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Role of Security Forces in Disaster Management with references to Nepalese Security Forces

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Abstract

This article is based on the role of security forces in disaster management with references to Nepalese security forcesDisasters are the serious disruption of the functioning of community or society. Nepal is a country highly vulnerable to natural disasters having a crucial effect on human life. There is an international practice to call out security forces in catastrophic situation for risk management. Nepalese society is highly dependent towards Security forces in the time of disasters. The study seeks to assess the role played by Nepalese security force in managing the disasters. The study follows qualitative approach with descriptive in nature to find out desired objective. Both primary and secondary data have contributed to find out the role of Nepalese security forces in disaster response and preparedness. The findings shows Nepalese security forces have demonstrated their skill and knowledge to counter both natural and man-made disasters to save life of people. The role is discussed in three phase i.e. Pre-disasters, during disasters and After Disasters. It shows that security forces are mostly concentrated in Search and rescue activity. Managing Disasters are multi-sectored work with collaborative efforts. The research stressed investing in Security forces for training and developing in order to build a capable rescuer. It is necessary for government of Nepal to take appropriate steps for job specialization in search and rescue in order to motivate and complement security forces. Also, a clear goal, vision, guidance and coordination within all sectors should be amplified.

Keywords: Role of Nepalese security force, disastermanagement, search and rescue and Civic Action.

Introduction

Disasters are life threatening events in human's life. They are a serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society cope by using only its own resources(UNISDR, 2009). Increase in damage and loss from disaster have poses a serious problem in societies. Reducing the risk of disaster is associated with three component, Preparedness, response and recovery. Disaster risk reduction measures are undertaken in order to build local resilience(Nepal Disaster Report, A Hazardscape and Vulnerability, 2009).

International Federation of Redcross and Red crescent (2020) states Disaster Management as the organization and management of resources and responsibilities for dealing with all humanitarian aspect of emergencies in particular

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preparedness, response and recovery in order to lessen the impact of disasters. The Ministry of Home Affairs is the focal agency for disaster management in Nepal which is guided and directed by the Central Disaster Relief Committee headed by the Home Minister in the matters of disaster management. The Ministry acts as a supervision authority and formulates implements national disaster plans, programs and policies. Beside that, others ministry like foreign ministry, Health ministry, communication ministry also share cooperative role in disaster management. After 1996, efforts were initiated to adopt various measures towards addressing different types of with the introduction of national action plan on disaster management in Nepal. The action plan serves as initiative to establish disaster management foundation in Nepal.(Nepal Disaster report, 2013). Currently, Natural calamity Relief Act 1982, Constitution of Nepal 2072, National strategy for disaster risk reduction 2009, Local disaster risk management planning guideline 2011, Disaster preparedness and response plan 2010, National Disaster response framework, National Building code are the existing legal frameworks in disaster management of Nepal.

Nepal police is a civil police with primary task of law enforcement, crime investigation and community policing. It comes under home ministry with active eighty thousand personnel deployed throughout the country. The police act 2012 and police regulation regarding the duty and responsibility state that every police has to be mobilized for disaster management. (Nepal police Act, 2012). Nepal police have been performing as a first responder in the time of catastrophic situation. The Armed police force, Nepal (APF) is a special force established to maintain peace and security with more than thirteen mandates. The primary function of APF is border security, Riot control, VIP security and to assist Nepalese army in external invasion. The armed police Act 2058 clearly direct APF in disaster search and rescue.

Due to the geographic location of Nepal to seismic activity from nearby Indian and Tibetan plate, it is highly vulnerable to natural disasters such as extreme drought, floods, landslide, fires, and epidemics effects(Nepal Disaster management Reference handbook, 2017). Due to vulnerability of population the regular and frequent occurrence of different natural hazard, Nepal is a hotspot for disaster(Nepal Disaster Report, A Hazardscape and Vulnerability, 2009). Globally, Nepal ranks 4th and 11th in terms of its relative vulnerability to climate change and earthquakes, respectively. The country is among the 20 most disaster-prone countries in the world, both natural and man induced. Out of 21 cities around the world that lie in similar seismic hazard zones, Kathmandu city is at the highest risk in terms of impact on people. More than 80 percent of the total population of Nepal is at risk of natural hazards such as floods, landslides, windstorms, hailstorms, fires, earthquakes and Glacial Lake Outburst Floods (GLOFs) (Disaster risk reduction national stretegy plan of action, 2018).

Objectives

- To understand the role play by Nepalese security forces in disaster management.
- To find out the demonstration role of Nepalese security force in reducing the risk of disaster in the phase of preparedness, Response and recovery.

Methodology

This paper based on qualitative approach with descriptive in nature as well as analytical research design. The both types of data used in this paper. Primary data are collected from observation, interview with security officials, and subject matter experts. Whereas, secondary data are collected form articles, published books, national and international documents, legal documents, guidelines and online search engine. Data form secondary sources have been analyzed in meaningful way with accordance to disaster management cycle.

Results and Discussions

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The security forces of Nepal have demonstrated their skill to counter disaster at the most catastrophic event. In both natural and man made disaster the availability of Nepalese security forces have raised belief of people towards security forces. The deployment of troops and their presence in every district have ensured secure among the people. In the mega disaster like Gorkha earthquake of 2015, Koshi flood 2008, Jure landslide 2015 Nepalese security forces have save millions of life and uphold humanitarian crises. Disaster Management encompass three different stages i.e. Pre disaster, during disaster and after Disaster. Nepalese security forces are actively engaged in all the phases of disaster management and their stringent action are seen during disaster. Taking deep proactiveness, Security force immediately deploy at the incident. The ability to locate victim, extricate them, segregate and save life are the activities during disasters. The role of Security forces have been discussed in three phase.

Role in Pre- Disaster

Disaster management has been a crucial task in global perspective. It involves different phases. The period of preparedness, formulation and implementation of strategy, response planning, capacity building, hazard mapping are the activity in pre-disaster phase. Before a disaster to reduce the potential for human, material or environmental losses caused by hazards and to ensure that these losses are minimized when the disaster actually strikes(National Institute of Diasater management., 2020).. While GON is focused on knowing and mitigating disasters its security forces are focused in producing technically skilled manpower to combat disasters. According to National emergency operation center, Nepalese security forces are entrusted as prime cluster agency in disaster management particularly in response phase so they have prioritize on disaster search and rescue training in normal time. Nepalese security forces are actively engaged during the time of disasters and their necessity has been raised day by day. Hence, it has been pre-requisite to train the personnel(Paudel, 2021). All three security agency have prioritize SAR training and have established their own training centers. The objective of training center has given ample emphasis to produce competent, confident and committed technically trained manpower in disaster related rescue operations and other humanitarian relief activities. Furthermore, all security agencies have established disaster management dedicated units in all layers of operations. The Nepalese army has established Disaster management training college under the directorate of military operation. The Nepalese Army has been inseparable agency in Disaster Relief Operations. Nepali Army has historically provided vital relief during floods, earthquakes, avalanches, fires, landslides, air and other transportation disasters. The primary roles of the Nepali Army in disaster relief are Search & Rescue Missions, Medical assistance & Evacuation, Air Rescue, Mass evacuation, flood control etc (Nepalese Army, 2021)

As a role community police and segregated units all over the country, Nepal police is highly entrusted by Nepalese citizen. Under the supervision of home ministry Nepal police has established Disaster Management Section was established under Police Headquarters, Department of Operations to enhance organizational competency and performance in disaster management arena (Nepal Police, 2021). Disaster Management Division further consists of training section which conducts training and simulation exercises for technical skill development and capacity enhancement of police as per the community requirement. An officer of Nepal Police states all police personnel are skilled in community light level search and rescue. As Nepal police are the first responder in all the disaster, they are trained with Medical First responder, Dead Body management, Canine handling, Firefighting, Rope rescue, road crash rescue, confined space rescue and water induced disaster rescue (Nepal Police, 2021). Search and rescue training is considered to be technical and knowledgeable. It requires both theoretical and practical knowledge. The training period consists more than three month of time. Beside, Technical skill training, all security personal is provided with soft knowledge skill training. Soft knowledge skill also has ability to perform soft search and rescue and have ability to deploy in any disaster that occurs in the country. The following table indicates technically trained manpower of Nepalese security force.

Table 1: The number of persons technically trained manpower of Nepalese security force.

Organization	Technically Skilled	Semi-Skilled	Total Strength
Army	10000	86000	96000
Armed Police Force	2034	35020	37054
Nepal Police	2031	77523	79554
Total	14065	198543	212608

Specialized and PEER course

Program for Enhancement of Emergency Response (PEER) course are international standardized courses initiated by the U.S. Agency for International Development in 1988 A.D. for Disaster response capacity strengthening in nine countries in Asia. Nepalese security forces are highly facilitated with PEER courses for disaster responses capacity enhancement.

Table 2: The number of persons technically trained of PEER course.

Organization	CSSR	MFR	Deep Diving	Fire Fighting	Mountain Warfare
Nepal Army	735	825	57	1281	800
Nepal Police	927	1010	-	830	-
Armed Police Force	328	70	64	100	4

Source: Directorate of Disaster management of Nepalese army, APF Disaster management Division, Nepal Police Disaster management Division, 2022.

Security force operational capacity is highly dependent with tools and equipment. Tools and equipment are the major weapons to overcome disaster response. The availability of technicallyequipment reduces the work load and saves a lot of time. (Paudel, 2021). SAR operation require specialized tools and equipment capable of penetrating concrete, locating trapped victims, communicating in complex confined spaces, and performing difficult and delicate rescues. The dearth in necessary tool and equipment were felt in gorkha earthquake response at 2015A.D. It has been observed that security forces being sent out with bare hand to rescue trapped people. In full reorganization of this shortage, Nepalese security forces have been subsequently marked with making necessary improvement with stockpile of necessary SAR tool and equipment, communication and technological equipment. In pre-disasters, GON of Nepal has presided efforts to procure, assemble and stockpile SAR tool and equipment to strength capacity of security forces. The following table indicates the inventory of SAR tool and equipment.

Table 3: The inventory of SAR tool and equipment

SN	SAR Equipment	Army	,	APF	Police
1	CSSR	•	1* Medium Team & 12	56 Set	12 Sets
2	MFR		* Light Team	4 Set	12 Sets
3	Fire Fighting	•	2x Disaster	32 Set	17 Sets
4	Rescue Raft		ManagementBattalion	25	-
			&1xNational	Boat	
5	Deep Diving/ Sink Hole		DisasterManagementSc	25 Set	5 Sets
	Entrapment		hool		
6	Rope Rescue			26 Set	5 Sets
7	DBM			4 Set	6 Sets
8	Life Detecting Equipment			4 Set	-
9	Heavy equipment			13 Set	-
10	Helicopters		20	-	-

Source: Directorate of Disaster management of Nepalese army, APF Disaster management Division, Nepal Police Disaster management Division, 2022.

Nepalese security forces are advancing for preparedness for emergencies in hospitals. The mention of scientists on possibility of many Mega disasters and lesson learnt form gorkha earthquake 2015 has alerted GON to prepare for HOPE (Hospital preparedness for emergencies). All the security forces of Nepal have their dedicated hospitals in order to providecurative and rehabilitative health services to personnel and their dependence. In the time of mega disaster, Security forces hospitals have contributed in treatment of victims. The enhancement of preparedness programs, conduction of HOPE training, cooperation with health institute to save life are the concurrent activities. After the spike of COVID-19, armed police force has transformed its hospital as COVID dedicated hospitals. It has proved to be admirable in responding citizen medical treatment. The training program on

HOPE has increased hospitals and healthcare facilities to prepare for casualties from earthquakes, landslides and floods. HOPE trained personnel are capable for increasing their ability to respond at national emergencies and continue functioning to provide medical treatment.

Managing Disasters are multi-sector engagement with coordinated efforts. GON have prepared numerous action plans to increase resilience Nepalese society. All the stakeholders from local level to central level have initiate in improving coordination between civil society and security forces in building a resilience Nepalese society. In this regards, there have been numerous response plans, joint exercises, awareness programs, resources mobilization, hazard mapping and interactions programs between civil society and security forces. Nepalese forces have focus to enhance capacity of community by providing awareness, trainings and logistic. Such activities are required to build a rapport between civil society and security forces. Disaster risk reduction activities should be integrated in the periodic plan and program should be regularly monitored (Disaster risk reduction national stretegy plan of action, 2018). All security forces have prepared Disaster action plan and have act accordance with it. The expansion of disaster response cell across the country, accruement of training and development, inventory of SAR tools and equipment, harmonizing civil security coordination are the concurrent task in predisaster phase.

Role during Disasters

During disasters, it is to ensure that the needs and provisions of victims are met to alleviate and minimize suffering (National Institute of Diasater management., 2020). The occurrences of disasters enhance human and infrastructural damages. This period of time are considered to be the furriest and hazards. The intensity of disasters cannot be stopped rather can be minimize. This phase of disaster management is also termed as response and recovery phase. After the occurrence of disaster, all stakeholders, actors, and humanitarian organizations, become involved in the immediate response and long-term recovery phases. Every nation of world are heavily dependent on their security forces for search and rescue at the time of disaster. Search and rescue are operational activity performed by security forces for the victims who are helpless or imminent danger. Nepalese security forces are highly persuaded in search and rescue. As Nepal is a home for both natural and artificial disasters, SF forces are the prime agency for relief and rescue. Security forces of Nepal are deployed every day to neutralize common disasters. At the time of mega disasters, they have played outstanding role in search and rescue. Nepal was jolted with 7.6 magnitude earthquake on Saturday 25 April 11.56 Local times in gorkha district. There were more than 300 aftershock traumatize the nation directly effecting 32 districts. Government of Nepal recorded 8790 fatalities and 22300 injuries. All the concern stakeholders responded the incident. The national emergency operation center was activated at level four. Central disaster Relief committee (CNDRC) recommended council of ministers to declare emergency and call for international assistance. Security forces quickly responded the incident and Relief operations started from the second hour of the earthquake in 2015 and lasted till 19 May 2015(Nepal Disaster management Reference handbook, 2017). Nepal

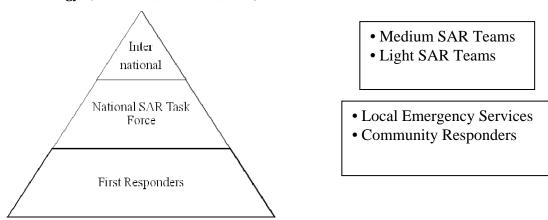
Army launched rescue and relief operation named "Sankatmochan" where more than 66,069 army personnel were deployed. Armed police force quickly deployed its technically trained manpower from Disaster management Battalion, Sinamangal for urban CSSR operation. Nepal police was first responder in all effected district and was actively engaged in rescue and relief, Dead body identification, Documentation and other legal aspects. More than 23,594 people were rescued. Out of them 1336 people were rescued alive from collapse structure buildings and 2928 people were rescued by Nepal army helicopters(MOHA, 2015). Similarly, in the year 2008 the koshi river at the eastern part of river outburst due to insistent rainfall and crippled the whole nation. The Government of Nepal estimates approximately 70,000 people are affected by flooding in the area. a total of 66,500 individuals have been displaced by the flood of which 42% are Indian nationals (OCHA Appeal and Situation Report, 2008) Security forces were heavily engaged in water rescue and evacuation operation. More than 15000 Nepalese security forces continuously perform their duty overnight in constructing of emergency shelter, camp management, and food and relief distribution.

The mega disaster of earthquake 2015, koshi flood 2008, Jure landslide 2014, Turkish plane crash have been a major sources of lesson learned to all security forces. The pro activeness and imitation in training, inventory management and well cooperation have resulted victory in other search and rescue operations. The following figures indicate search and rescue of Nepalese security forces in the last 5 years.

Year	Disaster	Casualties	Rescue	Deployment of Security force
2017	2046	4375	3815	23607
2018	1874	4748	4405	21937
2019	2636	5766	5212	35682
2020	1763	3777	3341	14810
2021	1958	2658	1543	18110

(Source: APF Disaster management Division 2022)

The Government of Nepal have envision on independent SAR team. Till today, Trained specialized capable and skilled personnel from the Nepal Army (NA), Nepal Police (NP) and Armed Police Force (APF) are actively engaged in Search and Rescue (SAR) team as Nepal does not have unified SAR force. In order to meet the existing challenge and enhance coordination in SAR activity, GON have prepared National Strategic Action Plan for Search and Rescue, 2014. It is the first stepin disaster response which has envisioned developing the minimum level SAR capacity from the trained and dedicated security personnel of Nepali Army (NA), Armed Police Force (APF) and Nepal Police (NP). Which is based on the National Strategy for Disaster Risk Reduction (NSDRM) – 2066 (2009) and analytical recommendations received from International Search and Rescue Advisory Group (INSARAG) in 2011. The essence of National strategic Action plan for SAR is formation, capacity building and strengthening integrated SAR by enhancing overall capacity, enhances the rescue capacity for every new emergency response.



(Source: National Strategic Action Plan for Search and Rescue, 2014)

National Strategic Action plan for search and rescue is an attempt to develop a professionally and technically sound Search and Rescue (SAR) Team in Nepal as per the INSARAG Guidelines. In an interview with NEOC officer, the formation of dedicated SAR team will enhance professionalism in Nepalese security personnel. Still, National Strategic Action plan for search and rescue is yet to be implemented.

Role after Disaster

After disasters also referred as post disaster are the period of Recovery, Rehabilitation Reconstruction and Development. The response phase occurs in the immediate aftermath of a disaster. After all rescue and relief, the regular situation becomes chaos and there is a situation of anarchism. The loss of life and property of people brings up havoc, disorder and disturbance in society. There is a chance of rise in criminal activity. Hence, Security forces claims this phase as most challenging and turbulence. Post disaster activities include relief distribution, medical assistance, shelter construction, Law enforcement and civic action. The post gorkha earthquake 2015, have whole nation with serious disruption of life.The distribution nationalcommunication not only halted Search and rescue also raise fear among the people. Immediately, after the tremor, many aftershocks traumatize the nation. Many other disasters like fire, road accidents were reported. Criminal offence like theft, robbery, brawl and harassment also occurred, creating challenges in security. Nepal police officer, deployed in Response of Gorkha earthquake mention, the aftermath of earthquake brought lawless for some time. Immediately, situation was controlled with deployment of Security forces(Adhikari, 2021). Nepalese Security forces have commenced in humanitarian relief work in post gorkha earthquake. The deployment in relief distribution, temporary shelter construction, protection and convey of food and enforcement of law where the prompt task. Also, assist in construction of home, rehabilitation of schools, regaining access to health service, rehabilitation of vital installation, building and developing infrastructure are still going on. After, gorkha Earthquake 2015, GON have realized the need of National Reconstruction Authority (NRA) and established in 25 December 2015 (2072) for five years to lead and manage the reconstruction and recovery of the earthquake. NRA after

pledging Security forces have constructed temporary shelter in highly effected districts like sindhupalchok, gorkha, Dolkha and lamjung districts. In the havoc of koshi flood 2008, Security forces extricated the victims and constructed temporary shelter at safer zone. There is an immense role of Nepal police in aftermath of any disasters. As a community police, Nepal police have posed as efficient organization by enforcing law at community level. The immediate task of damage assessment, victim identification, documentation, commutating various stake holders is well commendable. The Aid to civil by Nepalese army and armed police force Nepal, in construction of temporary shelter, construction of damage roads, medical treatments, psychological treatment and hazard mapping are indispensable which are remarked by state.

The recovery phase of a disaster can last from six months to a year or even longer depending on the severity of the incident. The maintenance of law and order can be more difficult when faced with large scale man-made or natural disasters. Reconstruction is a very specialized work, needs a large number of technical manpower and expert. Its goal is to restore normal community activities that were disrupted by disaster impacts through a process involving both activities that were planned before disaster impact and those that were improvised after disaster impact. The Phase of recovery is also termed as Solidatary phase. It is possible when all the stakeholder of communities engage in a planning process that addresses the major recovery functions and incorporates hazard mitigation and hazard insurance into a recovery operations plan.

Need for Improvement

Search and rescue operations are critical task. Rescuers have to be competent enough to save life. The essence of search and rescue operation is "Safety First". It is necessary for rescuer to have personal protective equipment. Lack of personal protective equipment has a positive correlation with rescue operations. Nepalese security personnel share displeasure with available personal protective equipment. It is necessary to have sufficient PPE for security Personnel. It is to make attention of GON to make an adequate inventory of PPE.

Lack of work specialization in search and rescue have scattered technically trained manpower. Highly trained water rescuer, Deep Divers, High altitude rescuer, Fire fighter, CSSR specialist of Nepalese security forces have been diminishing. It is an urgent requirement to concentrate technically trained manpower and engage. Behind this, under staffing of human resources, insufficient resources and lack of apathy form concern level have reduces motivation of security forces. There should be stringent action to minimize such activity. Hence, designing motivation mechanism by adding incentive, developing career should be carefully designed in order to retain highly skilled manpower are fundamental requirement of Government of Nepal. Many researches have stressed to increase training in security sector by improving wealthy communication mechanism between all the security forces of Nepal. There is also necessary to prioritize and disperse area specific among army and police forces. Engagement of all three forces in same intensity of disaster has created work duplication. The practice of simulation exercise,

incident command system, mock drills, collective exercise and familiarization within all security forces develops unity in work.

There is inherent to improve civil- military relationship in Nepal. There is necessary to maintain a contact and develop better relationship between local government and Nepalese army. Due to this relationship and share information a community can be heavily benefited at the time of disaster. As disaster management consists of multi sector involvement for a common goal. All other collaborating and voluntary organization should have shared role in disaster education and training. In this regard, voluntary organization in Nepal like Red Cross, Nepal society for earthquake technology (NSET), International organization for migration (IOM), Fire brigade, Rescue and awareness group (RNA) which are directly and indirectly assisting in search and rescue operations need to institutionalize relationship for a better result.

Conclusion

Growing threat of natural and man-made disaster has terrorized the world. Everyday people are losing their valuable life encountering form natural disasters. There is a saying wars may occur in decade but disasters occurs frequently causing harm of life and property. It is impossible to stop disaster but it is possible to stop its intensity by well preparing. Every country of the world have prepared action plan is mitigating disasters. Specially, in search and rescue activity security forces of world have min the heart and mind of peoples. Nepal ranks among the 20 most disaster-prone countries in the world, both natural and man induced disasters. The government of Nepal has done remarkable works in preparing against disasters. Preparing security forces to curb disasters are daunting task. Recognizing this fact, strengthening the operation capacity of Nepalese security force by enhancing inventory management has averted a catastrophic situation. Security forces of Nepal have save millions of life risking their life. Legal arrangement for deployment of security forces in disaster management has paved a way for aid to civic power. In all the phases of disasters their nimble role have assist in reducing the intensity of disasters. The findings shows, Nepalese security forces have been mostly concentrated in Search and rescue activity. In order to combat the fury of disaster, there have been routine training and development of human resources, inventory and maintenance of resources, proliferation of medical facility and civil awareness. The research strongly suggests investing in security forces for developing a capable rescuer. A nation should immediately take appropriate action in job specialization in order to motivate and complement security forces for their arduous effort in managing disasters.

Managing disasters are multi sectored work with collaborative effort. There should be an active engagement to achieve a common goal. There is a necessity of clear goal, vision, guidance and coordination within all the sectors and participant. Since, search and rescue are action oriented task. A nation should disseminate a minimal SAR technique for all the citizens. It is impossible to win disaster without civil- military coordination and cooperation. There can be further more research for deep insight into the subject matter.

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