly argued against the "continuation of ERRA beyond its original mandate" because "the government can ill afford a huge organization in the waiting for a disaster which may or may not happen" (The News, December 11, 2014).

Aspect	ERRA Act 2011	NDM Act 2010	Difference
Short title	Earthquake Reconstruction and Rehabilita- tion Authority Act	National Disaster Management Act	N/A
Effective from	To take effect from 1st July 2007 retrospec- tively	To take effect from 17 th August 2007 retrospec- tively	No difference – but ERRA effectively pre-dates NDMA
Coverage	Whole of Pakistan	Whole of Pakistan	No difference
Purpose	An Act to set up a dedicated authority (ERRA)	An Act to provide for an effective national disas- ter management system	ERRA – a single purpose agen- cy NDM – system/ framework
Scope	Post disaster damage assessment, recovery, reconstruction and rehabilitation of the areas affected by earthquakes	Framework for regulation of the national disaster management system to overcome unforeseen situations.	ERRA - Earthquake specific NDM – general coverage of all disasters
Area of focus	Geographic focus on areas affected by earth- quakes	Geographic focus on areas within the country affected by any kind of disasters	ERRA – focused on earthquake prone areas NDMA – no specific area focus
Nature of business	Providing legal basis for setting up ERRA as an entity autonomous in tis functions and operations and a body corporate. Assigning ERRA the responsibility for all reconstruction, rehabilitation & early recov- ery, recovery programmes & projects.	Providing legal basis for setting up NDMA, as well as DMAs at Provincial and District levels. Assigning NDMA the responsibility for prepara- tion of National, Provincial and District Plans for disaster risk management	ERRA – a powerful, resource- ful single purpose agency NDMA – a comprehensive planning system of disaster risk management

Table 2 ERRA Act 2011 and NDM Act 2010: A Comparison

Note: This Table is developed by the Authors by comparing ERRA Act 2011 and NDMA Act 2010.

8.2 Winding Down ERRA?

There have been reports about the government deciding to wind up ERRA. According to a 2014 newspaper article, ERRA "has become a white elephant over the past few years" (The News, December 11, 2014). The article details the deliberations of a committee of the Cabinet Secretariat that "formulated the blueprint to disband" ERRA. The minutes of the committee are quoted as stating the government would fund all on-going projects undertaken by ERRA scheduled for completion by December 2015, "while the residual portfolio of the ongoing projects will be transferred" to the respective provincial governments and NDMA. The report further detailed the possibility of absorbing ERRA's workforce within the National Disaster Management Authority or elsewhere (The News, December 11, 2014). It seems that there was a proposal to maintain ERRA as a self-sustainable organization, which was not approved by the committee. While acknowledging ERRA's good performance in initial stage, the Chief Secretary of Jammu and Kashmir claimed no significant progress had been made during the previous two years.

9. An Assessment of ERRA

A report by the Feinstein International Center (FIC) (2008) on ERRA acknowledges the military's "effective and highly praised leadership of the relief phase" (Wilder 2008, p.74), but it is critical of its reconstruction efforts. According to this report, some donor agencies felt that "while the military culture was effective in leading the emergency relief phase, it was not well-suited to a longer-term reconstruction phase requiring community involvement and building consensus" (Wilder 2008, p.73). A concern was also raised about "the establishment of ERRA ... [regarding the] negative impact that this parallel bureaucracy would have on provincial and district governments" (Wilder 2008, p.73).

The report highlighted "the lack of an exit strategy for ERRA and the military. It quoted a UN official as stating 'There is a disconnect as the government has no strategy to empower line ministries to take over ERRA's role after two-three year.'" (Wilder 2008, p.73).

Meanwhile, Bukhari (2011) claims that according to the NDMA, while the disaster management system was provided the required political support at the federal government level, the support was found lacking at the provincial governments' level. It pointed out that the Provincial Disaster Management Committees (PDMCs) had not met in three of the four provinces. The situation made it difficult for the newly formed bodies to take up a leading role due to the confusion created because of parallel laws and duplication of institutional responsibilities (Bukhari 2011).

The procedure for winding down ERRA has become a tricky affair because of the overwhelming powers granted to ERRA as a corporate entity in the 2011 ERRA Act. Section 26 of the Act stipulates a resolution needs to be passed by both Houses of the Parliament. An additional concern is that ERRA is nominated as an executing agency in certain international agreements and contracts. A newspaper article reported that the winding up of Earthquake Reconstruction and Rehabilitation Authority (ERRA) was only possible through an act of the parliament because the body had statutory cover (Business Recorder 2015). It claims that the future of ERRA was questioned in 2011, because it was originally established (in 2005) for a period of three years (Business Recorder Feb 27 2015). The newspaper article further stated that In August 2013, the then government decided to disband the authority but could not do so due to statutory cover enjoyed by the entity.

10. Pakistan's Disaster Management Capability

Moving beyond the earth shattering experience of the 2005 earthquake and the recurrent floods between 2010 and 2013, it is pertinent to ask in retrospect where Pakistan stands today in terms of disaster management capability. According to a 2014 WB report, the government's credibility is, however, undermined by its lack of "readiness and poorly executed responses to natural disasters". The report lists three major challenges in the disaster risk management sector: "i) weak institutional capacity; ii) limited effective coordination amongst stakeholders; and iii) lack of understanding of disaster risk to inform decision making for preparation and resilience" (WB 2014, p.17).

While noting the creation of NDMA at the federal government level and PDMAs at the sub-national level, the World Bank report (2014) points to the lack of clarity of their roles and the fact that these authorities haven't yet been made operational at local levels in many districts.

However, while maintaining that much work remains to be done, the World Bank report also acknowledges "Pakistan has begun to institutionalize disaster risk management activities" (WB 2014, p.17). Clearly, there have been positive spin-offs from the creation of NDMA and/or ERRA. In describing the Citizen's Damage Compensation Program (CDCP) 2011-2014, one of the WB sponsored projects, the report describes the CDCP program as a "worldwide success story". This "has become a flagship program for the government of Pakistan". It notes that the CDCP provided the basis for a Future Disaster Response Action Plan (FDRAP), "which builds on lessons learned from CDCP and other international best practices to provide cash assistance for early disaster recovery". It also notes that the design of CDCP served "as a blueprint for provincial responses to floods in 2011 and 2012" (WB 2014 p. 30).

11. The value of Command and Control approach to Disaster Management

ERRA was conceived as an immediate measure to fill the void of institutions dedicated to manage, coordinate and administer large-scale disaster responses. Its sole purpose was defined in its specific mandate to handle early recovery, reconstruction and rehabilitation related to earthquake related disasters. It was thus set up as an entity at the highest level of government, primarily responsible for this task. It required all other agencies or organizations, whether in the public or private sector including donor agencies, dealing with the impacts of earthquakes to channel their efforts through ERRA. This approach reflected the government's primary concern for ensuring coordination and efficiency that would allow the optimal use of resources, thereby resulting in an effective response in the shape of reconstruction and rehabilitation.

The initial task of ERRA was such that a command and control model suited its operations best. Thus it was natural for the military to take the lead in its establishment and running. As a hybrid organization it brought in the required civilian experts and contractors who were assigned tasks against clear deadlines. With the Prime Minister of Pakistan as the Chair, and the legal status of a body corporate, the organization provided an easy interface for international donors and agencies, despite their general reluctance to work with the army. The reluctance is likely to have been created due to the perception that the political process of community involvement and promotion of local leadership was being by-passed in favour of efficient delivery of reconstruction targets. However, perhaps the pragmatic view prevailed. A report by FIC quotes a UN official stating "As civilian institutions don't function it is in our interests to keep the military involved. Civilian structures are dysfunctional in contrast to military structures that function and can deliver." (Wilder 2008, p.73).

12. Conclusion

The creation of ERRA presented a great opportunity to turn the devastating disaster into an opportunity to usher in a comprehensive and effective disaster management system in Pakistan while carrying out extensive reconstruction and rehabilitation tasks within the earthquake affected areas. With weak and dysfunctional civilian institutions, the job naturally fell to the armed forces who have had prior experience in carrying out relief and rescue operations. The involvement of the army and the nature of the initial tasks was best served by a command and control model.

While the command and control model was suppressed in the setting up of a modern organizational structure and a hybrid nature of the organization, the limitations of the top-down approach to disaster management soon became apparent. Yet, the ERRA leadership sought to adopt the HFA principles of DRM into their operations. As part of the natural evolution, ERRA led to the setting up of a comprehensive, multi -tiered, nation-wide disaster management and planning system in the shape of NDMA. Instead of NDMA becoming the logical next phase of governance, both authorities seemed to engage in a tussle of acquiring greater legal status, leading to a situation where there appears to be a duplication of mandate between them.

Two lessons can be drawn from this saga. Firstly, while it is tempting to seize the moment and usher in reform through any opening that appears, it is fraught with dangers. It is important to work out the details beforehand to avoid complications, especially where legal structures are to be created. It is also pertinent to have in place adequate exit strategies where experimentation is required.

Another lesson that can be drawn is that in planning and public policy making, it is important to promote the bottom-up approach. The temptation to adopt the top-down approach to deliver results is especially strong and perhaps justified in carrying out disaster management tasks. However, it is then all the more important to ensure the grass roots involvement and participatory planning practices are deliberately instilled in all processes and decision-making. While topdown approaches can successfully and efficiently deliver results on ground, those results may not necessarily serve to strengthen political participation and community development objectives.

In the case of ERRA, the positive contribution its existence has made to Pakistan is considerable by any standard, yet it has got embroiled in unnecessary controversy. This could have been avoided if it had set itself a clear date of expiry and/ or merger with the institutions it helped to bring about. ERRA could also have concentrated on actively building up connections with the community, local leaders and the local administration in carrying out its operations, rather than using the total support it enjoyed from the national leadership to by-pass bureaucracy in the name of expediency. At the end of the day, there is more to planning and management and dealing with the community than delivering cut and dried tasks.

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