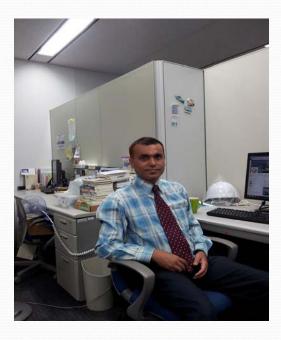
Disclaimer

This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries.

The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.

Institution for the management of natural disaster at national level, a sharing between Nepal and Japan, in reference to south Asian countries



VR Pradip Kumar Koirala



1st Visit at Neighbors and neighbor Museum











Kobe and Hyogo

Kobe City Emergency Management Center

- Crisis Management Center at Kobe,
- Observe the Emergency Control 119 Bureau and the Police Operation Rooms of Service
- Hyogo Prefectural Emergency Mgmt and Training Centre at Miki Disaster Management Park
- NuNoBiki Water Intake Facility and Kobe Water Science Museum at Kusudanichoto
- Kobe City Higashinada Water Sewage Treatment Plant and System







Presentations Mr. NatoriSan about the change pattern of disaster management in Japan

Some other presentations









ICHARM, at Grisp College Tokyo

JMA Osaka & Tsunam/Serge Prevention









Osaka Dotombory

Tokyo Cabinet Office

- Cabinet Office at Chiyoda-ku, presentation by Ms. Sasegawa, Deputy director general at Cabinet Office and meeting with the authorities
- Presentation on Business Continuity Plan (BCP) by Dr. Seiichiro Fukushima from RKK Consulting at Hibiya Library Tokyo







Research Theme

Institution for the management of natural disaster at national level, a sharing between Nepal and Japan, in reference to south Asian countries

Research background, scope, theme and objective

Desired field of research
Background and significance of the research
Scope of the research
Methodology of the research
Expected result
Application of the research result
Limitation of the research
Conclusion and finding

Nepal and Japan Afghanistan Bangladesh Bhutan India Maldives Pakistan Sri Lanka

Focal Noodle Agency and Regulation for Disaster Coordination

Nepal Disaster Management Division, Ministry of Home Affairs,

Natural Calamity (Relief) Act, 1982 (1st revision in 1989 and 2nd in 1992 Sep)

Japan Cabinet Office Disaster Management (Designated one Minister for DM),

Disaster Countermeasures Basic Act, 1961

Afghanistan Afghanistan National Disaster Management Authority (ANDMA),

National Law on disaster response, management and preparedness in the Islamic

Sate of Afghanistan (updated on 2006 and 2011)

Bangladesh Disaster Management and Relief Division, Ministry of Food and Disaster Mgmt.,

Disaster Management Act, 2012

Bhutan Department of Disaster Management, Ministry of Home and Culture Affairs,

Disaster Management Act of Bhutan, 2013

India National Disaster Management Authority (NDMA),

Disaster Management Act, 2005

Pakistan National Disaster Management Authority (NDMA),

National Disaster Management Act, 2010

Maldives National Disaster Mgmt Center, Ministry of Defense and National Security Services

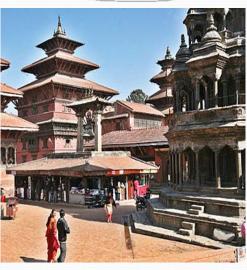
Disaster Management Act, 2006

Sri Lanka National Disaster Mgmt Center, Ministry of Disaster Mgmt and Human Rights,

Sri lank Disaster Management Act No. 3 of 2005

Nepal

Major Past Natural Disasters



- The great earthquake of 1255 has damaged palaces, temples, and houses in the Kathmandu Valley and killed one-third of its population. The reigning monarch, Abhaya Malla, had died six days after the earthquake as a result of injuries sustained during the event.
- 1934 (1990 BS) Great Earthquake with magnitude of 8.4 on the Richter scale, leaving 8519 people losing the lives
- 1988 (2045 BS), Udayapur Earthquake with 721 deaths, 6553 people injured, 64174 private buildings, 468 public houses, 790 government buildings damaged

Flood in Mahakali River at Darchula in 2013

Flood in 2013, Swapped a major part of residential land at the district headquarter Darchula







(Photo By: Pradeep Man Dangol / ICIMOD, 23 November 2012)

(Image Courtesy of Nagarik Daily, 18 June 2013)

2013/06/17, Because of heavy rain, two night continuously flooded in Mahakali River, swapped 156 houses just in district headquarter Darchula. Floods and landslides caused by heavy rains in May 2013 hit 29 districts of Nepal. A total of 69 people were killing, 29 people injured and 2,079 families (approximately 12,474 people) were displaced due to the flood and lanslide in 2013 (NDR, 2013).

Major Recent Natural Disasters



2012 (May 5) A great avalanches induced flood at Seti River, near Pokhara, taking life of 72 people, collasping around 30





 ${\bf 2012}$ (May), a big fire in Siraha District, burning around 1000 houses affecting 2063 people



2014 (August), Sunkoshi Blocked by big landslide, affecting around thousands of people in upper and lower river

Major Recent Natural Disasters

Koshi Flood 2008

2008 Big Flood at Koshi River/River embankment collapse, living 2.7 million people affecting (both at Nepal and India) and around 200 people death

- Rescue and Relief Standards, 2007 (1st revision in 2008 and 2nd in 2012 Jun)
- Prime Minister Disaster Response Fund Guideline 2006, (1st revision in 2008)
- PM Natural Disaster Response Fund (from 2006) activated intensively
- Disaster Related Funds at Line Ministries, in process of creation from 2008
- National Strategy for DRM, 2009
- The Cabinet at OPMCM takes active role from 2008
- National Risk Reduction Consortium (NRRC) 2009-2014, chaired by Home Secretary from 2009
- Five Flagship Program 2009-2014 from 2009
- Rescue and Treatment Sub-committee chaired by Health and Population Minister play active role from 2008
- Supply, Shelter and Rehabilitation Subcommittee, chaired by Urban Minister play active role from 2008
- National Platform on Disaster Risk Reduction, 2008
- National Emergency Operation Center at National Levels and Regional/District Emergency Centers (EOCs) from 2010
- SAHANA Program for data collection, processing and for dissemination from 2011
- Publication of Disaster Report started, till date the reports are of 2009, 2011, 2013
- Disaster Preparedness and Response Plan (DPRP) Guideline, 2011
- Local Disaster Risk Management Guideline, 2012

of about 2 billion Nepal rupees





	•	1255 (1310 BS), the first	•	General	rules	and	regulation	•	Prime	Minister	and	Home
		recorded earthquake in history of					and social		Ministe	er		
		Nepal		harmony,	not sp	ecific	to disaster	•		Ministry,		
	•	1260 (1316 BS), recorded big		managen	nent				police	and Army (a	as per n	eed) for
		earthquake								r response		
	•	1408 (1463 BS), a major						•		work has be	•	
		earthquake							at that	time as a so	cial wor	k
	•	1833 (1890 BS) great earthquake										
	•	1934 (1990 BS) Great Earthquake										
		with magnitude of 8.4 on the										
		Richter scale, leaving 8519 people										
ŀ		losing the lives		NT / 1	G 1	(D.	1. () 4 .		G . 1			D 11 C
	•	1980 (2037 BS), 6.5 Richter scale	•				lief) Act,			Natural 1		
		earthquake in eastern part of the					1989 and			ittee (CNDI		Control of the Contro
		country		2nd in 19			A -4 1000		Home	Minister, ac		
	•	1988 (2045 BS), Udayapur	•			rnance ural	Act, 1999			 Regions Relief (
		Earthquake with 721 deaths, 6553 people injured, 64174 private	•	Central			Disaster shed by the			(RDRC		
		buildings, 468 public houses, 790		Act of 18		establis	sned by the			Region		d by
		government buildings damaged		Act of 18	192					Admini		rom
		1993 flood in the Terai region,								1982	Strator 1	TOIII
	•	taking life of 1,289 people and							Distric		ter	Relief
		affecting 575,000 people								ittee (DDR		
		1994 (2051 BS) earthquake in								District Office		
		Mid Western Region affecting							Celebra			National
		around 700 people								iake Safety		
		1998, flood affecting an about half							2 ar arq	and Burety	_u, 110	1///
		million people with the total loss										

								-				
•	2008	Big	Flood	at	Koshi		Rescue	and	Relief	Standards,	•	National Strategy for DRM, 2009
	River	River e	embankm	nent co	llapse,		2007 (1	lst revi	ision in	2008 and	•	The Cabinet at OPMCM takes
	living	2.7 mi	llion peo	ple aff	ecting		2nd in 2	2012 Ju	n)			active role from 2008
	(both	at Ne	pal and	India) and	•	Prime	Mi	nister	Disaster	•	National Risk Reduction
	around	d 200 p	eople de	ath			Respons	se Fun	d Guide	eline 2006,		Consortium (NRRC) 2009-2014,
							(1st rev	ision in	2008)			chaired by Home Secretary from
						•	PM Na	atural l	Disaster	Response		2009
							Fund fro	om 200	6		•	Five Flagship Program 2009-
						•	Disaster	r Relat	ed Fun	ds at Line		2014 from 2009
							Ministri	ies, in j	process	of creation	•	Disaster Preparedness and
							from 20	800				Response Plan (DPRP) Guideline
											•	Rescue and Treatment Sub-
												committee chaired by Health and
												Population Minister play active
												role from 2008
											•	Supply, Shelter and
												Rehabilitation Subcommittee,
												chaired by Urban Minister play
												active role from 2008
											•	National Emergency Operation

- 2011 Sikkim Eartahquake with 6.8 Magnitude killing 16 People and affecting thousand of people of the east part of the country
- 2012 (May 5) A great avalanches at Seti River, taking life of 72 people and damaging millions of worth
- 2012 (May), a big fire in Siraha District, burning around 1008 houses affecting 2063 people
- 2010 the cold-wave considering the major disaster in Terai Region and the incident of fire has increased in those regions

- Rescue and Relief Standards, 2007 (1st revision in 2008 and 2nd in 2012 Jun)
- Government Work Division Regulation, 2012 May
- Local Level Disaster Management Funds, mobilized by Development District Committee active from 2012
- Open Space Cabinet Decision, 2013
- Directive for Relief from Coldwave to the economically deprive people, 2012

Local Disaster Risk Management Guideline, 2012, LDRMP

Emergency

Center at National Levels and

National Platform on Disaster Risk Reduction, 2008, NPDRR Publication of Disaster Report started, till date the reports are of

Centers (EOCs) from 2010 SAHANA Program for data collection, processing and for

dissemination from 2011

Regional/District

2009, 2011, 2013

- Guideline for the relief to coldwave victims, 2012
- Various Line Ministries, presuming the duty of Disaster Management creating either unit or focal point from 2012
- National Disaster Response Framework, 2012
- Ten Cluster and one Early Recovery Network owned by Government Ministries from 2012
- Post-Disaster Dead body management Guideline, 2012
- APF Disaster Management Training Center, along with DM from 2012
- Ministry of Home Affairs, Disaster Management Division in
- Disaster management section at MOFALD and DM Units in different Ministries from 2013
- DM Units/Squared/Brigades at the three Security Forces from 2013

•	2014 (August), Sunkoshi Blocked by big landslide, affecting around thousands of people in upper and lower river streams	National Strategic Action on Search and Rescue, approved by cabinet	•	DRR Portal, one stop to all disaster related activities in Nepal from 2014 Health Emergency Operation Center, along with Emergency Centers at TIA, Red cross, Security forces and UN Agencies from 2014
•	Since 1971 there is a record of significant loss of lives and livelihoods due to floods, landslide and fires on every single year		•	National Disaster Management Act (Proposed) in process till to date Establishment of National Disaster Management Agency (NDMA) is in process

The change in Policy is not substantive and does not have necessary relation with the Disaster Incidents

In Japan

1923 • Great Kanto Eqk M7.9	1897 • Erosion Control Act	Traditional institutions
(142,807)	1924 • First Seismic Building Code	
1925 • North Tajima Eqk M6.8 (428)	 Directly impacted by Great Kanto 	
1927 • North Tango Eqk M7.3 (2,925)	Eqk of 1923	
1930 • North Izu Eqk M7.3 (272)		
1933 · Showa Sanriku Eqk &		
Tsunami M8.1 (3,064)		
1943 • Tottori Eqk M7.2 (1,083)		
1944 • Tonankai Eqk M7.9 (998)		
1945 • Mikawa Eqk M6.8 (2,306)	1947 • Disaster Relief Act	
1945 • Typhoon Makurazaki (3,756)	1949 • Flood Control Act	
1946 • Nankai Earthquake M8 (1,443)	1950 • Building Standard Law	
1947 • Typhoon Catherine (1,930)	 Directly impacted by Fukui Eqk of 	
1948 • Fukui Earthquake M7.1	1948	
(3,769)		
1948 • Ion Typhoon (838)		
1950 • Jane Typhoon (539)		
1951 • Ruth Typhoon (943)		
1952 • Tokachi-oki Eqk M8.2 (33)		

Up to 1960's, not really have fond implication on policy change from disaster incidents

1953 • North Kyushu Rain	1957 • Dam Control 1960 • Ise-wan Typhoon was the
1953 • Nanki Torrential Rain	Multipurpose Act 1st Epoch-Making Turning Point
(1,124)	1960 • Soil Conservation and and it has enacted the DCMB Act,
1954 • Toyamaru Typhoon	Flood Control Urgent 1961
(1,761)	Measures Act .From Response oriented to
1958 • Kanogawa Typhoon	1961 • Disaster preventive approach
(1,269)	Countermeasures Basic Act, Individual to comprehensive
1959 • Typhoon Ise-wan (5,098)	1961, DCBA multi-sector approach
1960 • Chile Earthquake M8.5	Expenditure to investment for
(139)	disaster risk reduction
	.National to national, prefecture
	and municipal government
	responsibilities

 $1960\,$ \cdot Ise-wan Typhoon was the 1st Epoch-Making Turning Point and it has enacted the DCMB Act, $1961\,$

1961 • Heavy Snowfalls	1962 • Act on Special	1961 • Formulation of comprehensive and strategic DM
1964 · Niigata	Financial Support to Deal with	System
Earthquake M7.5 (26)	Extremely Severe Disasters	 Annual Gov't Official Report on Disaster
1968 • Tokachi-oki Eqk	1962 • Act on Special	countermeasure
M7.9 (52)	Measures for Heavy Snowfall	Investment for disaster prevention
	Areas	Formulation of National DRR Platform
	1966 • Act on Earthquake	• Definition of responsibility of DM and state of disaster
	Insurance, this action is made	emergency
	from Niigata Eqk, 1964	1962 • Establishment of Central Disaster Management
		Council, provisioned by DCBA, 1961
		1963 • Basic Disaster Management Plan for Disaster
		Prevention, provisioned by DCBA, 1961
		1961 • Designation of Disaster Reduction Day

1973 • Mt. Sakurajima Eruption	1973 • Act on Special Measures	1979 • Tokai Earthquake
1973 • Mt. Asama Eruption	for Active Volcanoes	Countermeasures Basic Plan
1974 • Izu-hanto-oki Equk M6.9	1978 • Act on Special Measures for	1980 · Countermeasure
(30)	Large-Scale Earthquakes	Improvement Projects in Areas for
1976 • Seismological Society of	1980 • Act on Special Financial	Intensified Measures
Japan's report about the possibility of	Measures for Urgent Earthquake	1981 • Revision of Building
Tokai Earthquake	1981 • Amendment of Building	Standard Law
1978 • Izu-Oshima Kinkai Eqk M7	Standard Law, the Miyagi-ken-oki	1983 • Designation of Disaster
(25)	Eqk of 1974 has lead this	Reduction Week Campaign
1978 • Miyagi-ken-oki Eqk M7.4		
(28)		
1983 • Japan Sea/Nihonkai Chubu		
Eqk M7.7 (104)		
1984 · Nagano-ken Seibu Eqk M6.8		
(29)		

2000 • Torrential Rains in	2000 • Act on Promotion of Sediment	2001 • Establishment of the Cabinet Office
the Tokai Region	Disaster Countermeasures for Sediment	2003 • Policy Framework for Tokai Earthquake
2004 · Niigata-Fukushima	Disaster Prone Areas	2003 • Policy Framework for Tonankai and Nankai
Torrential Rains and other	2101 • Amendment of Flood Control Act	Earthquakes
rains	2002 • Act on Special Measures for	2003 • Tokai Earthquake Countermeasures Basic Plan
2004 · Niigata-ken-Chuetsu	Promotion of Tohnankai and Nankai	2004 • Tonankai and Nankai Earthquake
Eqk M6.8 (68)	Earthquake Disaster Management	Countermeasures Basic Plan
2004 · Heavy Rain	2003 • Specified Urban River Inundation	2005 • Tokai Earthquake Disaster Reduction Strategy
Nationwide	Countermeasures Act	2005 • Tonankai and Nankai Earthquake Disaster
2007 • Noto Peninsula Eqk	2004 • Act on Special Measures for	Reduction Strategy
M6.9 (1)	Promotion of Disaster Management for	2005 • Policy Framework for Tokyo Inland
2007 • Niigata Chuetsu Eqk	Trenchtype Earthquakes in the Vicinity	Earthquakes
M6.8 (15)	of the Japan and Chishima Trenches	2006 • Policy Framework for Trench-type
2008 • Tagagawa Flash	2005 • Amendment of Flood Control Act	Earthquakes in the Vicinity of the Japan and Chishima
Flood	2005 • Amendment of Act on Promotion	Trenches
2008 • Iwate/Miyagi Inland	of Sediment Disaster Countermeasures	2006 • Tokyo Inland Earthquake Disaster Reduction
Eqk M7.2 (23)	for Sediment Disaster Prone Areas	Strategy
	2005 • Amendment of Act on Promotion	2006 • Basic Framework for promoting a Nationwide
	of the Earthquake-proof Retrofit of	Movement for Disaster Reduction
	Buildings	2008 • Disaster Management Strategy for Trench-type
	2005 • Hazard Map (at municipality level)	Earthquakes in the Vicinity of the Japan and Chishima
	Preparation Guideline	Trenches
	2006 · Amendment of Act on the	2009 · Chubu and Kinki regions Inland
	Regulation of Residential Land	Earthquake Countermeasures Basic
	Development	Plan

In 2001, DM Subject has moved to Cabinet Office.

CONCLUSION AND FINDING

- Changing focus form response to preparedness
- ERT vs. DPT. Emergency Response Type/Disaster Preparedness Type

Focus on effective response
 Cure the situation
 Conducted for Victims
 Direct result can be seen
 Focus on Preparedness
 Care the Situation
 Done for everybody
 Indirect Results

Security related agency leads
 Do not care on Preparedness
 Do not care on response

- Coordinating agency of government for DRR at national level
- Disaster management as a business for all
- Coordination from the central national coordinating agency
- Use of learned lessons
- Consideration of past recommendation for institutional set up/UNISDR
- Institution for disaster management at national level
- Some alternatives for proper institutional set up
- Proper institutional setup for overall DM at national level

Trend of Disaster Management in 21th Century

- Recognition of one way approach is insufficient
- Combination of ERT and DRT

	Emergency Response	Disaster Prevention
EMT		
DPT		
	Cure	Care
	Everyone	Only Patient

Dr. OgawaSan Slide at Kanagawa

Some alternatives for proper institutional set up

Proper institutional setup for overall DM at national level

CONCLUSION AND FINDING

Shift from ERT to DPT is necessary

Nepal Disaster Management Division, Ministry of Home Affairs,

Bhutan Department of Disaster Management, Ministry of Home and Culture Affairs,

Disaster Management Bureau (lead by one minister) at the Office of Prime Minister and

Council of Minister Japan

Disaster Management Ministry Bangladesh, Sri Lanka, Maldives

National Disaster Management Authority (independent) under the Office of Prime Minister and Council of Minister India, Pakistan, Afghanistan

This conclusion and findings do value the current national situation and condition, taking into account the ground necessity and the system varies from national culture to culture, accepting the sole responsibility of the country to adopt the proper system, as the country think necessary.

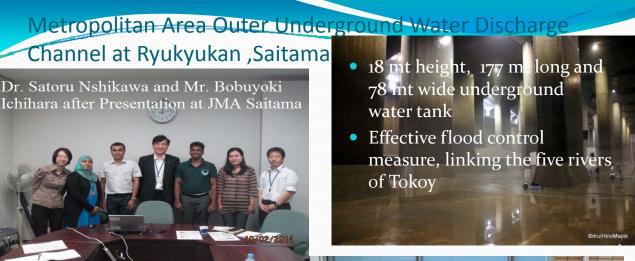
Strength/Opportunity

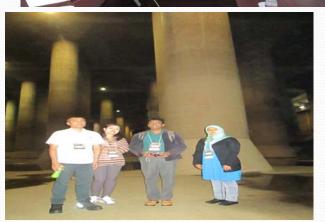
- Access to the material/well working environment
- Cordial Relation with ADRC Staff, Good support from all, frequent and regular contact with ShiomSan
- Introduction to the Academia People, Professors from Kyoto, Kobe, Tokyo, Kanagawa and Tohoku Universities
- Praiseworthy VR Networks
- Fruitful Exposure Visits to Tokyo, Sendai, Nagasaki, Yokohama, Kyoto, Hyogo
- Visit to the different Disaster Related Museums
- Knowledgeable Presentations from experts
- GIS Map Making/Sentinel Asia/DM Japanese System
- Acquaintance of Japanese Social life and Food

Further Improvement

- Expand VR Alumni/Network/a common platform
- Ex-VR Conference in important
- Sential Asia, ADRC can play ex-ante role, asking/offering the support in time of disaster
- General Assembly. before the GA, Preparatory Committee Meeting required, some quantitate target for disaster reduction can be worked out
- Small Grant Project from ADRC, Gov. Counter Part Agency can not make a Project, So, recommended NGO may be a solution
- In time of VR out from Kobe for exposure visit, some extra expense needed/also some extra money for cargo/luggage

Some concern to ADRC







Tohoku Forum for Creativity Sendai

International Workshop on Implementation of Practical Disaster Risk Reduction

Group work in Early Warning Group with presentation about EW and





Tsunami Affected Kesennuma and Sendai

Field visit trip to Tsunami Affected Kesennuma, now it can be seen the recovery process is going on there.

Also the tsunami affected Sendai area - Gamou, where 150 people had died among the 1500 population from the tsunami,

Visited Arahama, where 186 has lost their life among the 2700

Visited Yriage, where 900 people lost their life among the 2900 population from the tsunami.

It also got briefed how the Arahama Elementory School and the Yuriage Junior High School Building has served as a life saving building for most of them at that time of tsunami,





Nagasaki

- Mt. Unzen Volcanic Eruption affected areas at Shimabara
- Presentation about Nakasima River Flood Management from Nagasaki Prefecture Public Works Department
- Nagasaki Office of River and Road
- Atomic Bomb Museum and Peace Park







Disaster Drills

- Ashiya City Disaster Response Drill, especially engagement of the community people in disaster response
- Disaster Management Drill at Kyoto, focusing on the fire services in the ancient area of Kyoto
- Toga Area BOKOMI Drill, focusing on Fire extinguishing, Bucket Relay, Smoke Experience and Takidashi Drill









Gracious Place to Visit











Peace Park Nagasaki

