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EVALUATION OF DISASTER RISK MANAGEMENT STRUCTURE OF PAKISTAN WITH EMPHASIS ON MAN-MADE DISASTER

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ABSTRACT

Pakistan is among few countries in the world, which has been suffered the most due to both natural and man-made calamities. In the overall scenario, this research study was aimed to evaluate the Disaster Management Structure of Pakistan with an emphasis on Man-made Disasters. For the purpose of this evaluation for deeper understanding of the structure, Content Analysis Research Method was adopted on the available policies, documents and important legislation which govern the institutions to participate in disaster management. The results showed that there exists a three-layered structure to deal with the disaster but mainly it deals with the natural ones. The research finding also revealed existence of huge gaps at the policy and legislative levels to deal with the man-made disaster especially. The National Disaster Management Authority (NDMA), which is the largest federal institute to encounter the disasters, virtually defines disaster on the basis of natural and man-made but, remained silent on human induced disasters. While evaluating, policies in most of the documents were found reactive rather than proactive, therefore; the focus should be on Disaster Risk Reduction instead of mere Disaster Management as, minimizing the adverse effects of disasters can be more productive than responding to the damages of its outcome. Above all, strong coordination is considered an essence for success in any institution, which needs to be enhanced among

NDMA, PDMA, DDMA, NACTA, CTD and Rescue Departments to manage and reduce the impact of manmade disaster.

INTRODUCTION

Pakistan is among few countries in the world, which has suffered the most due to both natural and man-made calamities, especially after 9/11 (Ahmad, 2013). Despite Pakistan's exposure to both natural and man-made disasters for reasons which vary from topography to population density and poverty, management of disaster in the country has historically been reactive rather than proactive (Amber, 2014). So, disasters created by men are thus categorized into technical and societal. Technical disasters are due to the technological failure, these include engineering failures, transportation or environmental disasters (Berg, 2001). Whereas, the societal disasters based on strong human intention, *e.g.*, terrorist or criminal acts, insurgences and war" (Biswas and Choudhuri, 2012; Khan *et al.*, 2015). However, both natural and man-made disasters require strong coping mechanism to reduce its severity (Lucini, 2013). The dissemination of the National Disaster Management Act, creation of NDMA Framework and Risk Reduction Policy to also focus on preparedness and reducing disaster risks, not to be only reactive to disasters, rather taken as paradigm shift in DRM (Mannakkara and Wilkinson, 2014). Although the proactive approach caused some effect by changing the mindset of people, by and large the mindset to provide only relief is still prevailing. Along-with the natural disasters, recent decades are evident of huge life and material losses due to man-made disasters which have not been studied in this context (Marvin *et al.*, 2013). Thus, this study has been carried out for evaluation of the resilience capacity of structures that encounter disasters in Pakistan, with a focus on man-made disasters (Murphy, 2012).

Man-made disasters have not wholly been ignored during the development process of preparing the framework for managing disasters in Pakistan which caused the formulation of National Disaster Management Authority in 2010 (Khan *et al.*, 2015). In most urban areas, Tehsil Municipal Boards, District Commissioners Offices, Police Departments and Fire Brigades and the Development Authorities of the cities are responsible for emergency relief, rehabilitation and evacuation. Rescue agencies like; 1122 have played an important role in province Punjab in relief, especially in its urban cities but, as a whole the system is precarious (Naz *et al.*, 2010). On the other hand, the leadership (political as well as bureaucratic) still seems to be largely ignorant and unconcerned about what is needed to reverse these weak links (Rahman and Shaw, 2014; Shafique and Mamood, 2013). Most specifically, there is no clearly expressed strategy or even a vision pertaining to economic geography of small and intermediate cities in Pakistan wherein; information data base related to non-metropolitan urban centers is also extremely deficient (Yamamura, 2012; Zaheer, 2012). The studies stated summarized to argue that the disasters in Pakistan, especially man-made, need considerable attention of the scholars. To the best knowledge of researcher, available literature reviewed maintained that there is a dearth of literature on such disasters, especially in local context. However, present research, conducted in Pakistani context, aimed to fill this knowledge gap by taking the aspect of man-made disaster under consideration.

Aim and Objectives

Present study is aimed to make an effort on appraisal of Disasters Management Structure in Pakistan with specific objectives. Firstly, to understand the disaster risk management structure of Pakistan from national to grass root level. Secondly, the study also evaluates the existing policies of concerned departments for man-made Disaster Risk Reduction in Pakistan. Moreover, it will also evaluate the resilience capacity of Pakistan to meet man-made disasters; and lastly, to identify the existing gaps (if any) among various concerned departments, which are predominantly meant for disaster risk reduction, managing disaster and developing resilience.

Overview On Disaster Management Structure of Pakistan

Pakistan possesses diverse nature of terrain and has been suffering from different kinds of disasters as well. Prior to 2005 earthquake, there was no suitable legislation and policies in place for disaster management in addition to a lack of institutional capacity, resources and experience in the field. The Calamities Act 1958 was focused on defining response and relief centric parameters for the conduct in the event of a disaster, mainly focusing on riverine flood.

Disaster Management in Pakistan (2005 Onwards)

Before Earthquake of 2005; only floods and earthquake were considered the tasks of disaster related works wherein; October 2005 earthquake in Northern Pakistan and AJ&K proved to be a defining moment where the government was neither prepared nor had the capability to encounter or manage the disaster of humongous magnitude. The earthquake focused the attention of federal government towards the need of policy for disaster management, building strategies, legislation as well as institutional frameworks. It led to the idea of forming specialized institutions to deal such events. So, as a result, The Earthquake Reconstruction and Rehabilitation Authority (ERRA) came into being on October 24, 2005. It was formed with mandate of rebuilding the earthquake damaged region by reconstructing the buildings on fast track and ensuring that they are seismically safe. Meanwhile; in 2007, NDMA was established not specifically for earthquake but, for most of the disasters.

Policies And Structures Related to Disaster in Pakistan

There are different policies, rules/ regulation and laws existed in Pakistan but these specifically set out for the natural disaster and not for man-made disasters. NDMA Act, National Calamities Act 1958, Pakistan National Calamities (Prevention and Relief) Rules 1969, Pakistan National Calamities (Prevention and Relief) Rules 1969 Standing Instructions, Punjab Delegation of Financial Powers Rules 2016, Punjab Government Rules of Business, Compensation Policy. These policies create in favor of natural disaster, which have helped the departments for early preparedness and post preparedness to some extent. The national policies and structure towards disaster management is thoroughly discussed within act 2010 but, all the relative departments were focused to

response quickly in any vulnerable situation created by the natural disaster. However, the management of manmade disaster is totally neglected in all available policies, laws, rules and regulations, which is direly needed. Even the concept of man-made disaster is also neglected in district plan of action available for disaster management.

Man-Made Disasters and Counter Measures

Man-made disasters incite a serious trouble to the economy, health-care and agriculture sectors of the society. It usually produces long-term effects which lead a country to underdevelopment. In spite of seeing these as tragic events that produce pathetic victims, disasters produced by human can alternatively be seen as the unavoidable outcomes of global inequalities and exclusionary policies promoted by key powerful players around the globe. Those region or country which is most affected by this disaster have little capacity of reconstruction or development. Thus, the disasters induced by human severely undermine processes of development predicated on participatory as well as practices driven by the community. On a global index, Pakistan recorded third-largest reduction of 912 deaths, behind Iraq (6,466) and Nigeria (5,950) vis-à-vis statistics in 2014. The lethality of terrorist attacks has declined as the operational capacity of groups like *Tehreek-e-Taliban Pakistan* (TTP) has reduced over the past three years. IED explosions and attacks on Law Enforcing Agencies (LEAs) have been the most common form of terrorist attack during 2017 as well as 2018, though both have been decreasing in incidence explosions reduced by 8% in 2018 (177) as compared to 2017 (192); similarly, attacks on LEAs indicates downward trend in 2018 (126) as compared to 2017 (180). Bomb blasts were the only type of attack to increase in quantum, from 19 in 2017 to 44 in 2018.

Table 1. Statistics Of Suicidal Attacks and Blasts with Casualties From 2000 To 2011 In Pakistan

Year	No. of Suicide attacks	Killed	No. of Bomb Blasts	Injured
2000	1	79	84	316
2001	3	48	62	342
2002	1	62	35	277
2003	2	84	41	203
2004	7	332	137	1309
2005	4	293	246	784
2006	7	519	301	1116
2007	54	1796	679	4059
2008	59	2144	600	4919
2009	76	2614	500	6667
2010	49	2714	473	5780
2011	22	1010	324	2213
Total	281	11695	3482	27985

In 2018, terrorist attacks in Balochistan killed 1.26 people per attack, compared to 0.65 people per attack during 2017. In KP, terrorist attacks killed 0.83 people per attack in 2018, compared to 0.68 people per attack in 2017. The lethality of terrorist attacks – in terms of people killed per attack – decline for tribal districts

(erstwhile FATA) from 1.04 person per attack in 2017 to 0.57 person per attack in 2018, Punjab (1.76 in 2017, to 0.83 in 2018) and Sindh (1.86 in 2017, to 0.66 in 2018). Despite the fall in deaths across tribal districts (from 224 in 2017 to 138 in 2018), the number of incidents rose from 215 in 2017 to 239 in 2018. Enhanced counter terrorism measures, including proactive Intelligence Based Operations (IBOs) and effective target hardening (including fencing of Pak-Afghan border) have reduced the lethality of attacks.

A systematic analysis of the law-and-order situation across Pakistan reveals that fatalities from terrorism decreased by 22.6% from 2017 to 2018; there were 517 deaths in 2018. Balochistan (288) headed the fatalities list, overtaking erstwhile FATA. Despite severe manpower, territorial and financial losses, TTP remained the most significant threat to Pakistan in 2018. Sindh had the largest reduction in number of fatalities during 2018, with a reduction from 99 (2017) to 10 (2018) i.e., a 90% decrease; the other significant reductions include Punjab 75 %, ICT 50% and AJ&K 67%. Balochistan was the only province where number of fatalities increased from 218 (2017) to 288 (2018) i.e., a 24% increase. The security situation improved tremendously during 2018, as depicted by the decline in quantum of terrorist attacks as well as the number of fatalities thereof. Proactive counter terror measures, and continuation of hybrid combination(s) of kinetic operations and non-kinetic state responses have curtailed the operational space for terrorist groups, allowing them lesser opportunities to carry out attacks. During 2018, the maximum number of terrorist attacks were IED explosions (177), followed by attacks on LEAs (126); the same pattern was witnessed during 2017, when IED explosions were the most common type of terror attack (192 incidents) followed by attacks on LEAs (180 incidents). Both types of attacks account for 46% of the attacks witnessed in Balochistan and 64% of the attacks witnessed in erstwhile FATA. Missile attacks remained the least executed attack choice of terrorists, as only 08 missile attacks occurred during 2017, registering a 50% decline during 2018. Similar to 2017, maximum fatalities were caused by 18 suicide attacks which resulted in 41 LEAs killed and 238 civilians killed.

The disasters are more often those unusual events which might result in greater potential losses i.e., life losses, property damaging and economic destruction. Man-made Disasters are a function of risk and can be considered as a serious disruption to the functions of a community or a society as well as incurring material, economic or environmental losses. It would have an impact on the ability of the affected community or society to cope with its own resources. Mankind history has been full of both natural disasters as well as man-made disasters. Nevertheless, it is important to understand that in ancient time natural disasters occurred mainly and man-made disasters were very few that caused destruction to human life. With the passage of time especially today, man-made disasters play an equal part in causing losses of life and property in different areas worldwide. The sad and tragic part of this debate between natural and man-made disasters is that as mankind has developed and become technologically advanced, frequency and magnitude of man-made disasters has increased in the same proportion. This has led to believe that man-made disasters that are avoidable are more tragic in the sense that innocent lives are

lost, who could have been saved. Let us take a closer look at these two categories of disasters; the natural disaster and man-made disaster.

RESEARCH METHODOLOGY

The methodology includes a historical study approach of diverse disaster and risk reduction policies, planning and practices via primary and secondary assets. It also includes the critical review of NDMA, NDRF, PDMA and DDMA polices. The historical view also highlights transformative policies, programmes and their fluctuating nature. The institutional history retrospective interpretation indorsed the advancement of polices and institutions in a prospective manner with respect to time order incorporated in analysis and explanation.

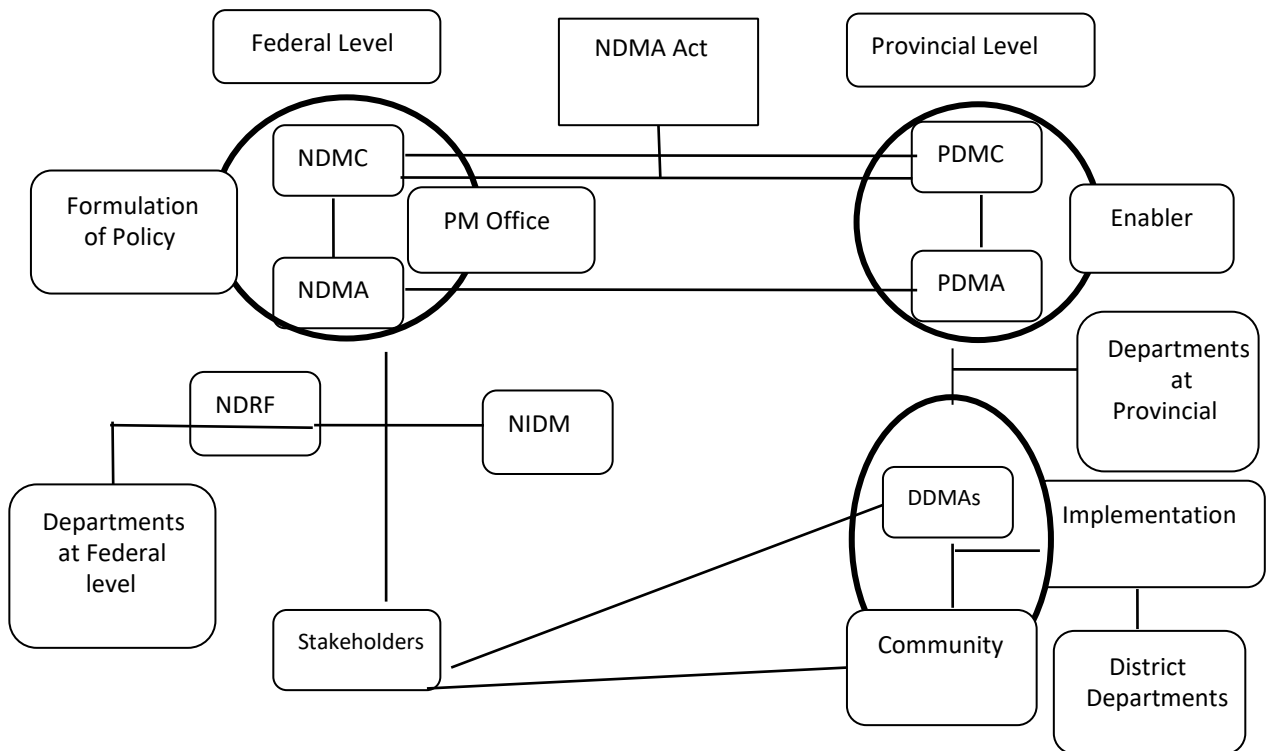


Figure 1: Structure of Disaster Management

Structure For Disaster Management

Pakistan is a country in which different kinds of disaster occurs in different time periods. Pakistan has faced five major natural disasters and after year 2000 has faced volatile mad-made disasters including terrorist attacks, suicide blasts, bomb blasts and many others. The structure relevant to disaster management is strongly prevailed in Pakistan but, the existing structure specifically counters the natural disaster in country. To handle the disaster in the country, the government has initiated the NDMA in 2007. NDMA plays its role as monitoring body at federal level and it is mainly focused to develop the policies, rules and regulation and coordinate among the department and stakeholders. NDMA has National Institute of Disaster Management (NIDM) and National Disaster Response Force (NDRF) as its subsidiaries. NIDM is the leading institution of capacity development programs and training for management of

disasters taking place in Pakistan. The NDRF is a planned dedicated national level force that will act as the responders in the event of a disaster. The contingency framework of disaster management follows the bottoms up approach where the district administration acts as first responders followed by provincial authorities. The horizontal communication within the disaster management structure of Pakistan enables NDMA to coordinate with the federal organizations, the PDMA, DDMA and other national and international stakeholders involved in the process. The Provincial Disaster Management Authorities are responsible for the formulation of provincial disaster management policies. The authorities are also mandated to monitor the implementation of National Policies and Plans.

NDMA has power to lay down the policies and develop the programs for management of disaster. NDMA approved all types of national plan to tackle the disaster mainly the natural disaster. It also provides funds to the provincial governments and district government; it develops guideline for provincial government which support them in natural disaster.

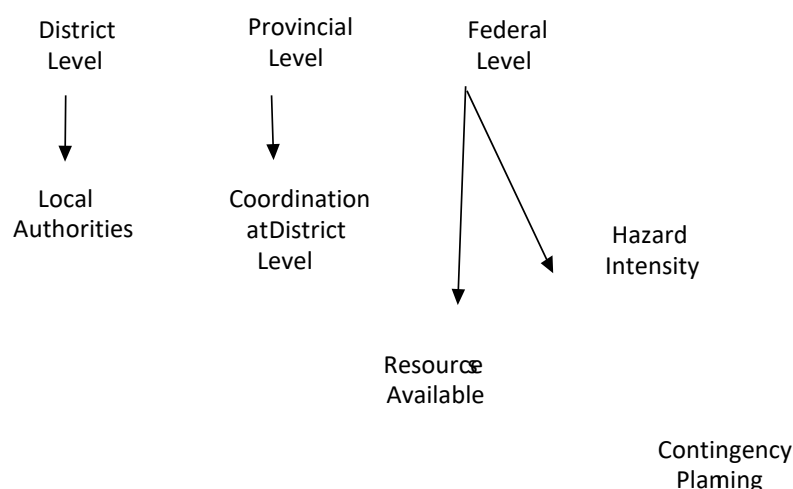


Figure. 2: Contingency Planning Methodology

After the 18th Constitutional Amendment, the PDMA are obligated to examine the vulnerability of the respective province to different disasters in order to specify prevention and mitigation measures. It was established to handle the natural disaster management policies implemented in provinces of Pakistan. The PDMA has also different functions and power, with the help of these powers first it develops policies to counter the disaster at province. The provincial management authority designs the departmental plans to provide support to the vulnerable person in disaster. It also reviews the available funds and how these funds should be utilized for the mitigation and early preparedness. The PDMA also ensures the departmental coordination to facilitate the departments and individuals during the period of natural disaster. It also measures the hazard of disaster and then develops the capacity of department and individuals to develop copeup strategies to reduce the damages of the disaster. PMDA promotes awareness among the community members,

community training and general education within the community. It also provides the technical support to the district authority and local government which is associated with PMDA. Whereas; the District Disaster Management Authority (DDMA), is also existed in the structure of disaster management developed under the NDMA Act. DDMA also performs different roles and facilitates the vulnerable individual before and after the disaster. The district disaster management authority develops a management plan for disaster at district level. It is also responsible to implement the national policies developed by the NDMA, Provincial policies, provincial plan, national plan and district plans. The Prime Minister of Pakistan is the Chairperson of National Disaster Management Commission (NDMC), opposition leader in Senate as well as in the National Assembly are the members of the commission. The Minister of Defense, Minister of Health, Minister of Foreign Affairs, Minister of Interior, and Minister of Finance also become the member of NDMC. Moreover, Prime Minister of AJ&K, Chief Executive (Now CM) of Gilgit Baltistan becomes the member of NDMC as well.

PDMA's form essential part of the disaster management cycle as they are required to carry out the response activities within the province and provide support to the DDMA's. The DDMA's act as first responders during emergency and are responsible for preparing the disaster management plans for their respective districts. The DDMA's must ensure that the national and provincial guidelines for prevention and mitigation are implemented. The DDMA's is the authority that has maximum involvement with the stakeholders such as NGOs and the community. For effective response, the DDMA's must ensure the viability of the communication system within their area. Overall; the concept of man-made disaster is completely ignored in the disaster management structure of NDMA, PDMA, DDMA. The man-made disaster also ignores the existed policies and programs of these authorities. All the focus of national disaster management authority and provincial management authorities are only natural disaster and its consequences. The consequences of man-made disaster are totally ignored within national and provincial programs and policies. Wherein; in Sri Lanka national policy for disaster management also converts the man-made disaster and its other types like, occupational hazards, industrial hazards, explosions, internal or civil strife, chemical accidents (fuel, gas, chemical and others), transportation accidents, ethnic conflicts, nuclear disaster, terrorism related disaster and weapons of mass destruction.

Policies For Disaster Management

There are several policies existed at national, provincial and district level for managing the disaster. These policies vary from department to department as, the department which are associated with disaster have their own policies to encounter it. National Counter Extremism Policies (NCEP) is one of the well-known policies to handle the man-made disaster. NCEP provides guidelines for intelligence operations to reduce the terrorist attacks; it also provides guidelines to take action against the religious hate speech which becomes a source of conflict between religious sects. There are national policy guidelines on vulnerable groups (2014) which also discuss the disaster at national level. Through the government can meet the segment which is more vulnerable in

targeted manners. It also provides opportunities to design the specific needs of the vulnerable group. This policy also encourages the vulnerable groups to participate in decision making which help them to enhance their own capacity. A national disaster risk reduction policy 2013 also discusses disaster management. This policy is focused to building up the national capacity to monitor and identify the vulnerability and its impact on individuals. The policy is also focused to early preparedness and building up the capacity to national level disaster. These national level policies are only focused on natural disasters and completely ignored the man-made disaster, like suicide attacks, religious conflicts, bomb blasts and massive shoot down of individuals.

There are also two division of disaster management at provincial level, one manages the natural disaster and the other manages the man-made disaster. Natural disasters are managed under the observation of PDMA by following the policies guidelines developed by NDMA. But the man-made disaster manages with the help of rescue department, district departments, police department, and CTD. CTD follows the policies developed by the police department and NACTA department and manages the disaster created by the man. The Punjab emergency policy has also developed to respond in the man-made disaster, it also helps in managing the natural disaster as well.

Pre-Disaster Measurements

For purpose of dealing with the man-made disasters in Pakistan, the relevant departments are bound for maintaining the preparedness to cope up with emergencies so that they may be able to provide in time response, emergency medical treatment and rescuing the victims of an emergency including surgical emergencies.

Mitigation

The process of disaster management starts from mitigation. These are the activities which actually eliminate or reduce the probability of disaster occurrence, or reduce the effects of unavoidable disasters. Mitigation measures include building codes, vulnerability analysis updates, zoning and land-use management, building-use regulations and safety codes, preventive healthcare and public education. The mitigation phase particularly includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects. During the mitigation phase structural and non-structural measures are undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards. According to the United Nations International Strategy for Disaster Reduction (UNISDR), the adverse impacts of hazards often cannot be prevented fully, but their scale or severity can be substantially lessened by various strategies and actions.

Preparedness

During the preparedness phase of the measures are taken to reduce the minimum level possible, of loss in human life and other damage, through the organization of prompt and efficient actions of response. Preparedness activities are geared

towards minimizing disaster damage, enhancing disaster response operations and preparing organizations and individuals to respond. They also involve planning, organizing, training, interaction with other organizations and related agencies, resource inventory, allocation and placement, and plan testing. NDMA and PDMA holds policies to prevent from disasters.

During & After-Disaster Measurements

Human Resource Management

To minimize the damage and the suffering the disasters might cause, it is important to maximally mobilize all human resources to cope with difficult situations. In this regard all the official department that recover the disaster i.e. Rescue 1122, police, Fire Brigades, Rangers, CTD, Armed forces, Municipal authorizes became active. Other than these private institutions participate actively. Volunteers from the government departments and the volunteers from nongovernmental organizations are active to provide their services in case of any emergency or disaster.

Physical Resource Management

In order to respond quickly to disasters, rescue units, ambulances, fire brigades, police and all the other relevant departments are communicated to reach the point of disaster. In hospitals, emergency alert is announced and medical supplies i.e., medicines, blood etc is arranged. They provide timely response, rescue and emergency medical treatment to the victims of an emergency including medical and surgical emergencies. With access to a comprehensive database of public and private medical centers, the distribution of resources during a disaster is under the supervision of the Ministry of Health.

Healthcare Management

Health care management in disasters is one of the main parts of disaster management. Health in disasters is affected by performance of various sectors, and has an interactive impact on various aspects of disaster management. In case of disaster, hospitals have given the emergency alert. All the nearby hospitals of the happening areas are bound to provide their services either they are private or public.

Information and Communication Management

The unity of command system is an important issue in disaster management. Effective coordination is seemed when all formal communications are established via the command line. In the vast disasters, as the indigenous people who are familiar with the city are affected, the rescuers are unfamiliar with the area. Therefore, the city map is helpful in identifying the medical centers. After the disaster to prevent publishing conflicting information, the detailed information of victims and the dead is collected under the supervision of a single organization.

Inter-Organizational Coordination

To maintain public order and provide healthcare services to the victims effected by the disaster, in addition to care providing organizations, other organizations are also responsible. It seems that proper security by the police force, and the other relevant departments in opening the roads for easy transportation of the victims by the Department of Road and Transportation, etc. are provided in case of any disaster.

Coordination Between Ministries and Divisions Among Federal and Provincial Departments

Coordination among the federal departments, provincial governments, and National authorities, provincial authorities, non-governmental organization, UN agencies and armed forces towards the management of disaster weather it is public or private. The National Disaster Management Act 2010 is considered as the primary act which developed the coordination among the federal and provincial departments which is specifically working to manage the disaster in country. However, still it is so confusing that which type of disaster will be focused by these departments.

The several federal government departments are working to manage the disaster, like NDMA and NACTA. These federal departments manage the disaster with the help of provincial department and district department. These federal departments lay down the policies, plans and programs for the provincial departments and local departments and then regulate these policies within provincial and district level. As the National Disaster Management Commission (NDMC) was established in which different stakeholder are engaged. NDMC develops policies and approves plans for the departments to manage the disaster. This commission lays down the overall guidelines, which are followed by the federal government and provincial government which shows that it develops a coordination mechanism among the departments. But mostly available policies of commission based on natural disaster and not on man-made disaster.

Whereas, NDMA is acting body which co-ordinates with the disaster management authorities at federal level. It gives plans to the provinces departments regarding disaster and then monitors and evaluates the performance of these plans. The department also provides the technical support to the provincial departments in respect to disaster management whether it was man-made or natural. But unfortunately, this department also focuses towards the earthquakes, floods and eruption of volcanoes which are natural disasters. This department also lays down the directions for provincial government, ministries and provincial authorities to check the response to any threatening situation. It also coordinates with the provincial departments to provide awareness towards the disaster management. On the other side the NACTA provides the policies and programs to counter the terrorism at national and provincial level. The NACTA collects and receives information from different government departments to coordinate with the stakeholders to assess the threatening situation and took adequate measure to counter the terrorism. The NACTA also prepares the action plans with the help of federal and provincial governments

against the extremism and terrorism. The NACTA also coordinates with different provincial and federal department to develop some strategic frame works to reduce the man-made disaster in term of terrorism. NACTA also coordinates with international organizations like UN, to awareness raising campaign against the terrorism and suicide attack. This is the forum which specifically working on man-made disaster and develops coordination among the department related to the counter terrorism.

CONCLUSION

The disaster management structure at National level, provincial level and district level was evaluated with the help of existing documents. The structures relevant to disaster management were formed in Pakistan but, the existing structures specifically to counter the natural disasters and not the man-made disasters. There was a strong gap existed under which the man-made disasters were handled within NDMA. NDMA, PDMA and DDMA were only focusing on natural disasters and most of the time these institutions become engaged to reduce the vulnerabilities of natural disaster and completely ignore the man-made disaster. However, to some extent the NACTA participate whereas; the whole effort to counter man-made disaster and pursue the reasons/ networks involved in such incidents is undertaken by intelligence agencies, CTD, Police, and Rescues Department etc. Limited organizational capacity of federal departments and the dependency of NDMA on their technical assistance restricted the timely decision-making process with respect to response activities. In addition, aside of national policies, Pakistan is also committed to international charters such as Sendai Framework for Disaster Risk Reduction (SFDRR) and Sustainable Development Goals (SDGs). NDMA, being the leading national agency for disaster management is committed to these charters however, the achievement of objectives is hindered by the restricted technical capacity.

There were different policies existed which were developed by the different departments to manage the disaster. NCEP provide guidelines for intelligence operation to reduce the terrorism attack, it also provides guidelines to take action against the religious hate speech which become a source of conflict between religious sects. There were national policy guidelines on vulnerable groups in disaster in 2014 is available which also discussed the disaster at national level. National disaster risk reduction policy 2013 also discussed in term of disaster management. This policy focused to build up the national capacity to monitor and identify the vulnerability and its impact on individual. Whereas, the Coordination among the federal departments, provincial governments, and National authorities, provincial authorities, nongovernmental organization, UN agencies and armed forces towards the management of disaster whether it was public or private but, it was not enough strong. NDMA was an acting body coordinating the disaster management at federal level.

CONFLICT OF INTEREST

The authors declared absence of any conflict of interest.

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