

MITIGATING EFFORTS ON DISASTER RISK MANAGEMENT; A CASE STUDY OF NEPAL.

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This study aimed to analyze trend of disaster occurrence and mitigating efforts in Nepal. As Nepal is the first country in south Asia who prepared disaster management act in 1981 however number of disaster incidents is increasing year by year. Nepal has recently prepared 'The Disaster Risk Reduction and Management (DRRM) Act, 2017' which is trying to provide comprehensive outlook of different dimensions of disaster risk management (DRM). DRRM is trying to introduce new approach in reducing and managing disaster by introducing the 'whole of society approach' in disaster risk management and ensuring ownership and accountability.¹

This study is more focused to figure out the existing policies and gap on Disaster Risk Management (DRM). It is found that the human and economic loss has been significantly increasing in recent years. Despite of the various policies and efforts, the trend of economic and human loss is increasing year by year. Recently, Government of Nepal has formed "Disaster Risk Reduction Management Authority - DRRMA". In the other side, the percentage of under-expenditure as per Government's annual budget allocation is increasing year by year and significant economic loss is occurring in the other side.

Ministry of Home Affairs (MoHA) is responsible for Disaster management in the country. Federal system has been introduced in the country recently however clear mechanism has not set up yet for DRM at the province level and local Government Unit level. At the district level, district disaster management committee (DDMC) is functional which is also experiencing difficulties due to the lack of effective data management, shortage of trained human, financial and logistical resources. Similarly, Municipalities (Metro, Sub-Metro, Municipality or Rural Municipality) are responsible at the lower level according to the federal system of Nepal. The existing policies are focusing on relief distribution. Some policies are focusing on preparedness however due to the lack of financial and logistical resources as well as lack of technical capacities Disaster management is not moving effectively. All the seventy-seven districts have disaster preparedness and response plans (DPRPs) which is one of the main basis for response work during the disaster. There is no any provision of stockpiling of search and rescue kits as well as basic survival kits at the both national, provincial and local level. The planners, policy makers and aid workers as well as administration are moving on ad hoc basis both on preparedness and response. It also applies on early recovery, reconstruction and post recovery phase of disaster management cycle. The annual budget both in National, provincial and local

¹ Nepal disaster report 2019

level is only focusing on traditional infrastructure development works which are implementing without considering basis disaster risk reduction concept. Due to the lack of mainstreaming of Disaster Risk Reduction (DRR), the poverty alleviation efforts aren't able to meet it's goal. Lack of community participation in the project cycle management (PCM), absence of involvement of private sectors and less effective Government's structures are contributing country to increase more vulnerability.

Keywords:

Disaster Risk Management, Disaster Risk Reduction, Community participation, economic loss.

Introduction

The Himalayan country Nepal stands at the top 20th list of the most multi-hazard prone countries in the world. It ranks 4th, 11th and 30th in terms of climate change, earthquake and flood risk respectively.² As the country lies in the high seismic zone, large-scale earthquakes were frequent in the country in the past including the earthquake of 25 April 2015. Nepal is not only earthquake prone country but also exposed to multiple hazards risk such as floods, landslides, fires, hot and cold waves, lightning, windstorms, hailstorms, droughts, epidemics outbreak and so on. Variable geo-climatic conditions, young geology, unplanned settlements, deforestation, environmental degradation and increasing population are contributing to increase vulnerability. Disasters triggered by natural hazards are causing heavy loss of lives and properties which are becoming powerful barriers for sustainable development.

Methods

Literature review was carried prior to perform this study. Primary data and secondary data were collected to do detail analysis. Followings are the steps carried;

Literature review on the Disaster Risk Management topics:

Disaster Risk Management related policies, guidelines, directories, books, journals and articles as well as web sites were reviewed thoroughly. The theoretical part of each books was taken to enhance the knowledge on disaster risk management. The available policies and guidelines were reviewed and studied. The act and legal provisions were collected and carefully reviewed.

Questionnaire preparation

Questionnaires were prepared to collect primary data from field. District level information was collected from District Administration Office (DAO), District Coordination Committee (DCC previously known as DDC), Nepal Red Cross Society (NRCS) and

² UNDP/ BCPR, 2004

Municipalities. The purpose of information collection was to check the awareness level of district and local level authority and to know the capacity to manage disaster.

Secondary data was collected from various Government Offices. Disaster human loss report was collected from Ministry of Home Affairs (MoHA), Budget allocation related information was collected from Ministry of Finance (MoFA), and Human loss report from 1981 to 2011 was collected from Disinventor and Nepal Disaster Report. Post Disaster Need Assessment (PDNA), Gorkha Earthquake 2015 also reviewed to know disaster scenario of country.

Primary data was collected from Districts. District Level line Offices were consulted to collect primary information. Mountain, Hill and Terai districts were selected for sampling to represent different geography.. Dadeldhura, Dailekh and Dolakha districts are most disaster prone Mountain/hill districts representing Far West, Mid-West part of Nepal. Similarly, Kanachanpur, Kailai and Sarlahi districts were chosen from Mahakali, Seti and Bagmati river basin as they are also from flood affected Terai districts. Kailali has Hill, Mid hill and Terai parts. The district is vulnerable with respect to flood, landslide and epidemic risk. Hence, Kailali district was chosen. Besides these, there are no other specific and intentional reasons for selecting sampling districts.

Comparative study between existing policies and practices

The qualitative information received from district level was converted into quantitative from and comparison was made. The use of policies and practices were reviewed and compared. Policies are in the form of paper and practices are in the ground. The purpose of primary data collection was to get qualitative and quantitative information from the field. The purpose of all policies is to act as the guiding legal documents. In other hand, practices are behavior of community and society towards the changes. The changes should be negative, or positive but positive changes are always expected while drafting policies. All the DRR related policies and guidelines have prepared to make resilient communities.

Gap Analysis of existing policies.

Based on the primary and secondary data, gap analysis was carried out. It was basically focused on understanding level on policies and effectiveness at district and local. Gap was identified by comparing the loss reports and available policies formulated after the 1982.

Data analysis and presentation

Study Data and Analysis Technique

Both primary and secondary data was collected, quantified and analyzed. Decade of 1980's has assumed as base period for disaster management as National Calamity Relief Act (NCRA) was promulgated in the year of 1982. The secondary data was collected from various sources

Secondary data collection and Analysis.

All the existing policies and documents were collected from relevant stakeholders like Ministry of Home Affairs (MOHA) and Ministry of Federal Affairs and Local Development (MOFALD) at the central Level, District Coordination Committee (DCC) and District Disaster Relief Committee (DDRC) at the local level. Disaster related information were gathered from Ministry of Home Ministry, Ministry of Federal Affairs and Local Development (MoFALD), desinventar, National Planning Commission (NPC), Ministry of Finance, Disaster

Preparedness Network (DPNet) and other organization. Quantitative information were reviewed and analyzed.

The Table below show the number of annuls death due to various types of disaster in Nepal after 1980. The data mentioned below is from 1980 to 2015. It is divided in five years interval and information was gathered accordingly. The highest human loss in the interval of five years has observed in 2011- 2015 which is due to the earthquake in 2015. The death toll reached second highest in 1991- 1995 which is 20% of total death. That was due to flood and epidemic outbreak across the countries. It has observed that 30,652 people died due to the disaster in 35 years which means 863 people are being killed by annually and 3 people daily. This trend shows very frustrating outcome and impacts of disaster management initiatives in Nepal. The figure is increasing in nature and Government and many Humanitarian Organizations are saying they are providing full efforts for effective disaster management in Nepal.

In another hand about 50% of total death was happened due to the epidemic outbreak only (figure 8, source: Dinsinventor). Normally, people and Government is focusing on primary hazards like flood, fire, landslide, earthquake but epidemics is one of the major hazard to cause human loss. Due to poverty, poor sanitation coverage, less knowledge on hygiene promotion, lack of awareness activities, geographically remoteness and poor literacy level are increasing to increase the vulnerability due to the epidemic outbreak.

Table 1: Death Report due to disasters (1981 to 2015)

SN	year	No# of deaths	Percentage	Remarks
1	1980-1985	2,626	9%	
2	1986-1990	2,409	8%	
3	1991-1995	6,121	20%	Flood, Epidemic
4	1995-2000	4,728	15%	epidemic
5	2001-2005	1,608	5%	
6	2006- 2010	1,998	7%	
7	2011-2015	11,162	36%	Earthquake
	Total	30,652	100%	
	Per year	876	Per day:3	

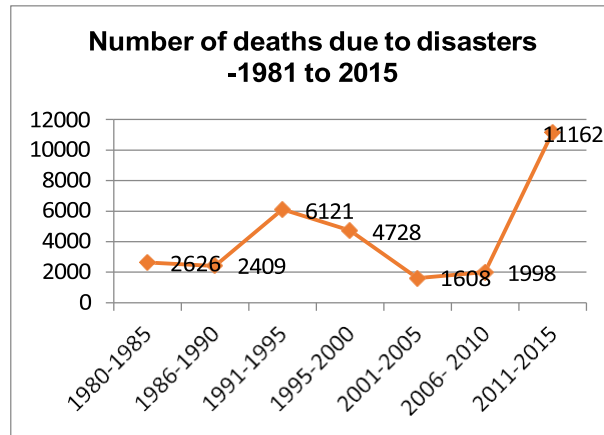


Figure 1: Human death due to disaster from 1980 to 2015

The graph is not steady and irregular in slope. This is clear indication of un-expected human losses due to disasters. Despite of preparedness and response initiatives, the graph becomes instead and irregular.

The above-mentioned figures are from last 35 years. If we see the year wise detail human loss from 2011 to 2015 (see figure 2 below), we can see almost straight line for first four years and very steady in 2015 human loss (killed). Similarly, the human missing trend from 2011 to 2015 seems almost constants (see figure 2). It is clearly shown that there is lack of preventing measures to minimize the human missing. The data shows that 895 have missed in these 5 years which is 179 persons in a year and one person in every two days. This is the very urgent point that Government, local administration and Humanitarian organizations should give special attentions to take immediate action.

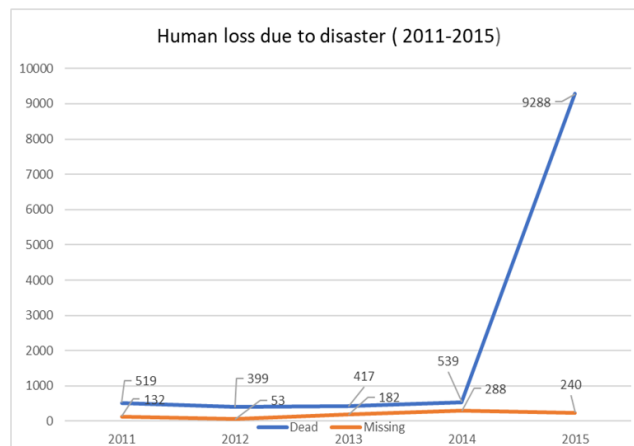


Figure 2: Human loss (dead & missing) due to disaster (2011-2015)

The hazard wise human loss is shown in Figure 3. Only three top most hazards are considered here except earthquake. The human loss comparison between three hazards shows that there is in-consistency in flood. Maximum human death was occurred in 2011 due to flood which is 126. Then, 9 persons killed due to flood in 2012, 129 in 2014 and 0 in 2015. If we look for human loss due to Landslide, this is also high but unsteady. But in the other hand the human lost due to the fire is almost same in all year. It shows that flood, landslide and fire all are most frequent hazards but the human loss caused by Flood and Landslides is not uniform. The fire hazard is the most sensitive one and is responsible to cause significant human loss almost same in all year.

The DPRPs of sample districts is also mentioning about fire and action points to mitigate fire risk also provisioned. It is more focused on public service announcement (PSA) at local level. But the graph clearly shows that the number of human loss is almost same in all years. This presentation clearly shows that the immediate actions should be prepared and applied.

The figure 4 shows that number of incidents of fire is increasing year by year.

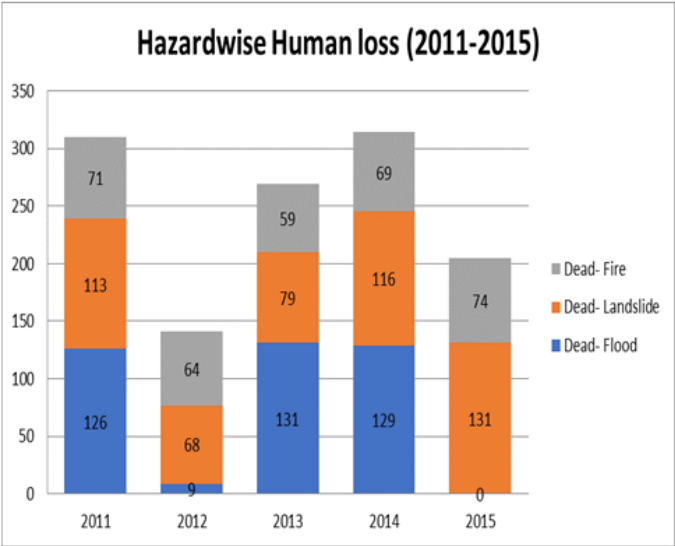


Figure 3: Hazard wise Human Loss (2011-2015)

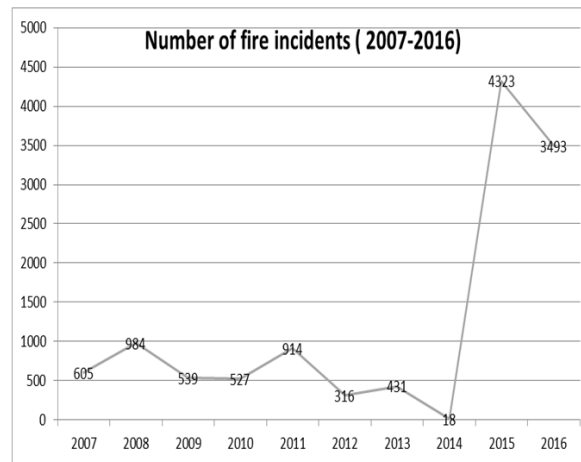


Figure 4: Number of fire incidents-source: Kantipur daily

Government of Nepal has increase budget six times higher than 2006/07 in 2015/16 (see table 2). Most of the budget is for staff and administrative cost, traditional development work, social protection and assistance to local Government. Not a single budget line was observed in the budget in which is allocated to Disaster Preparedness and response. In one hand budget is increasing year by year however the burn rate of budget utilization is decreasing every year (see table 4). The budget was increased six times with in ten year however budget is under expenditure by 11 times than the 2005/2006 in 2015/2016.

In another hand, significant financial loss has been observed due to disaster in these years. Budget is financial resources to implement any kind of activities. Government of Nepal is allocating budget for every fiscal year and it is increasing in straight line year by year. The Grant and Loan is also increasing in trend. In other hand the significant lost due to the disasters is also increasing (see Table 3). Normally, 1% of total budget is losing due to disaster however 35% of total allocated budget was lost due to various disasters in fiscal year 2012/13 which is significantly high amount. The financial loss due to Earthquake in 2015 has not considered here because it is more than the total budget of the country. If we consider this, other lost becomes almost negligible so it is not considered here.

Figure 4 below shows the graphical representations of total development budget of the country and year wise financial loss due to disasters. Similarly, figure 5 shows the gap of planned budget versus expenditure. The graph clearly shows that the gap between the planned budget and expenditure is increasing year by year.

Table 2: Budget allocation of Government of Nepal (2006/07 to 2015/16)
Amount in 100 Million NPR

SN	FY	Recurrent	Capital	Principal repayment	Total in NPR
1	006-07	83.76	44.97	15.16	143.91
2	07-08	98.12	55.26	15.56	168.99
3	08-09	128.51	91.31	16.18	236.01
4	09-010	160.63	106.28	19.01	285.93
5	010-011	190.31	129.53	18.04	337.90
6	011-012	266.61	72.70	45.68	384.90
7	012-013	279.01	66.13	59.67	404.82
8	013-014	353.41	85.09	78.72	517.24
9	014-015	39.,95	116.75	102.39	618.10
10	015-016	484.26	208.87	126.32	819.46

Source: Ministry of Finance (www.mofa.gov.np)

Table 3: Allocated Budget Vs. Budget lost due to Disaster

SN	Fiscal Year	Capital budget	Lost due to Disaster	Loss Percentage
1	2006-2007	44,976,412	487,352	1%
2	2007-2008	55,262,682	633,228	1%
3	2008-2009	91,310,086	2,039,139	2%

4	2009-2010	106,284,793	947,037	1%
5	2010-2011	129,538,178	1,736,136	1%
6	2011-2012	72,607,090	2,155,134	3%
7	2012-2013	66,134,610	16,772,189	25%
8	2013-2014	85,099,731	2,321,601	3%
9	2014-2015	116,755,042	4,000,000	3%

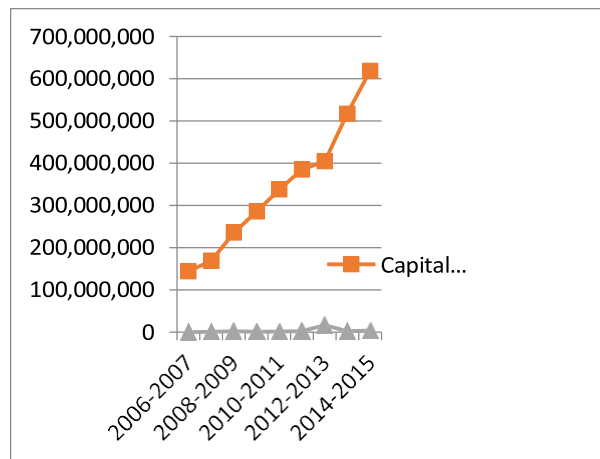


Figure 5: Allocated budget Vs. economic loss due to disasters (10 years)



Figure 6: Budget expenditure trend in the last month of every Fiscal year

The figure 6 shows that the expenditure trend is significantly high in the last month of the fiscal year which is equivalent 20% to 30% of the total budget of the year. Majority of the expenses is related to construction works. Ashad (June and July) month is rainy season and not good for construction work. That's why infrastructure works are not sustainable and not disaster friendly.

This kind of rapid work in the rainy season is also increasing the landslide hazard and raising the possibility of land erosion.

In another hand, due to climate change effects and flooding, the production of main crop of rice is irregular year by year. Irregular rain fall, drought and excessive rainfall are also contributing to reduce rice production. In other hand rice production land is decreasing day by day. The serious agriculture land loss year by year may hit country in food security side at any time.

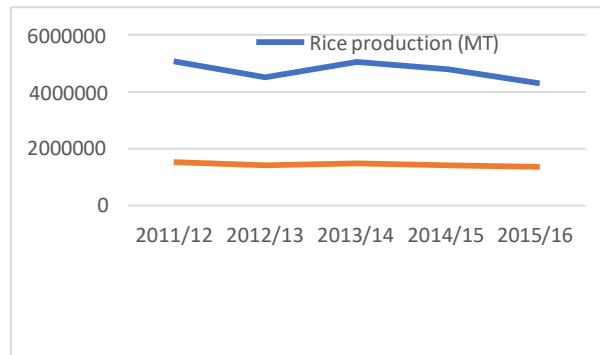


Figure 7: Rice production and Agricultural land

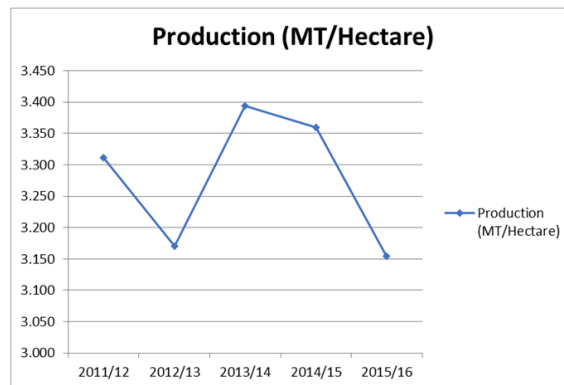


Figure 8: Rice production per Hectare

Primary Data Collection and Data Analysis

Primary data followed with the questionnaires was collected from the disaster affected districts. All five sample districts are disaster prone districts. Dadeldhura (DDL), Dailekh (DL) and Dolakha (DO) were chosen as hill districts where epidemics, landslide and earthquake are the main hazards. Kanchanpur (KPR) and Sarlahi (SL) districts are Terai and low land districts where flood, epidemics and cold wave are main hazards. The data was collected from Questionnaire and face to face interview method.

The five year data has shown in table 4. Only one district Sarlahi allocated budget for emergency management in 2010. Dolakha (DO) and Daeldhura (DDL) followed the same in second year. Then, Dailekh (DL) and Kanchanpur (KPR) districts started in the third year. Now all sample district has been allocating some budget of emergency management works.

Table 4:: Emergency budget allocation at the district level in thousand in NPR

SN	Fiscal Year	SL	DL	DDL	KPR	DO
1	011/012	2,200	-	-	-	-
2	012/13	3,000	-	100	-	1,000
3	013/14	2,500	50	200	50	1,000
4	014/015	4,800	230	200	100	1,000
5	015/16	6,200	200	300	250	1,200

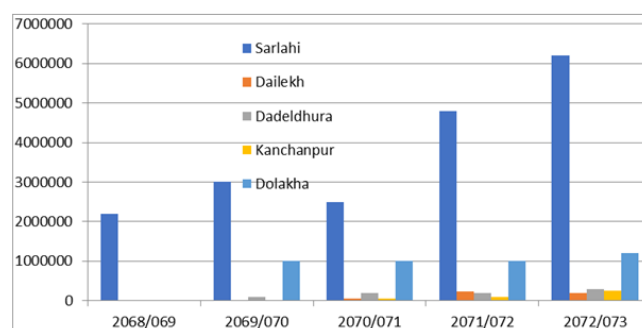


Figure 9: Budget allocation for Disaster Risk Management in sample Districts

Capacity of the districts were done as per questionnaires and each indicator have been indicating by scoring. 0 Represents No and 1 represents Yes in the score sheet mentioned below.

Table 5: Capacity Analysis of Districts

Key areas	Indicators	DDL	KPR	DL	SL	DO
Preparedness Initiatives		3	3	2	4	3
	Do you have updated DPRP in you district?	1	1	1	1	1
	Is it used in latest disaster?	0	0	0	1	0
	Is it useful to coordinate during response	1	1	1	1	1
	How often DDRC meeting takes place	1	1	0	1	1

Key areas	Indicators	DDL	KPR	DL	SL	DO
	Are people aware on the provisions of NCRA	0	0	0	0	0
Local Capacity to manage disasters		5	4	3	5	4
	Are you conducting DRR trainings before disaster	1	0	0	1	1
	Are there any difficulties on implementation of NCRA?	1	1	1	1	1
	Do you have sufficient SAR items in District	1	1	0	1	0
	Do you have trained community volunteers	1	1	1	1	1
	Do you have prepositioned relief materials?	1	1	1	1	1
Timely response and Need Assessment		4	4	4	4	4
	Relief items are distributing within 24 Hrs	1	1	1	1	1
	Rapid Need assessment with in 48 Hrs	0	0	0	0	0
	Mobilization of Security Forces for SAR	1	1	1	1	1
	Do you have trained community for all DM Cycle	1	1	1	1	1

Key areas	Indicators	DDL	KPR	DL	SL	DO
	Do you have prepositioned items at the local level	1	1	1	1	1
		3	3	3	4	5
DRR Mainstreaming in development work	Do they have knowledge on DRR mainstreaming ?	1	1	1	1	1
	Is LDRMP initiated in the community level?	1	1	0	1	1
	Is there any budget allocated at local level for DRM?	0	0	1	1	1
	Is there any mandatory provision to allocate budget?	1	1	1	1	1
	Is VCA tool using while developing annual plans in 13 steps of planning process	0	0	0	0	1
		2	2	3	2	2
Community engagement	Is there any local disaster management committees?	1	1	1	1	1
	Is there any representation of community in DDRC?	0	0	1	0	0

Key area s	Indicators	DD L	KP R	DL	SL	D O
	Are community people consulted prior to planning process as per LSGA (annual plan preparation)	0	0	0	0	0
	Is environment effect from mini infra works considered?	0	0	0	0	0
	Is there CBDRM approach in place at community level?	1	1	1	1	1
Data Management		3	2	2	2	2
	Is there PMIS in place at district and national level?	1	0	0	0	0
	Is disaster related information prepared and updated?	0	0	0	0	0
	Is there any standard reporting format?	0	0	0	0	0
	Is there any records of disaster loss at district level	1	1	1	1	1
	Is there any focal person for	1	1	1	1	1

Key area s	Indicators	DD L	KP R	DL	SL	D O
	record keeping?					
Tota l		20	18	17	21	20

Gaps in Policies and Practice

The objective of formulating policies and preparing guidelines is two make resilient Nepal. There are three aspects to increase resiliency. The first one is preparedness and capacity building; second one is effective response and last one is early recovery and development work. Monitoring evaluation and corrective actions are the part of all three aspects. Mainstreaming of Disaster Risk Reduction (DRR) is required in development work and meaningful community engagement is required during the preparedness phase. Nepal started drafting of policies from 1982 and still policies and guidelines are drafting however disaster loss both human and economic both are increasing in trend. The significant economic losses is creating barrier to alleviate poverty.

The lower political division is ward at Rural Municipalities or Municipalities. It has many polices and guidelines to be considered for planning and implementation process. Hence, DRR related process is not considered seriously. 75 districts out of 77 districts have prepared it's DPRP plan but it has not internalized yet. National Strategy for Disaster Risk Management (NSDRM) is national framework however it is not implemented effectively so there is a gap between the local and national level. Even the districts stakeholders are not fully aware on the legal provisions and preparedness related activities. Most of the emergency responses are being done as an ad-hoc basis. The roles and responsibilities are seems to be unclear.

The big gap between the policies and practices is on the conceptual clarity and budget allocations. The budget allocation in the sample districts seems nominal whereas traditional development works are contributing to increase disaster risk in negative way. The other gap is the empowering people to cope with the disasters. The analysis of available data justifies that the awareness level of people on preparedness is low that's why significant level of economic and human losses have been occurring. There are different policies and guidelines regulated through its own governing line ministries. Each guideline and policies are prepared prioritizing its own priority development issues along with showing scope of integrating disaster risk reduction. Due to the provisions made in policies and guideline of different line ministries, different development plans like local development plan, Local Disaster Risk Management Plan (LDRMP), Local Adaptation Plan for Action (LAPA), District Disaster Preparedness and Response Plan (DPRP), District Disaster Management Plan (DDMP), Annual plan (Municipalities and districts) are being prepared at the district level. There is no any functional relationship from one plan to another plan. All plans and action points are preparing in isolation that means they don't have any point of integration. The lack of resource allocation, implementation and commitment to reduce the disaster are the main gaps at all level.

The National Calamity and Response Act (NCRA) are only guiding documents for the response. This is more focused on providing relief rather than the preventive actions. This act is using as guiding documents to distribute relief items after the disaster however affected families need to collect many supporting documents like Police report, recommendations from

local body which is very tedious and complicated for extremely remote places. Only few people are receiving assistance from Government annually

National disaster response frame work (NDRF) is another policy to use as a guidance document during the emergency. Due to the lack of roles and responsibilities, emergency response and immediate support have not happened on time. The collected information of all sample districts clearly shows that adequate resources haven't allocated at the district level. Adequate coordination among the various organizations has happened and there are no any responsible functional offices at the local level. NEOC and DEOC are assumed for effective data management however DEOC has not able to strengthen. Due to the less effectiveness of the DEOC at the district level, NEOC is not able to maintain functional relationship with DDRCs, Rural Municipalities (RMs), Municipalities and Humanitarian organizations.

Government of Nepal committed to form National Disaster Management Authority and to formulate new disaster management act about one decade ago but it has not formulate yet. There is not an adequate mechanism to implement the National Building Codes (NBC) to guard against the risks of earthquake. The simplified version of National Building Code, Mandatory Rule of Thumb (MRT) is also not able to implement. Only Lalitpur and Dhangadhi sub Metro City and Dharan Municipality have claimed that they are implementing NBC effectively. The Building Regulations under the Building Act do not yet establish a mechanism for approval of smaller buildings at local level, although these are covered in the Act itself.

Land use planning and high-risk settlements are another aspect of increasing vulnerability of communities. Due to the lack of proper policy and understanding on land management, ad-hoc urban trend is increasing and proper constructions have not made. There is no clear role between Department of Urban Development and Building Construction (DUDBC) and respective Municipalities. Government is increasing number of municipalities but capacity development of such municipalities has not given priority. There are many RMs which are susceptible to many kind of disasters. They can't able to implement NBC in traditional ways. There is no consistent legal mechanism to relocate individuals or communities from high-risk land. Early warning and DRR communications has not considered. Some of the initiations have taken in Karnali and Narayani river however it is not sufficient. Provision of community based disaster management is lack in all policies and practices.

Involvement and active participation of private sector in all phase of disaster cycle management is not provisioned in all documents. Public private partnership must be ensured in all cycle of disaster management.

FINDINGS AND RECOMMENDATION

Nepal has developed some policies and guidelines for effective disaster management. Government of Nepal, UN, Humanitarian Organizations, Red Cross societies and civil societies are providing special care and attention to minimize effect of disasters by increasing the resiliency of country and communities. After the three decades of starting formulation policies in Nepal, country is still experiencing big threats of disasters which are responsible for significant economic loss.

- a. Inconstancy in Data management: There is no consistency on data management, dissemination and sharing at all level. There is no any specific data management format at all level. Due to the lack of adequate information management system (IMS), all sample districts are not able to maintain records effectively. The available information clearly shows that disaster is one of the hindering of all districts. It is resisting the development efforts and increasing vulnerability of the districts. Due to unavailability

of data, proper planning hasn't done. Due to the lack of proper planning, effective development hasn't occurred.

- b. Lack of proper guidelines and implementation: Despite of the dozens of guiding documents and policies, vulnerability of the country is increasing day by day. Most of the time has been spending on policy formulation but execution has not happened at all level. Ad-hoc basis implementation is not bringing significant changes. It is found that due to the lack of financial resources, plans of districts have not executed. There is no any contingency plan and proper monitoring plan. Milestones haven't fixed. So, all districts are not able to meet its target.
- c. Less community participation in planning and implementation: It is found that community participation is less in planning and implementation level. Only Government Officials are taking lead in all kind of decisions at the district level. District level authorities are focusing only relief and response.
- d. Lack of capacity development and stockpiling: All of districts have not any capacity development plans like search and rescue trainings, first aid trainings, Hygiene promotion training and other emergency management trainings. Some of the events are carried by Nepal Red Cross Society and some I/NGOs however it is in very small scale. The prepositioning of life saving materials is not happening in all districts. Only Nepal Red Cross Society has nonfood items (NFI) for distribution which is negligible as compared with district populations.
- e. Significant economic loss and threat to food security: The increasing trend of disaster events is responsible for big number of human loss and significant economic loss. Number of floods in Terai and land slide in hill area is responsible for significant loss in agriculture land which is supporting for decrease in food production. This loss in production and productivity may increase food insecurity at any time.

Conclusion:

From the above analysis, it came to know that Nepal has policies for Disaster Risk Management. The first Act was formulated in 1982 and within thirty-two years of journey more than ten documents were formulated. About three persons have been killing per day in Nepal due to various forms of Disasters and every Nepalese is a risk from two hazards. Due to the unavailability of financial resources, lack of trained manpower on disaster management, the country's geographic topology and poor weather forecasting technology; Nepal is still at high risk from different types of disaster. The human and economic loss trend gives serious threats to policy makers, implementers and civil societies to take immediate actions. Disasters are causing effects in multiple sectors like livelihood, food security, tourism, development, education, health and Nutrition etc.

Recommendations:

Policy level intervention:

The existing policies are only focusing on relief distribution. The adequate policies focused on preparedness, capacity development of community and stakeholders, early recovery plan should be prepared and in place.

High level of Community engagement:

High level community engagement in planning, implementation and monitoring stages should be ensured. Community people are fully aware on the local context, capacity and gap of their community. Hence, their engagement will support for drafting favorable policies and plan.

Proper definition of Mainstreaming of DRR:

There are many policies and guidelines available in Nepal. Due to the clarity on role and responsibilities, effective implementation has not occurred. Hence, proper definition of mainstreaming with key guidance note, indicators and monitoring tools should be prepared and applied. Any policies should align with 13 steps of planning process.

Capacity development on Search and Rescue (SAR) & Emergency Management:

As the community people are the first responder, the capacity development efforts like training on search and rescues, first aid, relief distribution, Orientation on Sphere, training on Vulnerability Capacity Assessment (VCA) and comprehensive training on emergency management should be focused. Community volunteers, Female Community Health Volunteers (FCHVs), Teachers, Village Health Workers (FHW), representatives of ward citizen forum (WCF), youths, local stakeholders etc should be engaged in such type of capacity development efforts.

Further study is recommended to check the effectiveness of policies:

The effectiveness of such policies should be studied by involving community people and stakeholders in the different level. The preparedness focused Disaster Management Act should be drafted as soon as possible by clarifying roles and responsibilities of all stakeholders at different level.

The study was carried in only five districts. Hence, similar type of study is recommended to conduct in other disaster affected districts and communities.

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