

**DRAFT
NATIONAL DISASTER MANAGEMENT PLAN
2012 - 2015**

**PREPARED FOR THE INSTITUTIONAL STRENGTHENING AND CAPACITY
DEVELOPMENT ON DISASTER RISK MANAGEMENT IN LAO PDR PROJECT**

**GOVERNMENT OF LAO PDR
NATIONAL DISASTER MANAGEMENT OFFICE OF THE
MINISTRY OF LABOR AND SOCIAL WELFARE**

UNITED NATIONS DEVELOPMENT PROGRAM LAO PDR

PROJECT NUMBER: 00074178

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PART I

BACKGROUND



**Lao People's Democratic Republic
Peace, Independence, Democracy, Unity, Prosperity**

National Disaster Management Plan

DRAFT Forward

The National Disaster Management Plan is an outcome of the national and international commitments of the Government of Lao PDR through the National Disaster Management Committee and the National Disaster Management Office of the Ministry of Labor and Social Welfare to create a more disaster resilient nation. The plan has been developed on the basis of a national vision and mission to reduce the vulnerability of all the people of the Lao PDR to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level by a) bringing a paradigm shift in disaster management from conventional response and relief practice to a more comprehensive risk reduction culture and b) strengthening the capacity of the Lao PDR disaster management system in improving the comprehensive response and recovery management at all levels.

The Lao PDR is taking a holistic approach for disaster management where emphasis has been given to work together with all the stakeholders and build strategic, scientific and implementation partnerships. The role of Government of Lao PDR, through the National Disaster Management Committee, is to ensure that risk reduction and comprehensive disaster management is a focus of national policy and programmes.

The Plan reflects the disaster risk reduction initiatives since creation of the National Disaster Management Committee in 1999 in line with the paradigm shift in disaster management from conventional response and relief to a more comprehensive risk reduction culture. The Plan seeks to address the current disaster risk threats facing the Government and people in the Lao PDR as well as bringing other important issues, such as risk reduction/mitigation, capacity building, climate change adaptation, livelihood security, gender mainstreaming, community empowerment as well as response and recovery management, into a four-year action plan. The plan also will act as a basic guideline for all relevant agencies in strengthening better working relations and enhancing mutual cooperation.

The Government of Lao PDR is committed to the implementation of its risk reduction framework and we congratulate the developers of the National Disaster Management Plan which shall contribute to achieving both the sustainable development goals in the National Socio-Economic Development Plan and the Millennium Development Goals.

DATE:

(SIGNED: Deputy Prime Minister, Lao PDR and Chairman, National Disaster Management Committee)

ACRONYMS AND ABBREVIATIONS

AADMER	ASEAN Agreement for Disaster Management and Emergency Response	IHR	International Health Regulations
ACMECS	Ayeyawady - Chao Phraya - Mekong Economic Cooperation Strategy	INGO	International Non-Governmental Organisation
ADB	Asian Development Bank	INSARAG	International Search and Rescue Advisory Committee
ADPC	Asian Disaster Preparedness Centre	IO	International Organisation
AHA Centre	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management	IOM	International Organisation for Migration
APSED	Asia Pacific Strategy for Emerging Diseases	JICA	Japan International Cooperation Agency
ARPD	ASEAN Regional Program for Disaster Management	L-JATS	Lao-Japan Airport Terminal Services
ASEAN SASOPS	Association of Southeast Asian Nations ASEAN Standby Arrangements and Standard Operating Procedures	LRC	Lao Red Cross
AUSAID	Australian Agency for International Development	MAF	Ministry of Agriculture and Forestry
CBDP	Community Based Disaster Preparedness	MBDS	Mekong Basin Disease Surveillance
CBO	Community Based Organization	MCDA	Military and Civil Defense Assets
CCA	Common Country Assessment	MCTPC	Ministry of Communications, Transport, Post and Construction (now MPWT)
CRA	Community Risk Assessments	MDG	Millennium Development Goal
CRED	Center for Research on the Epidemiology of Disasters	MoND	Ministry of National Defense
DCA	Department of Civil Aviation	MoE	Ministry of Education
DCDC	District Communicable Disease Committee	MoEM	Ministry of Energy and Mines
DDMC	District Disaster Management Committee	MoF	Ministry of Finance
DIPECHO	Disaster Preparedness Programme European Commission	MoFA	Ministry of Foreign Affairs
DMC	Disaster Management Committees	MIC	Ministry of Information and Culture
DMH	Department of Meteorology and Hydrology	MLSW	Ministry of Labour and Social Welfare
DMP	Disaster Management Plan	MoH	Ministry of Health
DRM	Disaster Risk Management	MOU	Memorandum of Understanding
DRR	Disaster Risk Reduction	MPS	Ministry of Public Security
ECSPA	Economic Cooperation Strategy Plan of Action	MPWT	Ministry of Public Works and Transport
EOC	Emergency Operations Center	MRC	Mekong River Commission
FAO	UN Food and Agriculture Organization	NAHICO	National Avian and Human Influenza Coordination Office
FDC	Flood and Drought Committee	NAICPPP	National Avian Influenza Control and Pandemic Preparedness Plan 2006-2010
FDD	Food and Drugs Department	NAPA	National Adaptation Programme of Action to Climate Change
GMS	Greater Mekong Sub-region	NAPT	National Authority for Post and Telecommunications
GoL	Government of Lao PDR	NASRET	National Search and Rescue Team
GTS	Global Telecommunication System	NCCCD	National Coordination Committee on Diseases
HDI	Human Development Index	NCCDC	National Committee on Communicable Diseases and Control
HFA	Hyogo Framework for Action	NCLE	National Centre for Laboratory and Epidemiology
IASC	Inter-Agency Standing Committee	NDMC	National Disaster Management Committee
ICRC	International Committee of the Red Cross	NDMO	National Disaster Management Office
IDRL	International Disaster Response, Laws and Principles	NDPC	National Disaster Prevention Committee
IDRL Guidelines	Guidelines for the Domestic Facilitation and Regulation of International Disaster Relief and Initial Recovery Assistance	NEIDCO	National Emerging Infectious Disease Control Office
IFRC	International Federation of Red Cross and Red Crescent Societies	NGO	Non-Government Organisation
		NGPES	National Growth and Poverty Eradication Strategy
		NPA	Non-Profit Association
		NSAP	National Strategic Action Plan
		NSEDP	National Socio-Economic Development Plan
		NTA	National Tourism Authority
		NWSS	National Weekly Surveillance System
		PCDC	Provincial Communicable Disease Committee

PDMC	Provincial Disaster Management Committee	UNICEF	United Nations Children's Fund
PDR	People's Democratic Republic	UNISDR	United Nations International Strategy for Disaster Reduction
PMO	Prime Minister's Office	UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
PRSP	Poverty Reduction Strategy Papers	UNRC	United Nations Resident Coordinator
SAR	Search and Rescue	UXO	Unexploded Ordnance
SARS	Severe Acute Respiratory Syndrome	VCA	Vulnerability and Capacity Assessment
SNAP	Strategic National Action Plan	VDPU	Village Disaster Protection Unit
SOP	Standard Operating Procedure	WB	World Bank
STEA	Science and Technology Environment Agency	WFP	World Food Programme
UNDAC	United Nations Disaster Assessment and Coordination	WHO	World Health Organisation
UNDMT	United Nations Disaster Management Team	WMO	World Meteorological Organization
UNDP	United Nations Development Programme	WRCC	Water Resources Coordination Committee
UNGA	UN General Assembly	WREA	Water Resources and Environment Administration

CONTENTS

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PART I	BACKGROUND	2
	Forward	3
	List of Acronyms and Abbreviations	4
	Table of Contents	6
1.	INTRODUCTION	8
1.1.	Background	9
1.2.	Purpose and Objective	10
1.3.	Planning Process	11
1.4.	Linkages with National Development Policies and Plans	11
2.	DISASTER RISKS AND HAZARDS IN LAO PDR	11
2.1.	Hazard Profile.	13
2.1.1.	Floods	13
2.1.2.	Drought	14
2.1.3.	Storms	15
2.1.4.	Disease Outbreaks and Epidemics	15
2.1.5.	Unexploded Ordnance (UXO)	16
2.1.6.	Landslides	17
2.1.7.	Agricultural Pests and Rodent Infestation	17
2.1.8.	Forest and Land Fires	17
2.1.9.	Urban, Environmental or “Technological” Hazards	18
2.1.10.	Earthquake	19
2.1.11.	Climate Change	19
2.2.	Underlying Vulnerabilities	19
PART II	NATIONAL DISASTER MANAGEMENT STRATEGY	21
3.	STRATEGY FOR DISASTER RISK MANAGEMENT AND RISK REDUCTION	22
3.1	Vision	22
3.2	Complementarity to HFA Objectives	22
4.	DISASTER RISK MANAGEMENT PLAN	23
4.1	Disaster Risk Management Framework	25
4.2	Roles and Responsibilities of the National Disaster Management Committee	27
4.3	Role and Responsibilities of the National Disaster Management Office	32
4.4	Role of Provincial, District and Village Structures and Responsibilities	32
4.5	Roles for Regional/International Supporting Agencies	34
5.	ACTION PLAN FOR DISASTER RISK REDUCTION	35
5.1	National Disaster Management Plan Action Matrix 2012 -2015	36
5.2	Summary of Disaster Risk Reduction Initiatives 2012 -2015	50
5.3	Disaster Risk Reduction Priorities	52

6.	IMPLEMENTATION	54
6.1	Re-engineering Mandates for Disaster Risk Management	54
6.2	Implementation Mechanisms	55
6.3	Funding	55
6.4	Monitoring and Evaluation	57

List of Annexes

Annex A	Disaster Risk Reduction Roles and Responsibilities in Pre-Disaster, Ongoing and Post-Disaster Cycle	58
Annex B	NDMO Restructuring and New Terms of Reference	75
Annex C	Disaster Terminology	91
Annex D	Linkage of the Key Strategic Goals to Key National and International Drivers for Change	94
Annex E	Millennium Development Goals and Disaster Risk Reduction	99

List of Tables

Table I.	Natural disaster profile of Lao PDR	12
Table II	Damage caused by floods in Lao PDR from 1966-2008	13
Table III.	Drought events and damage in Lao PDR	15
Table IV.	What Does Disaster Risk Reduction Look Like?	24
Table V.	Proposed National Disaster Management Committee	25
Table VI.	Summary of Disaster Risk Reduction Initiatives 2012-2015	50

List of Figures

Figure 1.	Provincial Map and Demographics of Lao PDR	12
Figure 2.	Lao PDR National Disaster Management Organization Chart	26
Figure 3.	Proposed National Disaster Management Office Organization Structure	75

1. INTRODUCTION

As the government of the Lao People's Democratic Republic (Lao PDR) proceeds to build its natural resource-rich environment into a modern, market-based economy, international development interests are providing more support for the benefit of all the people of the country. The environment provides the natural resources which comprise the country's exploited and unexploited wealth, and the geographical characteristics which have impeded more rapid social and economic development in the past. The environment also contains natural hazards that create periodic conditions of destruction or extreme hardship for many of the country's 6.1 million people.¹

It is now widely recognized that the adverse consequences of natural disasters² can easily destroy hard won accomplishments and waste resources committed to national development efforts in any country. It is the most impoverished countries, which suffer comparatively greater loss from disasters. In addition to causing the loss of both capital and personal assets, disasters often result in the diversion of national resources from development activities for short-term emergency relief and recovery.

The main mission of the Government is to bring a paradigm shift in disaster management approach from conventional response and relief to a more comprehensive risk reduction culture and to promote food security as an important factor in ensuring the resilience of the communities to hazards.

The primary hazards³ in the Lao PDR with a significant potential for large scale destruction of property or loss of social and economic assets are floods and droughts. As the country has the largest per capita availability of fresh water anywhere in Asia, there is no anticipated acute shortage. There are however, strongly marked wet and dry seasons and a topography which accentuates localized conditions. There are also considerable fluctuations in precipitation throughout the year and among different areas of the country.

¹ 6,127,910 persons as per the Lao Department of Statistics, Ministry of Planning and Investment 2009. P.22. June 2010.

² While there are many possible definitions of disasters, the one which will be used throughout this document is, 'A serious disruption of the functioning of a community or society involving widespread human, material, economic or environmental losses and impacts, which exceed the ability of the affected community or society to cope using its own resources.' Disasters are often described as a result of the combination of exposure to a hazard; the conditions of vulnerability that are present; and the insufficient capacity or measures to reduce or cope with the potential negative consequences.

³ The general definition of hazard used here is an event which has the potential to cause a disaster, and can be either natural (e.g. flood, cyclone, tsunami), human induced (e.g. chemical spill, fire), biological (e.g. SARS, Bird Flu) or technological in nature (e.g. nuclear generator failure). Hazards are not by definition disasters. Hazards include: (a.) A cyclone, earthquake, flood, storm surge, tornados, tsunami, riverbank erosion, drought, landslide, hailstorm or other natural happening; (b) An explosion or fire, a chemical, fuel or oil spill, or a gas leak; (c.) An infestation, plague or epidemic; (d). A failure of, or the disruption to, an essential service or infrastructure; and (e) A process of organic origin or those conveyed by biological vectors, including exposure to pathogenic micro-organisms, toxins and bioactive substances.

Droughts or floods may occur somewhere in the country during any year, and both occur in some years, as happened in 1972, 1979, 1986, 1991, 1992 and 1993. There have been 43 occurrences of either flood or drought during the period 1965-2008. Floods have the greatest macro-economic impact on the country and affect a greater number of people.

The effects of drought can be even more severe on individual victims, as frequently the affected people lead a subsistence existence with limited reserves and few economic options. It is generally the Northern provinces or highland areas adjacent to Vietnam where drought conditions or prolonged food scarcity are experienced. Because of the frequently rugged terrain and few roads, the areas prone to drought are more difficult to access for the provision of relief.

There are other lesser hazards which occur in the country or ones which have a more localized or limited affect on matters of national development. Some, like HIV/AIDS may have severe repercussions, but are already being addressed in other sectoral or national programmes. Others, such as urban, environmental, or “technological” hazards are not yet a serious concern, but an increased awareness of their potential should be considered in the context of national developmental planning. These other hazards are of interest to the general aspects of disaster risk management but attention will be concentrated on the major, slow-onset, natural disasters with present, significant national impact.

According to the National Disaster Management Office, more than one million people were affected by floods and 97,000 people by drought during the period 2000-2007. The assessed losses to the floods during this period were in excess of US dollars eight million and the losses to drought set at US dollars 84,251. Losses were also incurred during the August 2008 floods along the Mekong River and the September 2009 floods associated with Typhoon Ketsana.

1.1 Background

Following assistance in the development of aptitudes in disaster management by the United Nations Development Programme from 1997 to 1999, the Lao PDR created a simplistic model to guide disaster risk reduction and emergency response management efforts. The establishment of the National Disaster Management Committee (NDMC) through the Prime Minister’s decree 158 (August 23, 1999) and the creation of its secretariat, the National Disaster Management Office were important steps forward by the Government. The responsibilities of the NDMC include the development of disaster management policies, mobilization and coordination of national and international assistance, information management and public awareness, disaster preparedness, response and recovery and promotion of local disaster management committees at the district and village levels.

A subsequent decree 097/MLSW and the National Strategic Plan for Disaster Risk Management 2003-2020 (1139/MLSW of 18 April 2003) provided the current policy framework for disaster management in the nation with the aim to: reduce disaster risk to the communities and strengthen capacities of disaster management bodies at the national, local and community levels on disaster risk management.

The Lao PDR has adopted the Hyogo Framework of Action at the World Conference on disaster risk reduction in Kobe in 2005 and is also a signatory of the Delhi Declaration of 2007. Thus, the Government of Lao PDR had recognized disaster risk reduction as a key development

priority that encompasses hazard mitigation and vulnerability reduction through an effective preparedness strategy aimed at reducing the effects of natural and man-made disaster, particularly in rural areas.⁴

Of particular importance was progress noted in the following areas:

- The establishment of National and Provincial Disaster Management Committees;
- Workshops and capacity development training on disaster risk management have been conducted for local disaster management bodies and rural/urban communities;
- Provincial Disaster Management Plans are in development in addition to district level flood preparation plans;
- Discussion has begun to integrate disaster risk reduction into development policies, planning, rural development plans and the national poverty reduction plan;
- Mainstreaming disaster risk reduction into school curriculums;
- Hazard and vulnerability risk mapping being conducted;
- Closer cooperation being developed in support of weather forecasting and flood early warning and dissemination and;
- Strong partnerships being developed with international partners to strengthen disaster preparedness and risk reduction.

1.2. Purpose and Objective

The National Disaster Management Plan follows the Hyogo Framework for Action (HFA) as the overall framework to guide the response of stakeholders in addressing the impact of disasters. A strong emphasis, however, is given towards strengthening sub-national capacities, particularly at the provincial and community level, to fully support the government priority of poverty reduction as elaborated in national development plans and policies.

The objectives of this National Disaster Management Plan are to:

- Align the strategic direction of disaster management programs with national priorities and international commitments.
- Articulate the vision and goals for disaster management
- Outline the strategic direction and priorities to guide the design and implementation of disaster management policies and programs.
- Create a cohesive and well-coordinated programming framework incorporating government, non-government and private sector.
- Ensure that disaster management has a comprehensive and all-hazards focus comprising disaster risk reduction and emergency response.
- Illustrate to other ministries, NGOs, civil society and the private sector how their work can contribute to the achievements of the strategic goals and government vision on disaster management.

⁴ H.E. Dr. Ty Phommasack, Vice Minister of Agriculture and Forestry. 3rd Asian Ministerial Conference on Disaster Risk Reduction December 2-4, 2008, Kuala Lumpur proceedings. pp. 131-132.

1.3. Planning Assumptions

The analysis of hazard risks, vulnerabilities and dynamic pressures bring home a scenario of more people living in and around hazard-prone areas. Current trends suggest that more people will be living in existing settlements in hazard-prone areas and new settlements will continue to spring-up with expanding population. These trends may worsen over the years since the population of Lao is on the rise. At the other end, the frequency, severity and intensity of certain hazards is on the rise; e.g. droughts, flooding, soil erosion and landslides, resulting from environmental degradation and climate change. From these scenarios it could be concluded that disasters in future will be more frequent and their social, economic and environmental impacts higher than before. In addition, regions that previously were not prone to certain hazards (e.g. droughts, flooding), may experience them in future.

1.4. Linkages with National Development Policies and Plans

The findings of the National Risk Profile of Lao PDR, including the national risk profiling for the country, will create the basis for incorporating appropriate risk reduction strategies and prioritizing them into the country's development planning by the Government of Lao PDR. It is expected that the findings of the proposed study will allow decision makers to prioritize risk mitigation investments and measures to strengthen the emergency preparedness and response mechanisms for reducing future losses and damages due to natural disasters. It would further assist donor agencies, development partners and so on, in adopting a risk reduction strategy for Lao PDR through appropriate financing mechanisms.

- map out all hazard prone areas and respective hazard zones based on historic disaster events;
- identify and assess the exposure of people, property, critical facilities, infrastructure and economic activities to those hazards;
- carry out preliminary assessments of the potential damage state of the identified elements at risk with reference to expected hazard intensities;
- and create preliminary national multi-hazard profiles in terms of hazards and sectors to identify priorities for National Disaster Risk Reduction Strategies.

2. DISASTER RISKS AND HAZARDS IN LAO PDR

EM-DAT⁵ has published a broader profile of disasters in Lao PDR. The profile shows that drought has affected a large population: in five drought events more than 4.25 million were affected. Epidemics have proven to be the biggest killer with about 578 people killed in five events. More frequent events are floods in the Mekong River which have affected more than 3.45 million people.

The ADPC study, 'Developing a National Risk Profile of the Lao PDR' has revealed that the Lao PDR is prone to various geological, hydro-meteorological and human induced hazards with specific degrees of severity.

⁵ "EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net - Université Catholique de Louvain - Brussels - Belgium"

Table I: Natural Disaster Profile of Lao PDR⁶

Disaster		Number of Events	Killed	Total Affected	Damage (000) US \$
Drought	Drought	5	-	4,250,000	1,000
	Unspecified	3	44	9,685	-
Epidemic	Bacterial Diseases	2	534	8,244	-
Epidemic	Viral Diseases	3	208	2,000	-
Flood	Unspecified	10	76	1,878,600	2,480
Flood	General Flood	8	358	1,569,740	37,128
Storm	Unspecified	2	8	38,435	302,301
Storm	Tropical Cyclone	3	64	1,397,764	103,650

Provincial Map and Demographical Information



	PROVINCE	CAPITAL	AREA (sq km.)	POPULATION
1	<u>Attapeu</u>	<u>Attapeu</u>	10,320	124,197
2	<u>Bokeo</u>	<u>Ban Houayxay</u>	6,196	161,530
3	<u>Borikhamxay</u>	<u>Paksan</u>	14,863	256,371
4	<u>Champasak</u>	<u>Pakse</u>	15,415	643,686
5	<u>Hua Phan</u>	<u>Xam Neua</u>	16,500	310,303
6	<u>Khammuan</u>	<u>Thakhek</u>	16,315	367,904
7	<u>Luang Namtha</u>	<u>Luang Namtha</u>	7 9,325	160,473
8	<u>Luang Phrabang</u>	<u>Luang Phrabang</u>	16,875	439,504
9	<u>Oudomxay</u>	<u>Muang Xay</u>	15,370	292,869
10	<u>Phongsaly</u>	<u>Phongsali</u>	16,270	174,246
11	Xayabury	Xayabury	16,389	367,421
12	<u>Saravane</u>	<u>Saravane</u>	10,691	358,041
13	<u>Savannakhet</u>	<u>Savannakhet</u>	21,774	890,582
14	<u>Sekong</u>	<u>Sekong</u>	7,665	95,243
15	<u>Vientiane Prefecture</u>	Vientiane	3,920	754,384
16	<u>Vientiane Province</u>	<u>Muang Phon-Hong</u>	15,927	467,452
17	<u>Xiangkhuang</u>	<u>Phonsavan</u>	15,880	263,697

⁶ Source: (EM-DAT, 2010) Summarized Table of Natural Disasters in Lao PDR from 1900 to 2011

2.1. Hazard Profile

The Lao PDR has a history of floods, drought, storms and disease outbreaks and epidemics. The effects of unexploded ordnance, remnants from the Vietnam War, remain as the slow process of clearance continues. Landslides, fires and agricultural pests and rodent infestation are particular concerns of the agrarian sectors. Earthquake tremors have been felt in various provinces in the country while the impacts of climate change and urban, environmental or “technological” hazards are currently being assessed in order to create viable mitigation strategies.

A brief overview on each hazard is presented while a more expansive description can be found in the National Risk Profiles of Lao PDR, developed in 2010 by the National Disaster Management Office, the Asian Disaster Preparedness Center with financial support of the United Nations Development Programme – Lao PDR.

2.1.1. Floods

Major floods have occurred in Lao PDR during the past 35 years, with exceptional ones in 1966, 1971, 1978 (some accounts cite 1977) 1995, 2008 and 2009. As a general condition, floods are experienced from August to September in the central and southern provinces of the country, in association with the southwest monsoon season. The floods may arise in the northern reaches of the Mekong River but the most significant effects are felt in the downstream parts of the Mekong River and its primary tributaries, south and eastward from Vientiane Province and Vientiane Prefecture and downstream to the southern extremity of the country where the Mekong River enters Cambodia. The tributaries are frequently swollen by heavy rainfall in their own catchment basins and then are further “backed up” by the advancing flooded Mekong.

Flood hazard maps were developed for the most flood-prone river basins. Eight rivers were identified and determined for flood hazard and risk assessments in accordance with the past history of flooding as well as in consultation with various flood-related agencies. The rivers identified in the assessment include Nan Ou, Nam Ngum, Nam Ngiap, Nam Xan, Se Bangfai, Xe Banghiang, Xe Don and Xe Kong. Results show that several districts located within these eight river basins are prone to flooding; with different water levels and areas of inundation.

Table II: Damage caused by floods in Lao PDR from 1966-2008

Number	Year	Type of Disaster Event	Damage Cost US\$ (000)	Location of Disaster Event
1.	2008	Large Flood and Flash Flood	4,384.40	Northern and Central
2.	2007	Flash Flood	8,056	Northern, Central and Southern
3.	2006	Flood	3,636	Central and Southern
4.	2005	Flash Flood and Landslide	1,316.58	Central and Southern

5.	2004	Flood	750.399	Southern
6.	2002	Large Flood, Flash Flood and Landslide	14,170	Northern, Central and Southern
7.	2001	Flash Flood	808.5	Central and Southern
8.	2000	Flood	6,684.23	Central and Southern
9.	1999	Flood	7,450	Central
10.	1997	Flood and Drought	1,860.30	Southern
11.	1996	Large Flood and Drought	10,500	Central
12.	1995	1995 Flood 15,000 Central	15,000	Central
13.	1994	Flood	21,150	Central and Southern
14.	1993	Flood and Drought	21,827.93	Central and Southern
15.	1992	Flood, Drought and Forest Fire	302,151.20	Central (Fire), Northern (Drought)
16.	1991	Flood and Drought	3,650	Central
17.	1990	Flood	100	Central
18.	1986	Flood and Drought	2,000	Central and Southern
19.	1985	Large Flood	1,000	Northern
20.	1984	Flood	3,430	Central and Southern
21.	1981	Flood	682	Central
22.	1980	Flood	3,000	Central
23.	1979	Flood and Drought	3,600	Northern and Southern
24.	1978	Large Flood	5,700	Central and Southern
25.	1976	Flash Flood	9,00	Central
26.	1974	Flood	180	
27.	1973	Flood	3.7	Central
28.	1972	Flood and Drought	40	Central
29.	1971	Large Flood	3,573	Central
30.	1970	Flood	30	Central
31.	1969	Flood	1,020	Southern
32.	1968	Flood	2,830	Central and Southern
33.	1966	Large Flood	13,800	Central

2.1.2. Drought

In Lao PDR, drought has also occurred with the highest damage losses of 40 Million US\$ in 1988 and 20 Million US\$ in 1989. Since the largest portion of the Lao population lives in rural areas and depends largely on agriculture, they are the most vulnerable to periodic droughts. In recent years, natural disasters resulting from climate abnormalities have resulted in frequent

drought and floods. The following table shows the historical account of damages caused by drought.

Table III: Drought Events and Damage in Lao PDR⁷

Number	Year	Type of Damage	Damage Losses US\$ (000)	Location
1.	2003	Drought	16,500	Central And Southern
2.	1998	Drought	5,762.70	Northern and Southern
3.	1989	Drought	20,000	Southern
4.	1988	Drought	40,000	Southern
5.	1987	Drought	5,000	Central and Southern
6..	1983	Drought	50	N/A
7.	1982	Drought	N/A	N/A
8.	1975	Drought	N/A	Central
9.	1967	Drought	5,120	Central and Southern

2.1.3 Storms

Storm hazard assessments were carried out for four storm return periods (10, 20, 30 and 50 years). The assessment analyzed areas covered in various provinces with regards to storms. Findings show that the Khammouane province is the most vulnerable province in the country. For 50 years return period, a class 3 (178 – 209 km/hr) storm is expected to hit parts of Khammouane province. The hazard assessment was based on the collection of relevant authentic data from various focal departments and agencies. For assessment purposes, well established technical methodologies were used and further validated by the focal departments.

Several typhoons have been reported with the most significant, recent typhoons being Xangsane (2006), Lekima (2007) and Ketsana (2009). These typhoons have rendered colossal losses of human lives, property and agriculture. Compared to floods, storms are more damaging to the economy. The Centre for Research on the Epidemiology of Disasters (CRED)'s data shows that economic losses due to storms are around 305.9 Million USD whilst for floods they come to 22.828 Million USD. Not many reports or data are available for storm events in Lao PDR.

2.1.4. Disease Outbreaks and Epidemics

During the last century, Lao PDR experienced outbreaks of a large range of major communicable diseases such as HIV, tuberculosis, typhoid, cholera, malaria and influenza. However, while communicable diseases have had a significant impact on health in Laos, a communicable disease outbreak has never required large-scale humanitarian assistance. A

⁷ World Vision-Relief International survey 2009

highly lethal and pathogenic strain of influenza virus is now endemic in several countries including Lao PDR and is currently spreading around the world among poultry. The circulating strain of Influenza A, known as A(H5N1), has successfully crossed the species barrier to infect humans. The humanitarian community is concerned that the H5N1 virus will develop the ability to spread effectively from person to person causing a new pandemic.⁵⁷ Lao PDR has experienced nine outbreaks of A(H5N1) in three waves since 2003,⁵⁸ resulting in two human casualties in 2007 in Vientiane Province. The first wave resulted in 45 outbreaks with approximately 155,000 poultry deaths resulting from both the disease and culling.⁶¹ The first outbreak alone was estimated to cost approximately 4 million USD.⁶² Except for a few cases in wild birds, most of the confirmed outbreaks occurred in domestic poultry, including chickens, turkeys, geese and ducks. Subsistence farmers own 80% of the poultry in Laos while the remaining 20% of the poultry is commercially produced to serve urban populations.

Given the limited extent of primary health facilities in Lao PDR there are periodic risks of public health epidemics, such as a cholera outbreak which occurred in 1993-94 and later following the floods in Khammouane Province in 1995. Malaria is endemic throughout the country, except in Vientiane, including numerous resistant strains and the deadly *plasmodium falciparum* “cerebral” malaria. The existence of the HIV/AIDS virus is receiving increasing attention in the country and the Lao Red Cross amongst other NGO organizations are developing programmes to expand public education and awareness about the disease and methods by which its spread can be minimized.

2.1.5. Unexploded Ordnance (UXO)

Several districts of Khammouane and Savannaket province have a very high density of UXOs ranging from 2 – 4 UXOs per square kilometer. Several other districts in Huaphanh, Xienghuang, Saravane, Sekong and Attapeu were also identified as areas with a high density of UXOs.

A unique, but quite important hazard experienced by Lao PDR, is the wide distribution about the countryside of unexploded battlefield ordnance (UXO) and still-lethal anti-personnel cluster bombs. These “bombies” as the latter are known locally, only received concerned international attention recently, as the lingering effects of mines in other countries have highlighted the development implications of relics of war. These deadly remains from the Indochina war in the 1960’s and early 1970’s continue to maim and kill dozens of villagers annually and keep a significant amount of otherwise productive land out of cultivation, particularly in the eastern half, of the southern third, of the country. Other areas adjacent to Vietnam and in the vicinity of the Plain of Jars are also affected although a precise determination of the extent of locations concerned awaits completion of a survey being initiated under a UNDP-financed programme in mid-1996.

The National Regulatory Authority for UXO/Mine Action Sector in Lao PDR (NRA, 2008) is mandated to manage UXO mitigation in the country. UXOs have a lethal history in Lao PDR as they continue to kill large numbers of people and livestock, impede infrastructure development and deny access to agricultural and pastoral lands. Living with the constant fear of UXOs has reduced productivity even in low risk areas where the population lacks alternative livelihoods. Villagers in these poor areas are forced to undertake high risk activities such as farming contaminated land. The victims continue to live in acute poverty and chronic malnutrition; risking injury and death by working on UXO-contaminated land.

2.1.6. Landslides

Slope stability in Lao PDR is related to weather conditions. Landslides usually affect transport infrastructure during the monsoon season in Lao PDR. Rainfall is the main triggering factor for landslide occurrences. Other principal factors influencing landslides include slope gradient, rock condition (lithology) and land use. A large part of the country is located in low to medium landslide susceptibility zones. Only 5.24 % of the country is prone to very high landslide susceptibility. These high susceptibility zones are localized in the southeast and central part of Lao PDR.

Three provinces including Xekong, Attapeu and Borikhamxai have more than 10% of land coverage in high susceptibility zones. High landslide susceptibility zones in Xekong and Attapeu are located in the southeast part of Lao, especially in conservation areas (Xe Xap and Dong Amphan). The high landslide susceptible areas in Borikhamxai (and Khammouane) are also located in conservation areas (Nam Kading and Phou Khao Khouay).

Attapeu, Phongsaly, Xekong, and Houaphan are four provinces with larger medium susceptibility zones. Medium susceptibility zones in Attapeu province have major roads connecting Lao with Vietnam that go through hilly and mountainous areas with a high susceptibility of landslides. Phongsaly has dense road networks within medium and high susceptibility zones in the northern part of Lao PDR. Landslide hazards have been closely related with transportation infrastructure throughout Lao PDR. There are some major roads that cross country borders and traverse through high susceptible landslide zones have high maintenance problems.

2.1.7. Agricultural Pests and Rodent Infestation

Agricultural pestilence, and particularly severe rat infestation is cited as an additional hazard for many subsistence farmers, who can ordinarily expect very modest yields from their small plots. Pestilence is an endemic problem particularly in the highland farming areas in the northern provinces and in the higher elevations of the central and southern provinces. One consequence of the declining number of fallow years maintained in the shifting agricultural systems being experienced from land pressures is a degradation of soil quality and moisture retention which fosters the growth of weed infestation. This, and the increase of pest infestation in the monoculture cropping patterns associated with shifting cultivation further reduces the expected yields of reduced fallow lands.

There are additional concerns in eastern highland districts bordering Vietnam where a specific type of bamboo flowers every ten years, and proves a particular attraction for rats. While this may constitute a natural "early warning system" of increased rat infestation, it is of limited utility without a suitable preventive intervention.

2.1.8. Forest and Land Fires

Given the opportunity to speculate on other disastrous events, government officers at both the central level and in the provinces or districts refer to fire. The perspective at national level tended to focus on fires of some urban or economic consequence, and generally on a particular example as in the case of the destruction of the Vientiane Night Market by fire in 1989. The awareness of fire

hazards from a local government viewpoint was stated more directly as occurring “regularly” in the villages with “a couple” of bamboo houses being set alight from cooking fires. In all instances of reference though, fire was seen as an incidental event. While its occurrence does no doubt hold importance and loss in a singular locality, or affecting several families or traders, the resulting needs were seen to be responded to by singular acts of public or official welfare. As such, fire was not considered a major element in matters of national policy or developmental objectives.

Other commentators, and particularly external ones writing in the environmental or developmental context, have observed the potentially greater consequence of wildfire on forest resources, and its extensive deliberate use in clearing land for upland “slash and burn”, or shifting, agricultural practices. While one figure cited is 100,000 hectares of forest land associated with land clearing for shifting cultivation is damaged by fire each year, the figure is considerably less of a contributor to overall deforestation than the annual loss due to logging practices and encroachment on forested areas by lowland farmers⁸. The cumulative effects of fire on forest cover can have serious consequences though as the forest area erodes and natural regeneration is retarded by the destruction of young trees.

2.1.9 Urban, Environmental or “Technological” Hazards

Commercial or industrial accidents do not yet represent a major source of potential hazards in Lao PDR, but as the economy develops further and the growth of urban and industrial facilities quickens, associated “technological” hazards may grow in importance. Rapid construction and the growth of urban infrastructure in response to an expanding economy frequently is conditioned by expediency rather than safe building practices. The absence of proper building codes and land use regulations which are appropriate to safe practices and the protection of the environment invite the spread of additional hazards to which increasing numbers of people become exposed.

Similarly, uncontrolled growth or inadequate environmental controls in the forestry and mining industries spurred on by increased industrialization can rapidly create situations of potential concern in terms of land and water degradation. The management of forest resources in particular, have a direct bearing on watershed conditions. These, in turn, can affect the future potential for either floods or droughts, both in the immediate locality, or in the case of siltation, further downstream.

Attention also has to be given to the compliance or enforcement of safe building and risk-aversion land use practices if urban or industrial hazards are to be minimized. In this regard, the PDR has issued a Government decree (No. 169 of 3 November 1993) regarding forestry and land use management, but the regulations and implementation procedures remain to be defined and then applied. It is a mark of the Government’s intent that this is a task which the Organization for Science, Technology and the Environment in the Prime Minister’s Office is presently pursuing.

In urban areas there is a growing concern about the risk of industrial pollution, particularly to water resources, in the absence of pollution standards for industry and mining ventures. Ground water contamination due to inadequate or non-existent waste water treatment has also been noted in Vientiane and other provincial towns. Inadequate storm water drainage in these same towns compounds the problem of effluent contaminating ground water reserves. Drains clogged with

⁸ Environmental Action_Plan, pp.20-21.

garbage are another example of how simple inattention can increase a potential risk for local flooding.

2.1.10 Earthquake

Earthquake hazard maps were developed using the MMI scale and results have shown that one fourth of the area of Lao PDR is located in a high earthquake hazard zone. These areas include Xayabury, Bokeo, Oudomxay, Luangnamtha and Phongsaly provinces. More than 30% of the country is located in a moderate earthquake hazard zone, while 43.62% falls in a low earthquake risk zone.

Although the Department of Meteorology and Hydrology (DMH) monitor seismic activity in Lao PDR, limited literature and information is available about seismic activity. Some seismic activity has been reported in the northeastern part of the country. Some of the work related to active fault assessment has been done by the Department of Mineral Resources (DMR) and the Government of Thailand. The current status of research and development reveals more intense work should be carried out in the country for seismic hazard assessment. The Report on Power System Planning Study in the MIH, Lao PDR (ADB, 1998), presents a distribution plot of seismic events for Lao PDR. This gives the evidence of more seismic events in the northwest part of Lao PDR. Some 6.0+ earthquake magnitudes have been reported in the northwest provinces.

2.1.11. Climate Change

As an essentially agrarian country, the Lao PDR is highly vulnerable to the impacts of climate change. Adverse impacts could possibly include increased flood and drought magnitude and damages, reductions in crop yields, decrease water availability, and increase in the number of people exposed to vector and water-borne diseases. Because it is not currently possible to reliably predict the adverse impacts of climate change at the regional and local levels, the strengthening of adaptive capacity to climate variability and extremes has been recommended.

2.2. Underlying Vulnerabilities

Socio-economic conditions in the Lao PDR have seen much improvement in recent years, where in 1993 was ranked 141 out of 173 nations and now is ranked 133 out of 182 nations in 2010. The country remains one of the least developed countries in the world while it does have the capacity to halve the proportion of people whose income is less than US \$1 a day by 2015. The ability of the nation to achieve full and productive employment and decent work for all, including women and young people and halve, between 1990 and 2015, the proportion of people who suffer from hunger is unlikely to be achieved. Their livelihoods depend primarily on agriculture, fisheries and forestry which, in recent years, have been subject to increasingly more frequent floods and drought..

While people living in the flood and drought prone areas have developed ways to deal with the impact of these hazards, their coping capacities has a limit. Poverty is a key determinant of the people's vulnerability to disasters but disasters also cause poverty. Various studies have shown that the poverty in Lao PDR has variety according to the geographical area that attributed to the people vulnerable to floods and droughts. The manner in which socio-economic development and natural resources are managed also has a direct impact on vulnerabilities of the general

population. Unplanned patterns of human settlement and land use have resulted in increases in the population of people living in the Mekong floodplains. Depletion of forest cover results to increased siltation of major water bodies and soil erosion. Irrigation systems and water conservation measures remain inadequate particularly in the face of an increasing incidence of drought. Exposure to natural hazards is formed around these linkages between physical, social, economic and environmental vulnerabilities that prevent many of its people to live in a safe environment.

PART II

NATIONAL DISASTER MANAGEMENT STRATEGY

3. STRATEGY OF DISASTER RISK MANAGEMENT AND RISK REDUCTION

The focus on risk in the search for more effective approaches to disaster management stems from the compelling need to understand more the root causes and underlying factors that lead to disasters. The need to manage risk systematically has been widely appreciated and applied in the industrial, engineering and financial sectors. The innovative application of the generic methodology of the risk management process to disaster management presents a fresh approach to understanding the nature of disasters, preventing their harmful effects, as well as seeking opportunities from their occurrences. In the context of total disaster risk management, it promotes coordination of functions and the diverse skills and disciplines and allows communities to undertake risk management activities that can protect national investments in sustainable development activities.

Efforts to enhance the capacities of communities and coping systems at various levels and sectors towards self-reliance and self-sufficiency in managing disasters effectively must be sustained. Understanding and identifying various types of vulnerabilities (human, social, economic, and environmental) as well as the nature of natural hazards are essential components of such efforts.

3.1 Vision

The Disaster Management Vision of the Lao PR Government as articulated in the National Strategic Plan for Disaster Risk Management (April 2003) identifies four key strategic objectives: (1) safeguard sustainable development and reduce the impacts and damages caused by natural and man-made disasters; (2) shift from relief to mitigation of disaster impacts to community, society and the economy and preparedness before a disaster strikes with emphasis on hazards such as floods, drought, landslide and fire; (3) ensure that disaster management is a joint responsibility of both the government and the people through building community capacity; and (4) promote sustainable protection of the environment and the country's natural wealth such as forests, land and water resources.

3.2 Complementarity to HFA Objectives

The Lao PDR, as a signatory of the Hyogo Framework for Action, is seeking to incorporate those actions with the recommended framework that are appropriate for initiation during the 2012-2015 timeline. The National Disaster Management Committee, through its Secretariat at the National Disaster Management Office, shall be responsible for authorization and coordination of select recommendations from the following key disaster risk reduction objectives. as follows:

- **Ensure that disaster risk reduction is a national and a local priority.** This objective is attainable by undertaking the following actions: (a.) Formulate policies and legislation in support of disaster risk reduction; (b.) Creation and strengthening of a national disaster risk reduction coordination mechanism or a National Disaster Risk Reduction Platform; (c.) Integration of disaster risk reduction into national development policies and planning; and (d.) Allocate appropriate resources for DRR at the national, provincial and community levels.

- **Strengthen sub-national and community-based disaster risk management.** The attainment of this objective shall require the following actions: (a.) Decentralize responsibilities and resources for disaster risk reduction; (b.) Promote implementation of community-based disaster risk reduction programs; and (c.) Development of a National Disaster Management Plan that supports activities at the provincial, district and village levels.
- **Identify, assess and monitor hazard risks and enhance early warning.** This objective requires the following actions: (a.) Conduct national and local risk assessments on a periodic basis to ensure that timely response mechanisms are developed; (b.) Establish and maintain a disaster management information system; (c.) Develop and maintain a multi-hazard early warning system; (d.) Collaborate with international and regional disaster risk reduction stakeholders and (e.) Establish and operationalize Emergency Operations Centers at national and sub-national levels.
- **Use knowledge innovation and education to build a culture of safety and resilience.** For the Lao PDR to achieve this objective, it shall be required to: (a.) Establish mechanisms for information exchange and networking; (b.) Promote disaster risk management education and training; (c.) Promote gender and cultural sensitivity training as integral component of disaster risk management; (d.) Undertake disaster risk reduction management technical and scientific research; and (e) Promote public awareness of hazards, risks and mitigation strategies.
- **Mainstreaming disaster risk reduction strategies into policies and programs of relevant government ministries.** This important objective can be attained over time through the inculcation of disaster risk management concepts into national awareness programs focused to: (a.) Promote food security to enhance community resilience; (b.) Integrate disaster risk reduction and response preparedness planning into all sectors of relevant government ministries; (c.) Promote appropriate structural and non-structural mitigation measures into national building codes and (d.) Develop innovative financial instruments for addressing disaster risks.
- **Strengthen disaster preparedness for effective response at all levels.** This objective is an ongoing set of activities to ensure that a national state of preparedness is maintained in order to respond effectively to anticipated natural disaster episodes: (a.) Strengthen national and sub-national capacity for preparedness and response; (b.) Develop coordinated regional operational mechanisms for emergencies exceeding national coping capacities; (c.) Prepare and periodically update disaster preparedness and contingency planning; and (d) Establishment of emergency funds at national and local levels.

4. DISASTER RISK MANAGEMENT PLAN

Disaster risk reduction is the responsibility of government at all levels and thus the National Disaster Management Plan is a plan of multiple government institutions and stakeholder departments and risk reduction partnerships. It is not possible for a single government institution to comprehensively address disaster risk reduction which should be viewed as a cross-cutting issue of sustainable development. Disaster risk reduction can only be addressed

through the collective effort of both development and disaster management stakeholders in the country. This action plan, agreed upon by all stakeholders, provides the blueprint for initiating and undertaking this collective effort.

The development of the Lao PDR National Disaster Management Plan must incorporate the attributes of a sound and sustainable disaster risk management plan. The following table offers a description of what a disaster risk reduction plan should look like:

TABLE IV: WHAT DOES DISASTER RISK REDUCTION LOOK LIKE⁹

ATTRIBUTES OF DISASTER RISK REDUCTION	
DISASTER RISK REDUCTION CATEGORIES	ELEMENTS OF SOUND PRACTICE
Sustainable institutional structures and good governance.	<ul style="list-style-type: none"> • Strengthening of national disaster management agencies and establishment of stronger coordination mechanisms. • Linking community-led experience with national-level policy making. • Improved environmental management and control mechanisms. • Strengthen building codes and land use planning. • Developing macroeconomic policies and regulatory reforms to produce an enabling environment conducive to strong public-private participation.
Risk identification, monitoring, early warning and public awareness.	<ul style="list-style-type: none"> • Comprehensive multi-hazard risk, vulnerability, and capacity assessments at all levels. • Management and dissemination of knowledge on risk. • Effective early warning systems for threats including famine, drought, riverine floods, flash flood, earthquake and severe storms, etc... • Communication and awareness raising about hazard threats.
Technical and physical risk mitigation.	<ul style="list-style-type: none"> • Improved design and construction of physical infrastructure, particularly critical infrastructure (transport networks, communication systems, energy networks etc.) and key public facilities (schools, hospitals etc.). • Improved maintenance and repair of physical infrastructure. • Well structured land use, planning, and zoning systems. • Appropriate structural interventions to reduce risk (e.g. maintenance of wetlands in flood plains). • Improved use of climate data to encourage more effective water management, agricultural planning, and health care.
Building resilience, promoting innovation, knowledge and education.	<ul style="list-style-type: none"> • “Disaster proofing” livelihoods to make them more resilient in disaster-prone areas. • Use of science and technology to develop appropriate livelihoods for populations at risk. • Promotion of risk awareness through education at all levels. • Improving information on the likely impacts of climate change.
Risk sharing and risk transfer.	<ul style="list-style-type: none"> • Use of insurance and reinsurance instruments (e.g. crop insurance for farmers).

⁹ Source: Department for International Development. 2006. Reducing the Risk of Disasters – Helping to Achieve Sustainable Poverty Reduction in a Vulnerable World.

	<ul style="list-style-type: none"> • Establishment of calamity funds for use in times of crisis. • Use of safety nets for the most vulnerable (microcredit and cash transfers).
Preparedness, effective response and sustainable recovery	<ul style="list-style-type: none"> • Community-level disaster preparedness incorporating a focus on safe behavior and practices. • Well-resources and prepared response systems with a focus on national and local capacity. • Ensuring recovery includes efforts to reduce underlying risk factors- including through engagement with decision makers and the public on future efforts to reduce disaster risks.

4.1 Disaster Risk Management Framework

The disaster risk management framework developed by the Government of the Lao PDR is appropriately structured both vertically and horizontally to identify and address the threats of hazards at the village, district, provincial, municipal and national levels of society. At the National level, the Government has assigned a National Disaster Management Committee, composed of Minister's and senior representatives of Government bodies and chaired by the Vice Prime Minister, to institute a framework for disaster risk management.

The following table represented the proposed membership, now under review by the Government, to expand the original 13 members noted in the Ministry of Labor and Social Welfare Decree on Assignment of NDMC Roles and Responsibilities of June 30, 2000 to 20 members.

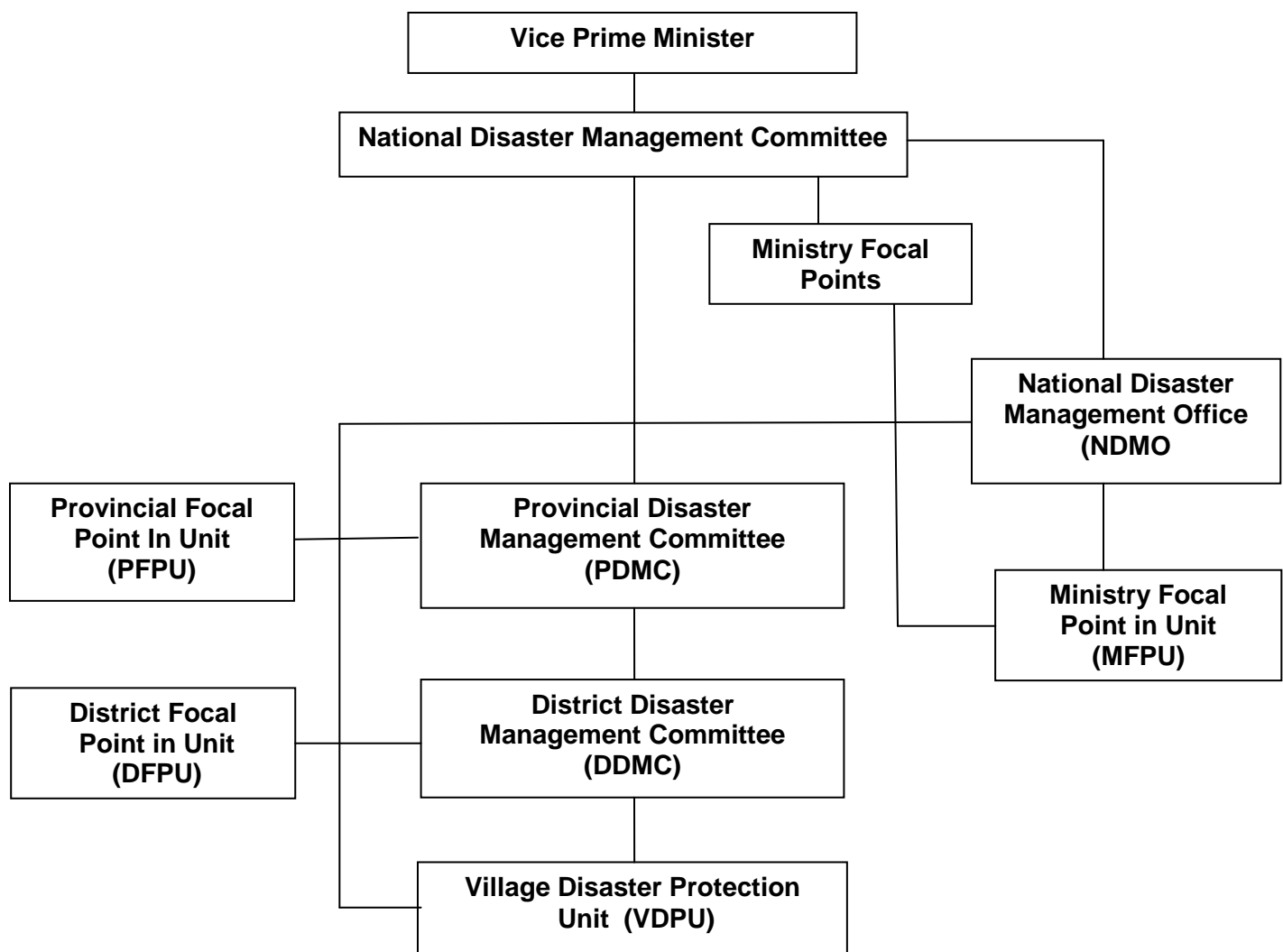
Table V: Proposed National Disaster Management Committee

NDMC Position	Title	Representing
Chairman	Vice Prime Minister	Ministry of Defense
Vice Chairman	Minister	Ministry of Labor and Social Welfare
Vice Chairman	Minister	Water Resources and Environment Administration (WREA) – Office of the Prime Minister
Vice Chairman	Vice Minister	Ministry of Public Security
Vice Chairman	Vice Minister	Ministry of Agriculture and Forestry
Member	Vice Minister	Ministry of Foreign Affairs
Member	Vice Minister	Ministry of Planning and Investment
Member	Vice Minister	Ministry of Public Health
Member	Vice Minister	Ministry of Public Works and Transport
Member	Vice Minister	Ministry of Education
Member	Director General, General Staff Department	Ministry of Defense
Member	Chief of Cabinet Office	Ministry of Energy and Mining
Member	Chief of Cabinet Office	Ministry of Industry and Commerce
Member	Director General of Budget Dept.	Ministry of Finance
Member	Chief of Cabinet Office	Ministry of Information and Culture
Member	Chief of Cabinet Office	Postal and Telecommunications Administration – Office of the Prime

		Minister
Member	Director General	Meteorology and Hydrology Department, WREA
Member	Chairman	Lao Red Cross
Member	Chief of Cabinet Office	Lao Youth Union
Member	Chief of Cabinet Office	Lao Women's Union

The following organizational chart represents the current Disaster Management structure:

Lao PDR National Disaster Management Organization Chart¹⁰



¹⁰ SOURCE : National Disaster Management Office

4.2 Roles and Responsibilities of the National Disaster Management Committee

The responsibility of the NDMC shall be to coordinate disaster risk management in its broader sense including an all hazards approach to mitigation; prevention, preparedness, response and recovery; to oversee the integration of disaster management issues into the sectoral development plans; to recommend to the Prime Minister to declare a state of national emergency and, if required, to request regional/international humanitarian assistance; to oversee the implementation of this policy through the National Disaster Management Office and to make recommendation and advise the Prime Minister.

- The chairperson may co-opt other persons of relevance to the subject of discussion.
- The NDMC will meet twice a year (prior to potential seasonally-prone disaster events), when early warning thresholds indicate need, and when a disaster strikes.
- The NDMC shall establish a permanent agenda for these meetings that must review response, prevention/mitigation, and preparedness relating to an all-hazards approach.
- The NDMC shall establish sub committees in accordance with an all hazard approach to hasten the decision making process. These committees shall be obliged to report their recommendations to the NDMC.

A brief description of some of the individual roles to be played during pre-disaster, ongoing and post-disaster periods are provided in Annex A of the Draft National Disaster Management Plan while given below is a sampling of various proposed tasks for NDMC members.

Ministry of Defence: Serve as the Chairman of the NDMC; Assist communities in evacuation and rescue the trapped groups and individuals; Provide essential medical assistance as required and transport injured to the hospitals; Undertake aerial and field assessment in collaboration with other stakeholders to identify needs of survivors; Deploy military resources for provision of relief to the survivors in collaboration with other stakeholders; Develop a disaster preparedness and response plan for the involvement of Lao PDR military in response and relief operations in different parts of the country; Coordinating mitigation activities in post disaster periods; Assist civilian authorities in the reconstruction and rehabilitation of infrastructure as needed.

Ministry of Labor and Social Welfare: Serve as the Vice-Chair and assigned responsibility for the management of the National Disaster Management Office for organizing and coordinating preparedness, prevention, mitigation and recovery activities in pre-disaster periods; During disaster events and post-disaster periods; promoting disaster management training for Lao PDR employees and the public countrywide; Acting as the center for disaster management information, assessments, collection and production of reports on an annual basis; and coordination of organizing of relief supplies, shelter and other resources following a disaster episode; Supports all activities in the National Disaster Management Plan linked to the NDMC, NDMO and the MLSW.

Water Resources and Environment Administration (WREA): Serve as the Vice-Chair and assigned responsibility for the preparation of flood protection plans for the country; Review and approve flood control / protection schemes prepared by provincial governments and concerned federal agencies; Make recommendations regarding principles of regulation of reservoirs for flood control; Review of damage to flood protection works and review of plans for restoration and reconstruction works; Measures for improvement of flood forecasting and warning system; Prepare a research program for flood control and protection; Standardize designs and specifications for flood protection works; Evaluate and monitor progress of the National Flood Protection Plan Implementation; Monitor the provincial government's implementation of the national Flood Protection Plan.

Ministry of Public Security: Serve as the Vice-Chair; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district, institutions and major hospitals as needed; and organizing specialized disaster response training for medical teams prior to the onset of disaster events. Responsible for coordinating the direct involvement of medical teams in emergency operations offering first aid and health care in addition to preparing death certificates of disaster victims; shall stockpile medications and supplies for use in any disaster episodes; responsible for hygiene and disease vector control.

Ministry of Agriculture and Forestry: Serve as Vice-Chair of the NDMC; shall appoint a disaster management contact person from the Ministry; Ensure a sectoral risk assessment exercise and prepare risk reduction action plan involving all its departments.; Ensure budgetary provision to support implementation of a sectoral risk reduction action plan; Develop programmes for research with regard to hazard analysis and its affect in agriculture; Responsible for joint relief with agricultural seeds and animal husbandry to disaster affected victims; Support in institutionalizing training on disaster risk reduction approaches in agriculture and forestry sectors; Instruct Ministry staff to undertake awareness initiatives among communities on the importance of disaster risk reduction..

Ministry of Foreign Affairs: Serve as Vice-Chair of the NDMC; shall appoint a disaster management contact person from the Ministry and, in the event of a national calamity or devastating disaster episode, shall seek international assistance following permission from the Lao PDR government; Liaison with the NDMC in order to ensure collaborative efforts for disaster risk reduction and preparedness; Develop operating procedures to fast track the requests for aid, facilitate deployment of international response teams, and receipt of relief in case of an emergency; Develop and maintain inventory of Embassy focal points for disaster preparedness and other aid giving organizations in order to quickly organize requests for assistance in case of disaster; Coordinate with foreign countries to receive aid in the case of a major catastrophe; Coordinate with international technical organizations and relevant UN agencies to receive technical and financial assistance for disaster risk reduction and preparedness.

Ministry of Planning and Investment: Serve as a member of the NDMC; Ensure that national policy and legal framework exist with decentralized responsibilities and capacities at all levels; Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels; Community participation and decentralization are ensured through the delegation of authority and resources to local levels; Systems are in place

to monitor, archive and disseminate data on key hazards and vulnerabilities; Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes.

Ministry of Public Health: Serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district levels; Identify hospitals and health facilities that are located in hazard-prone areas, analyze their internal and external vulnerability during emergencies, and increase the hazard resilience of such hospitals; Prepare and implement hospital disaster preparedness plan for such facilities to be able to deal with emergency situations; Prepare plans and SOPs for tracking and evacuations of mass casualties as a result of a major disaster; Develop health care personnel proficient in disaster response (including improved education of nurses, emergency medical technicians, and doctors to have improved knowledge and preparedness of disaster management; Increase knowledge of psychiatrics on rehabilitative dimensions of disasters along with the health care of internally displaced people and women and children issues; Establish Emergency Medical Cells to ensure better coordination in disaster situations; Set-up medical camps and organise Medical Mobile Teams (MMTs) to be sent to the scene of disaster with minimum delay; Ensure communication links between hospitals and the scene of disaster; Build acute health care system for post disaster response through strengthening the existing district development system; Establish a system of high readiness and list of personnel to be mobilized when warning is received or impact of disaster reported.

Ministry of Public Works and Transport: Serve as a member of the NDMC; Planning and execution of disaster plans in collaboration with other NDMC representatives; Engage in public awareness activities which will strengthen the Lao PDR capacity to mitigate against, prepare for and respond to hazard impacts; Working alongside several other first responder government agencies to effectively and efficiently deal with the effects of disasters; Assist with the restoration and improvement where appropriate, of facilities, livelihoods and living conditions of disaster affected communities, including efforts to reduce disaster risk factors.

Ministry of Education: Serve as a member of the NDMC; Shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district and educational institutional levels as needed; Integrating disaster management concepts into education programs in schools, organize disaster management training on living with natural hazards and managing environmental issues for teaching staff and students; Responsible for the evacuation of students and general population to emergency shelters in schools in the event of a disaster; Identify and inventory the vulnerable educational institutions and infrastructure of the Ministry in hazard-prone areas; Implement actions to reduce vulnerability of the built infrastructure in education sector in hazard-prone areas, e.g. retrofitting, renovation, rebuilding etc; Encourage local educational authorities and teachers to prepare school disaster response plans and their implementation; Allocate funds for safer construction and disaster preparedness activities at school, college, and university levels in hazard-prone areas.

Ministry of Energy and Mining: Serve as a member of the NDMC; Designate one responsible person in the Ministry as the disaster management Focal Point; Issue necessary directives to the respective staff on their duties and responsibilities as a precautionary for disaster and post disaster situations; Prepare a sectoral risk assessment and a risk reduction action plan of the Ministry; Ensure a budgetary provision of the Ministry for its risk reduction

and management activities; Undertake and manage risk reduction programs to ensure the resilience of infrastructure to hazards, and to reduce the vulnerability of services and systems; Undertake planning to ensure uninterrupted services during hazard impacts; Issue detailed instructions to the employees about their duties and responsibilities at precautionary, disaster and post-disaster stages of natural disasters; Arrange regular workshop/on-the job training for working employees in disaster areas on disaster issues.

Ministry of Industry and Trade: Serve as a member of the NDMC; Shall appoint a disaster management contact person from the Ministry; Develop safety standards for industrial factories and other processing activities; Managing safety standards for the use of chemicals, toxic substances in industry and their impact on the environment and the public; Promote specialized training related to handling dangerous materials and industrial accidents; Mainstream disaster management principles and practices in development planning processes of the Ministry; Develop research programs with regard to hazards analysis; Ensure that disasters are timely assessed by Ministry officials for damages and losses and for recovery strategies; Implement an emergency sectoral response system; Ensure disaster risk management issues are considered when constructing new factories or Industries; Develop business continuity policy and procedures at industry and higher levels; Prepare sectoral risk reduction action plan; Ensure budgetary provisions of the Ministry for disaster management activities; Establish a risk communication system of the Ministry.

Ministry of Finance: Serve as a member of the NDMC; Shall appoint a disaster management contact person from the Ministry; Shall be responsible for the reserve and delivery of government funding for disaster activities upon the approval of the NDMC; Propose, on behalf of the NDMC, government funding for short, medium and long term mitigation and recovery activities.

Ministry of Information and Culture: Serve as a member of the NDMC; Shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district and institutional levels as needed; Develop a communication action plan to ensure the availability of communication services in case of the occurrence of a disaster; Train the communications staff of the ministry and the private sector media personnel with the electronic, and print media to raise their awareness about disaster risks and the role of media in promoting community preparedness; Initiate timely early warning information, emergency operations, and mitigation information broadcasts through multi-media services; Coordinate with the NDMA to receive information about the disaster risks and preparedness strategies, particularly about community preparedness; Promote disaster management public awareness and education media broadcasting programs and publications on environmental protection of natural resources.

Postal and Telecommunications Department: Serve as a member of the NDMC; Increase sharing of knowledge on policy options, strategies and best practices for ICT connectivity; Establish and maintain communications (telephone, fax, email); Design and implement awareness and public education programmes in cooperation with the NDMO including individual, family and community prevention, preparedness and response actions, warning signals and their meaning; Prepare agency disaster response contingency plans to protect the staff, equipment and spare parts from disaster impacts; Broadcast individual and household measures to save lives and livelihoods; Create mass awareness through radio broadcasting;

Arrange broadcasts of information relating to proper execution of building codes for earthquake and flood risk mitigation; Arrange broadcasting of the government instructions/standing orders on disaster management; Broadcast programmes for the people of the affected areas.

Meteorology and Hydrology Department: Serve as a member of the NDMC; Have overall responsibility for hydrometeorology early warning information services countrywide; Observe hazard situations and generate meteorological, and geophysical data; Analyze data for issuing forecasts and warnings for aviation, agriculture, transport, etc: Issue forecasts and warnings for any approaching events that might cause damage and loss to life and property; Disseminate warning about hazards to relevant users through speedy communication; Scrutinize, compare and publish data for appraisal of long term weather trends and earthquakes; Analyse extreme events observed in the past and their future trends; e.g. climate change, weather modification, land-ocean-atmosphere interaction, seasonal weather prediction.

Lao Red Cross: Serve as a member of the NDMC; Shall appoint a disaster management contact person from the Lao Red Cross as a Focal Point; Develop disaster preparedness and response plans at national level and for all branch offices in the high risk areas Develop teams of volunteers for disaster preparedness and response; Train the volunteers in emergency preparedness and response (e.g. evacuation, first aid, fire fighting, early warning etc). Responsible for initiating rapid assessments and producing disaster information following a disaster event; Responsible for joint emergency operations in rescue and relief provision for disaster affected persons; Initiate joint mobilization of relief assistance with Red Cross/Red Crescent partners; Work closely with local authorities in conducting joint assessments of damages and losses and needs of disaster survivors. Organize disaster management training, drills and exercises for the Lao Red Cross volunteers and the general public.

Youth Union: Serve as a member of the NDMC; Organize youth to play a major role as interpreters and conveyers of disaster risk messages to their households and communities; Addressing vulnerabilities related to health, environment, education, religion, household economic security and other sectors, which impact together on a community and individual's wellbeing; Direct involvement in disaster management work to create a better sense of community and civic consciousness; Support post-recovery and reconstruction undertaken by village, district and provincial authorities.

Women's Union: Serve as a member of the NDMC; Give special attention to the social, cultural and economic needs of women, children and most disadvantaged groups in disaster and risk management by using participatory tools such as vulnerability and capacity assessments; Raise awareness of the decision makers and Government about the special vulnerabilities and capacities of women disaster episodes; Promote awareness among women in hazard-prone areas about disaster risks and disaster preparedness; Develop capacities of women's organizations on disaster risk reduction and preparedness; Make institutional arrangements for involvement of women in disaster risk reduction; Ensure that needs of women survivors are addressed in post disaster situations during the relief, rehabilitation and reconstruction phases; Facilitate participation of women in the management of relief, rehabilitation and reconstruction activities; Support post-disaster rehabilitation of livelihoods of women survivors..

4.3 Role and Responsibilities of the National Disaster Management Office

The National Disaster Management Office (NDMO) serves as the Secretariat to the National Disaster Management Committee (NDMC) with responsibilities that include: preparation of national disaster and emergency response plans and strategic policy coordination of all disaster relief operations in the Lao PDR. At the discretion of the Prime Minister's Office, the NDMO serves as the lead agency for the Government of Lao PDR in regional and international disaster management cooperation. This includes sectoral areas of disaster management such as information gathering, sharing, early warning, surveillance, joint training, and common standards and protocols required for regional and international cooperation.

The NDMO is also intended to:

- Providing expert advice to the NDMC.
- Promoting coordination with ministerial focal points.
- Promoting disaster mitigation and preparedness activities at the local level.
- Implementing community awareness activities.
- Providing training, guidelines and plans to make disaster risk management more effective.
- Establishing disaster management implementation teams at the national, provincial and district levels

Additional tasks have been developed for the National Disaster Management Office, along with an expanded organizational structure and staff capacity, as noted in Annex B as a recommendation for consideration by the National Disaster Management Commission to overcome current constraints impeding the growth and development of disaster risk reduction.

4.4 Role of Provincial, District and Village Structures and Responsibilities

Each Provincial government is expected to form a Provincial Disaster Management Committee (PDMC) chaired by the Governor. Other members of the Committee will include disaster preparedness and response stakeholders from the public sector, police and armed forces, civil society organizations, representative from Industry, leaders of religious organizations, prominent residents in the Province and one person representing the Lao Red Cross. The National Disaster Management Office shall offer technical and capacity building support to provincial, district and village level initiatives

The PDMC is the pivotal point for the implementation of disaster management resources in the Province. Each PDMC will be a channel for information and resources and be a link between national objectives and provincial priorities. The Governor will appoint one senior official to be responsible for the coordination of disaster management activities in the Province.

As the coordinating body in the province for disaster risk management, the PDMC shall:

- Prepare a Provincial Disaster Management Plan based on district level risk assessments and viable preparedness, mitigation and response strategies.
- Continuously monitor the hazards, risks, and disaster threats and the conditions of vulnerable populations within the region.

- Conduct vulnerability analyses on emerging disaster prone areas and prepare recommendations on reducing their vulnerability.
- Identify training needs and conduct training and public awareness.
- To mobilize and coordinate all intervention from other agencies at the time of emergencies.
- To ensure that compatible disaster management fully reflect national priorities and guidelines
- To support the implementation of disaster management programs agreed for the Province.
- Mobilization of needed financial and material resources for disaster management.

At the district level, a District Disaster Management Committee (DDMC) is to be established with a district representative as the chairperson and members comprising all district level department heads, NGO leaders and civil society members.. The committee is required to meet bi-monthly during normal period and as and when necessary during emergency situation.

There is to be a plan for each District titled “District Disaster Management Plan” comprising both disaster risk reduction and emergency response to be prepared by the District Disaster Management Committee. The DDMP should highlight and articulate, among others, the following:

- The areas in the district vulnerable to different forms of hazards and risks,
- Total resource requirements and planned actions for the district to undertake in prevention and mitigation of disasters by government agencies, NGOs, and the private sector within the district,
- Procurement of emergency supplies,
- Operation of disaster shelters,
- Restoration of emergency services, such as water supply, gas supply, power, telecommunication, road links,
- Provision of emergency medical services,
- Recovery plans and procedures delineating damage assessment procedure,
- Restoration of damaged public infrastructure, resumption of educational institutions, and
- Restoration of livelihood, rehabilitation of affected people, especially the disabled, and elderly women and children.

The Village Disaster Protection Units are underway in a small number of communities at the moment. These institutions are the frontline of disaster management where disaster preparedness and civil protection systems are being developed. Through the village committee, lead by a traditional village leader, the following activities are being undertaken:

- Preparation of plans and procedures for disaster management programs in their respective locations,
- To take operational control in the event of a disaster or emergency so as to ensure that support is provided to the affected households,
- Mobilization of needed financial and material resources for disaster management,
- Identification and mapping of all hazards in their respective location and conduct risk and vulnerability analysis, and
- Establishment of civic groups for disaster reduction and relief operations.

4.5 Roles for Regional/International Supporting Agencies

The NGOs - NGO's are important partners in disaster management activities. NGO's are often able to respond flexibly and rapidly to urgent needs of disaster. In order to forge a closer link between them and the disaster management authorities, the Disaster National Management Office shall:

- Encourage them to participate in disaster management activities aimed at reducing vulnerability of the community and high-risk individuals. In specific terms NGO's will be encouraged to participate in training, public education, damage assessment, rehabilitation and construction projects in disaster stricken areas.
- Extend invitations to NGOs to participate in the development of disaster management plans at all levels for the purpose of resource mobilization and information sharing on disaster preparedness, mitigation, and early warning and response roles. NGOs shall link up with the NDMO to ensure that the strategic policy and operational implementation incorporates their participation.
- NGOs and other disaster stakeholders will ensure their participation comply fully with international standards of relief and human rights.

In the Lao PDR non-governmental organizations have created a Disaster Risk Management Working Group with the objective of (a.) facilitate knowledge management, (b.) develop lessons learned, (c.) collaborate together with all disaster risk reduction stakeholders, (d.) develop joint action programming, and (e.) work in a coordinated manner with the Government of the Lao PDR and other risk reduction stakeholders. The participation of the NDMO in periodic meetings will facilitate the interface between the NGOs and the Government on disaster risk management.

UN Agencies - The UN Agencies, including FAO, ISDR, OCHA, UNDP, UNHCR, UNICEF, WFP and WHO, are crucial in supporting disaster risk management programs in preparedness, mitigation, response and rehabilitation and recovery phases. Specifically these agencies will:

- Participate in National Disaster Management forums for the purpose of information and experience sharing.
- Participate in Technical Committees dealing with specific disaster types.
- Provide financial and technical support for the development of sustainable disaster management preparedness and response capacity with key stakeholders in addition to responding to humanitarian crises.

The Inter-Agency Standing Committee (IASC) has proposed the formation of an Emergency and Disaster Preparedness and Response Coordination body in concert with the National Disaster Management Office with the purpose of coordination of activities between various government ministries and the humanitarian agencies to prepare for, respond to and mitigate emergencies and disasters in the Lao PDR.

5. ACTION PLAN FOR DISASTER RISK REDUCTION

The Action Plan for Disaster Risk Reduction specifies the actions necessary to establish an effective disaster risk reduction mechanism in the Lao PDR capable of fulfilling the roles and responsibilities set out in the Disaster Management Plan.

5.1 NATIONAL DISASTER MANAGEMENT PLAN ACTION MATRIX 2012 - 2015

Strategic Goal	Key Targets	Expected Outcomes	Action Agenda for 2012-2015	Lead Ministry/ Agency	Supporting Ministry/Agency
1.	2.	3.	4.	5.	6.
Professionalizing the disaster management system	1.1 Establish a Disaster Management Regulative Framework	1.1.1 A legal, policy and planning framework that makes disaster risk reduction a mandatory requirement at all levels.	1.1.1.1 Review and revise key disaster management policy and planning instruments reflecting broader risk reduction functions. 1.1.1.2 Enact Disaster Management Decree and formulate rules. 1.1.1.3 Develop, approve and implement Disaster Management Policy and Plans. 1.1.1.4 Revise work plans in relation to NDMO mandates. 1.1.1.5 Develop Standing Orders/Procedures (SOPs) in line with Comprehensive Disaster Risk Reduction and Emergency Management Approach.	Ministry of Labor and Social Welfare, NDMO	Ministry of Public Security Office of the Prime Minister
	1.2 Implement a learning and development strategy to facilitate the professional development of NDMC and NDMO and key personnel from government, NGOs and the private sector.	1.2.1 A professional and competent disaster management workforce that is demonstrating effective national and regional leadership.	1.2.1.1 To ensure that risk reduction is a mandated requirement for all disaster management programmes. 1.2.1.2 Enhance professional skills and knowledge of NDMO and selected other key implementing agency staff on disaster risk reduction, preparedness, warning and forecasting system, and post-	All NDMC members NDMO	Ministry of Education

			<p>disaster recovery activities.</p> <p>1.2.1.3 Develop a learning and development framework for disaster management professionals.</p> <p>1.2.1.4 Promote, design and implement research and evaluation programmes on disaster management.</p>		
	1.3 Design and implement training/awareness raising programs targeting national and district level policy officials.	1.3.1 All policy level officials are aware of the disaster management concepts and basic frameworks.	<p>1.3.1.1 Develop an introductory training course for disaster management.</p> <p>1.3.1.2 Design and implement the training programme for the policy officials at all levels.</p>	Ministry of Education Ministry of Labor and Social Welfare WREA, NDMO	Relevant ministries INGO Disaster Risk Management Working Group
2.0 Mainstreaming Disaster Risk Reduction	2.1. Risk reduction principles and practices are mainstreamed within all development programmes and policies	<p>2.1.1 NDMO is recognized as a key partner in development planning and policy making.</p> <p>2.1.2 Development project appraisal process includes disaster risk reduction issues</p>	<p>2.1.1.1 Identify relevant development policy and planning frameworks, develop and establish mechanisms to ensure risk reduction is a national and local priority.</p> <p>2.1.1.2 Develop Disaster Impact and Risk Assessment (DIRA) tool for all hazards and incorporate into national and provincial planning.</p> <p>2.2.1.3 Develop and implement an advocacy strategy to facilitating incorporation of disaster risk reduction within development policy and plans.</p> <p>2.1.1.4 Design and implement capacity building training to strengthen relevant planning capability at national and local levels.</p> <p>2.1.1.5 Incorporate disaster</p>	<p>Ministry of Planning and Investment</p> <p>NDMO</p> <p>NDMO</p> <p>NDMO</p> <p>Ministry of</p>	<p>Water Resources and Environment Administration</p> <p>Ministry of Agriculture and Forestry</p> <p>INGO Disaster Risk Management Working Group</p>

			risk reduction approaches in all ongoing/future development plans, programs, and policies. 2.1.1.6 Inclusion of disaster risk management within the development project validation process.	Planning and Investment Ministry of Planning and Investment	
	2.2 Mainstreaming disaster risk reduction issues in all the sectoral policies and plans	2.2.1 Sectoral damage and loss from disaster episodes on the decline. 2.2.2 Strengthened relevant planning capability at all levels.	2.2.1.1 Establish focal points within relevant ministries and departments. 2.1.1.2 Identify relevant sectoral policy and planning frameworks and documents 2.2.1.3 Review and revise the policy and planning documents incorporating disaster risk reduction issues. 2.2.1.4 Develop and implement an advocacy strategy facilitating incorporation of disaster risk reduction issues. 2.2.1.5 Prepare a monitoring and evaluation guideline	All NDMC Ministries All Relevant Ministries NDMO NDMO NGOs IASC, NGOs	NDMO All Relevant Ministries IASC
	2.3 Disaster risk reduction considerations incorporated in NGO programmes and plans	2.3.1 NGO communities have a better understanding of their risks and strategies for reducing or managing their all hazard risks. 2.3.2 Sustainability of community benefits received through NGO Interventions.	2.3.1.1 Inclusion of disaster risk reduction mechanisms 2.3.1.2 Advocacy and public awareness for social mobilization. 2.3.1.3 Prepare monitoring and evaluation guidelines.	NDMO INGO Disaster Risk Management Working Group IASC, NGOs	NDMO
3.0 Strengthening	3.1 Capacity Building of	3.1.1 Members of NDMCs at all levels are	3.1.1.1 Revise roles and responsibilities of DMCs in	Office of the Prime Minister	Ministry of Public Security, Sectoral

Institutional Mechanisms	Disaster Management Committees at all levels.	aware of their roles and responsibilities. 3.1.2 NDMCs at all levels are functional and carrying out their mandated jobs during both normal and emergency periods and post emergency situations in accordance to developed policies, procedures and institutional linkages..	relation to risk reduction and emergency response process. 3.1.1.2 Identify national, regional, sub-regional and local institutional mechanisms including informal systems and undertake an audit to validate roles and linkages. 3.1.1.3 Design and implement a national training strategy aimed at building knowledge and understanding of disaster management roles and responsibilities of key players at all levels as per SOPs. 3.1.1.4 Promote development and establishment of the National Disaster Management Plans at all levels. 3.1.1.5 Establish local level contingency planning frameworks with provision of resources for risk reduction.	NDMO Ministry of Education All NDMC members PDMC DDMC Village Committees	Ministries, INGO Disaster Risk Management Working Group, Development Partners
	3.2 Create a national training capacity to sustain and progressively expand disaster risk management training efforts.	3.2.1 Disaster management training and research capacity is established and functioning. 3.2.2 Disaster management is taught in public training courses 3.2.3 All training events use the updated module for disaster management	3.2.1.1 Establish within NDMO capacity for disaster management, training and research department. 3.2.1.2 Develop and implement a national training policy to enhance competencies and skills for effective disaster risk reduction and emergency response. 3.2.1.3 Incorporate disaster risk reduction issues into the training curriculum of all public sector training institutes.	NDMO NDMO Ministry of Education All Relevant Ministries	Ministry of Planning and Investment; Ministry of Education NDMO Lao Red Cross

			<p>3.2.1.4 Incorporate disaster risk reduction issues into the training curriculum for:</p> <ul style="list-style-type: none"> - local government public representatives and officials at all levels. - teachers at all levels. <p>3.2.1.5 Conduct TOT and capacity building training for the teachers and instructor of different national training institutions on the revised curriculum.</p> <p>3.2.1.6 Promote gender, cultural and sensitivity training as integral components of education and training for disaster risk reduction.</p>	<p>Ministry of Education</p> <p>Ministry of Education NDMO</p> <p>All Relevant Ministries NGOs</p>	NDMO
	3.3 Develop a national monitoring and evaluation system to enable the effectiveness of the training strategy to be measured.	3.3.1 A common pre- and post-training assessment tool is in place to monitor the disaster management training programmes of the public training institutes.	<p>3.3.1.1 Develop a common methodology to monitor and evaluate the disaster management training programs.</p> <p>3.3.1.2 Establish a monitoring and evaluation mechanism about when and what to monitor by whom.</p> <p>3.3.1.3 Establish a reporting mechanism.</p>	<p>NDMO Lao Red Cross Ministry of Education</p>	All Relevant Ministries
4.0 Empowering At Risk Communities.	4.1 Develop and establish a standard assessment procedure to identify community and household	4.1.1 Communities have a greater understanding of their risks and vulnerabilities to hazards and strategies for reducing or managing their all-hazards risks.	4.1.1.1 Identify and document community and household level all-hazards risks with special emphasis on risks of women, children, the elderly and the disabled, following the standard assessment	<p>NDMO Ministry of Labor and Social Welfare, Women's Union, Youth Union Ministry of Public</p>	NDMO NGOs, Development Partners

	level risks		procedures.	Security	
	4.2 Establish a disaster risk reduction action planning framework.	4.2.1 Disaster risk reduction action plans for all hazards, all risks and all sectors are produced and endorsed by the relevant DMCs at all levels 4.1.2 Government and donor funding targeting strategies identified within the local level risk reduction plans.	4.2.1.1 Develop a disaster risk reduction action planning template through pilot testing. 4.2.1.2 Prepare risk reduction action plans for all high risk districts communities and endorsed by the respective DMCs. 4.2.1.3 Design and implement an advocacy strategy to ensure execution of the plans by the respective concerned authorities	NDMO Ministry of Defense, NGOs NDMO	NDMO Relevant Ministries Water Resources and Environment Administration
	4.3 Strengthen community and household level capacity to withstand disaster events.	4.3.1 Community and households are better prepared to cope with disaster events.	4.3.1.1 Design and implement skill and knowledge based training programme for DMCs. 4.3.1.2 Organize community level drills. 4.2.1.3 Design and implement livelihood support programmes for at risk communities, particularly women, the elderly, the disabled and other disadvantaged groups.	NDMO Lao Red Cross NGOs Ministry of Public Security Ministry of Information and Culture, Ministry of Education	All Relevant Ministries, NGOs
	4.4 Reduce vulnerability of the at risk communities through social safety nets	4.4.1 Protect the needs of the poor, particularly women, children, the elderly the disabled and Other disadvantaged population of at risk communities against seasonality and shocks.	4.4.1.1 Establish guidelines and procedures to design and implement the target activities and other safety net programs. 4.4.1.2 Establish an effective targeting mechanism. 4.4.1.3 Establish an effective monitoring and support mechanism to ensure proper execution of the guideline and	Ministry of Labor and Social Welfare NDMO	NDMO NGOs

			avoidance of political influences and leakages. 4.4.1.4 Policy advocacy to ensure continuity of the allocations for safety net programmes in the annual budget.	Ministry of Finance	
5.0 Expanding Risk Reduction Programming across hazards and sectors	Across Hazards: 5.1 Update hazard risk and vulnerability maps.	5.1.1 Local/National development plans are developed on the basis of the updated hazard maps.	5.1.1.1 Conduct Hazard Risk Analysis and produce updated hazard maps.	NDMC, NDMO	Sectoral Ministries, Development Partners
	5.2 Establish an integrated approach to disaster management of all hazards including climate change and climate variability impacts.	5.2.1 Scientific analysis including climate change impacts is guiding all hazards risk assessment processes. 5.2.2 Timely all hazards risk information readily available in user friendly format to key stakeholders and development planners. 5.2.3 Research gaps are influencing government, donor and private sector priorities. 5.2.4 Disaster management stakeholders are updated on all hazard risks including climate change and climate variability impact knowledge.	5.2.1.1 Establish NDMO networking with WREA on climate change adaptation activities. 5.2.1.2 Develop scenario and prediction models to determine climate change and climate variability impacts. 5.2.1.3 Conduct research to determine hazard risks including climate change and climate variability impacts for Lao PDR. 5.2.1.4 Strengthen existing knowledge and information accessibility on hazard risks and impact prediction.. 5.2.1.5 Identify adaptation options through action research. 5.2.1.6 Support a hazard risks information library, database and knowledge information	Water Resources and Environment Administration Hydrology and Meteorology Department Technological Institutions	NDMC, NDMO Technological Institutions, Water Resources and Environmental Administration, NGOs/ Development Partners

			network. 5.2.1.7 Incorporate climate change and climate variability impact information in the disaster risk reduction programmes design network.		
	<p>Across Sectors: 5.3 Develop and establish policy and planning frameworks to incorporate all hazard risk reduction perspectives into sectoral policies and development plans, such as:</p> <ul style="list-style-type: none"> • Agriculture, livestock and fishery • industry • education (primary, secondary and university) rural and urban housing, • construction of roads, bridges and culverts • water transportation • Health • Water resources • Power, energy 	5.3.1 Building disaster resilient community elements including population infrastructure, utility services, life and livelihood support system, etc.	<p>5.3.1.1 Develop guidelines and templates for inclusion of DRR in sectoral policies and plans.</p> <p>5.3.1.2 Include disaster risk reduction in policies and development plans of various relevant sectors.</p> <p>5.3.1.3 Include disaster risk reduction perspectives at primary, secondary and tertiary levels of education.</p> <p>5.3.1.4 Promote action research in relevant sectors.</p> <p>5.3.1.5 Risk based design of projects and ancillary structure.</p> <p>5.3.1.6 Design and implement Social Safety Net Programmes To ensure food security of the most vulnerable.</p> <p>5.3.1.7 Identifying and converting existing public buildings into multi-purpose disaster shelters.</p> <p>5.3.1.8 Promote food security as an important factor in ensuring the resilience of communities to hazards.</p> <p>5.3.1.9 Establish a dependable national food security system.</p> <p>5.3.1.10 Develop and</p>	<p>NDMO All Relevant Ministries</p> <p>Ministry of Education</p> <p>Relevant Ministries</p> <p>NDMO</p> <p>Ministry of Labor and Social Welfare</p> <p>NDMO</p> <p>Ministry of Agriculture and Forestry</p> <p>Ministry of Agriculture and</p>	<p>Ministry of Agriculture and Forestry, Ministry of Industry and Trade, Ministry Public Works and Transport; Ministry of Defense; Armed Forces Division; Department of Post and Communication; Ministry of Education; Academic Institutions; Ministry of Public Security</p>

	<p>and mineral resources</p> <ul style="list-style-type: none"> • Environment and forestry • Science and Technology • Tele-communication • Water Supply and Sanitation • Food Security • Land Use • Women, children, elderly and disabled people. 		<p>implement a School Safety Programme including a national school safety plan and school building-level emergency response plans.</p> <p>5.3.1.11 Harmonize and coordinate all land use related policies, legislation as well as promote effective protection and enhancement of land quality with the aim of ensuring sustainable utilization of land so that it can provide optimal production to foster socioeconomic development and maintenance of land quality for long-term productivity.</p> <p>5.3.1.12 Develop plan and implement accordingly for women and children.</p> <p>5.3.1.13 Prepare and upgrade data on women, children, elderly and disabled people</p> <p>5.3.1.14 Provide special arrangement for women, children, elderly and disabled people in shelters</p>	<p>Forestry Ministry of Education</p> <p>Ministry of Public Security</p> <p>Ministry of Labor and Social Welfare</p> <p>Ministry of Labor and Social Welfare</p> <p>Ministry of Labor and Social Welfare</p>	
6.0 Strengthening Emergency Response Systems	<p>6.1 Strengthen and improve an all Hazard Early Warning Systems through</p> <ul style="list-style-type: none"> • technical, technological and physical capacity 	<p>6.1.1 Ensure accuracy in the early warning information generation.</p>	<p>6.1.1.1 Technical and technological capacity building of relevant Lao PDR ministries and other related organizations to a) improve the accuracy of early warning information generated and b) increase the lead time for flood forecast.</p>	<p>MDMO Water Resources and Environment Administration</p>	<p>Armed Forces Division; Department of Post and Communications INGO Disaster Risk Management Working Group,</p>

	strengthening early warning systems •establishment and strengthening of regional networks for real time data/information sharing		6.1.1.2 Use ASEAN and other available frameworks and platforms to establish regional networks for real time data/information sharing.		Lao Red Cross, NGOs Development Partners
	6.2 Establish an effective command and control system along with a National Disaster Management Information Centre with an internet connection with all the Provinces and in high risk districts. • to archive and share disaster risk reduction information • produce and share policy briefs •receive and disseminate early warning and needs assessment information.	6.2.1 An effective 24/7 information hub including early warning dissemination system. 6.2.2 An effective information management system that is providing on-time adequate and necessary information during emergency situations.	6.2.1.1 Establish and make operational a National Disaster Management Information Centre within the emergency operation centers (EOC). 6.2.1.2 Design information products. 6.2.1.3 Produce and disseminate regular information products in time intervals.	MDMO Ministry of Information and Culture	Ministry of Defense; Relevant Ministries Development Partners
	6.3 Establish an effective Community Alert System through capacity strengthening of telecommunications	6.3.1 An effective communication network to timely disseminate all hazard warning messages to the communities. 6.3.2 A disaster	6.3.1.1 Develop and establish an all hazards community alerting system and impart training to enhance its operational capability. 6.3.1.2 Organize regular drills to improve the efficiency of the	MDMO Ministry of Public Security	Relevant Ministries Lao Red Cross

	at the Provincial and District levels.	management information network is operational and demonstrated down to the household level.	system		
	<p>6.4 Establish and improve Search and Rescue Mechanism by</p> <ul style="list-style-type: none"> •Preparing a potential search and rescue scenario •Strengthening S&R capability of first responding institutions by providing training and equipments support • Establish an all hazard volunteer groups for S&R operations. 	<p>6.4.1 An effective search and rescue mechanism to provide timely operations.</p> <p>6.4.2 First responding institutions are fully equipped to efficiently handle the S&R operations.</p> <p>6.4.3 A well-trained standby volunteer workforce to assist in S&R operations.</p>	<p>6.4.1.1 Identify potential rescue scenarios and determine appropriate search and rescue equipment needs.</p> <p>6.4.1.2 Strengthen MOH and other first responding institutions with required training and equipment support</p> <p>6.4.1.3 Establish and strengthen the community based institutional mechanism for disaster volunteering , such as Lao Red Cross.</p> <p>6.4.1.4 Develop and implement a training programme to establish the all hazard volunteer workforce at municipal and district levels.</p> <p>6.4.1.5 Prepare SOPs for specific hazard based disasters incorporating command, control and coordination mechanism for emergency response.</p> <p>6.4.1.6 Design and integrate disability guidelines within search and rescue training system.</p>	<p>MDMO</p> <p>Ministry of Public Health, Lao Red Cross</p> <p>Lao Red Cross</p> <p>All Relevant Ministries NDMO Lao Red Cross</p> <p>NDMO Ministry of Defense</p> <p>NDMO</p>	<p>Ministry of Defense,</p>
	6.5 Develop and establish emergency response plans	<p>6.5.1 An all hazard response plan is established at all levels.</p> <p>6.5.2 Emergency response operations</p>	<p>6.5.1.1 Review the existing emergency response plans at all levels.</p> <p>6.5.1.2 Develop and establish emergency response plan for</p>	<p>DMO</p> <p>All Relevant Ministries</p>	<p>Relevant ministries, Armed Forces NGOs Development</p>

		during disaster are well coordinated.	<p>all hazards at all levels.</p> <p>6.5.1.3 Develop and implement a standard relief management procedure.</p> <p>6.5.1.4 Strengthen the Provinces and Districts to prepare their respective response plans</p> <p>6.5.1.5 Administration, coordination and monitoring of emergency relief and rehabilitation programmes, such as design, approval and distribution of relief materials.</p> <p>6.5.1.6 Promote planning and practicing of emergency evacuation routes for persons with disability</p>		Partners, CBOs and the Private sector
	6.6 Develop and establish post disaster recovery and reconstruction mechanism	<p>6.6.1 An all hazard post disaster recovery and reconstruction plan is established at all levels.</p> <p>6.6.2 Post disaster recovery and reconstruction operations following disaster are well coordinated.</p>	<p>6.6.1.1 Review existing damage and needs assessment systems and strengthen where necessary.</p> <p>6.6.1.2 Establish a standard sector specific damage and loss assessment methodology.</p> <p>6.6.1.3 Incorporate disaster risk reduction measures into post-disaster recovery and rehabilitation processes and use opportunities during the recovery phase to develop capacities that reduce disaster risk in the long term, including through the sharing of expertise, knowledge and lessons learned.</p> <p>6.6.1.4 Enhance recovery</p>	<p>NDMO</p> <p>NDMO</p> <p>All Relevant Ministries NDMO</p> <p>All Relevant</p>	<p>Relevant Sectoral Ministries and departments/ Armed Forces Division</p>

			schemes including psychosocial training programmes in order to mitigate the psychological damage of vulnerable populations, particularly children, the elderly and the disabled, in the aftermath of disasters	Ministries	
7.0 Developing and Strengthening regional and global Networks	7.1 Establish public and private partnerships for disaster risk reduction.	7.1.1 To create a working interface with and between the technical and scientific community.	7.1.1.1 Identify national disaster management players. 7.1.1.2 Establish formal and informal partnerships through signing of Memorandum of Understandings and Letter of Agreements.	NDMO	Relevant Ministries/ Departments, INGO Disaster Risk Management Working Group, NGOs, Academic Institutions
	7.2 Support regional and global initiatives and ensure representation that is consistent with the government integrated all sector risk reduction approach at all levels	7.2.1 To establish formal and informal partnerships with regional organizations for enhanced information exchange and mutual support. 7.2.2 Facilitate information sharing and more effective cross border mutual support programs including early warning mechanisms. 7.2.3 Timely cross border early warning. 7.2.4 Appropriate representation at regional and	7.2.1.1 Identify key regional collaborating organizations and develop systems for coordination, and knowledge sharing. 7.2.1.2 Negotiate on cross border information to enhance early warning. 7.2.1.3 Use, ASEAN and other platforms to establish regional networks for real time data/information sharing as well as sharing of new knowledge and technology. 7.2.1.3 Prepare a guideline for international assistance for any major disaster emergencies. 7.2.1.4 Actively involved in disaster risk management	NDMO Ministry of Foreign Affairs NDMO NDMO Ministry of Foreign Affairs	Relevant Ministries Regional and International Organizations Development Partners

		international forums. 7.2.5 Formalized public private partnerships	activities of ISDR, ADRC, ADPC, NGOs and donor nations. 7.2.1.5 Liaise and cooperate with international groups i.e. International Search and Rescue Advisory Group (INSARAG).. 7.2.1.6 Liaise and cooperate with ASEAN Disaster Management Coalition and AADMER.		
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5.2 Summary of Disaster Risk Reduction Initiatives 2012 -2015

The disaster risk reduction initiatives, summarized in Table VI, provides an overview of all the priority activities, timeframes and an initial indicative budget for their implementation during the period 2012 -- 2015. The National Disaster Management Plan initiatives shall need to be incorporated into specific partnerships with stakeholders engaged in disaster risk reduction in the Lao PDR and is intended to promote synergies to create sustainable achievements in vulnerability risk reduction while creating greater disaster resilience.

Table VI: Summary of Disaster Risk Reduction Initiatives 2012 -2015

	Disaster Risk Reduction Components	Time Line				Budget
		2012	2013	2014	2015	\$ (000)
1	Professionalizing the Disaster Management System					
1.1	Formulation of a national disaster risk management policy and legislation	X				15
1.2	Enhance professional skills and knowledge of NDMO and selected other key implementing agency staff on disaster risk reduction, preparedness, warning and forecasting system, and post-disaster recovery activities.	X	X	X	X	100
1.3	Design and implement training/ awareness raising programs targeting national and district level policy officials	X	X	X	X	160
2	Mainstreaming Disaster Risk Reduction					
2.1	Risk reduction principles and practices are mainstreamed within all development programmes and policies.		X	X	X	150
2.2	Mainstreaming disaster risk reduction issues in all the sectoral policies and plans.			X	X	100
2.3	Disaster risk reduction considerations incorporated in NGO programmes and plans.	X	X	X	X	80
3	Strengthening Institutional Mechanisms					
3.1	Capacity building of National Disaster Management Committees (DMCs) at all levels.	X	X	X	X	120
3.2	Create a national training capacity to sustain and progressively expand disaster risk management training efforts.	X				75
3.2	Develop a national monitoring and evaluation system to enable the effectiveness of the training strategy to be measured.		X			50

	Disaster Risk Reduction Components	Time Line				Budget
		2012	2013	2014	2015	\$ (000)
4	Empowering At Risk Communities					
4.1	Develop and establish a standard assessment procedure to identify community/household level risks.	X	X			50
4.2	Establish a disaster risk reduction action planning framework.		X			200
4.3	Strengthen community and household level (internal) capacity to withstand the disaster events.	X	X	X	X	400
4.4	Reduce vulnerability of the at risk communities through (external) social safety nets.	X	X	X	X	150
5	Expanding Risk Reduction Programming across Hazards and sectors					
5.1	Across Hazards: Update hazard, risk and vulnerability maps.			X		100
5.2	Establish an integrated approach to disaster management including climate change and climate variability impacts.	X	X			200
5.3	Across Sectors: Develop and establish policy and planning frameworks to incorporate all hazard risk reduction perspectives into sectoral policies and development plans.		X	X		100
6	Strengthening Emergency Response Systems					
6.1	Strengthen and improve an all hazard early warning system.	X	X			120
6.2	Establish and operate a National Disaster Management Information Centre within an Emergency Operations Center) with an internet connection with all the Provinces and in high risk districts.		X	X	X	150
6.3	Establish an effective Community Alert System through capacity strengthening of telecommunications system at the Provincial and District levels.		X	X	X	150
6.4	Establish and improve Search and Rescue mechanisms.	X				100
6.5	Develop and establish emergency response plans.	X	X			100
6.6	Develop and establish post disaster recovery and reconstruction mechanisms.	X	X			100
7	Developing and Strengthening Regional and Global Networks					
7.1	Establish public and private partnerships for disaster risk reduction.	X	X	X	X	100
7.2	Support regional and global initiatives and ensure representation is consistent with disaster risk reduction sectoral approaches at the national, provincial, district and village levels.	X	X	X	X	300

5.3 Disaster Risk Reduction Priorities

Among the high priority disaster risk reduction interventions identified, an initial set of disaster risk reduction interventions has been further categorized as being critical or urgent. These interventions focus on the activities incorporated into a disaster risk reduction framework that seeks to ensure that disaster risk reduction forms an integral part of the government's development agenda. Achievement of disaster risk reduction goals over the long-term depends on creating a solid foundation from which all the other disaster risk reduction initiatives identified can be more effectively launched.

The critical or urgent priorities for action are more specifically identified as follows:

- **Ensuring disaster risk reduction is a national and a local priority.**

Formulation of national disaster risk management policy and legislation is a critical priority for the Government of the Lao PDR. Launch long-term disaster risk reduction efforts envisioned in the National Disaster Management Plan. The government will take the lead and demonstrate its commitment to disaster risk reduction by formulating new, and revising out-dated, policies and legislation in support of disaster risk management.

The current lack of more formal and legal basis for various ministries to undertake disaster risk management initiatives together with the absence of regular operational budgets for national and local disaster management bodies (i.e., community, district, provincial and national levels) are the most serious constraints in the pursuit of disaster risk reduction in the country.

Given the need to learn from the experiences of other countries, technical assistance and expertise of key donor institutions, international and regional disaster management agencies and NGOs will be a key factor in pushing this agenda forward.

- **Creation and strengthening of national disaster risk reduction coordination mechanisms.**

The coordination of a wide range of disaster risk reduction initiatives involving collaboration and partnerships between an equally wide range of national and local government institutions, non-government organizations and potential technical and financial support institutions requires a strong coordinating mechanism. This coordinating mechanism should build on existing structures within the National Disaster Management Committee and its implementing body the National Disaster Management Office given their existing legal mandate to coordinate disaster management efforts in the country.

One of the primary tasks of the National Disaster Management Office will be to revive and strengthen its coordination network to effectively link government institutions, local governments, non-government organizations, the private sector, civil society and other relevant stakeholders including non-government organizations and key donor institutions. This includes establishing linkages to adequate technical and financial support to the concerned lead institutions.

- **Integration of disaster risk reduction into the national development planning**

For a substantial reduction of disaster losses in terms of human lives and in the social, economic and environmental assets of communities and of the country as a whole, disaster risks management must be incorporated into national development policies and plans. For as long as disaster risk reduction is not identified as one of the priority concerns in the national development plan, it is unlikely that disaster risk reduction programs will be consistently undertaken by government institutions and supported by the country's major external development partners.

- **Strengthen Disaster Preparedness for Effective Response at All Levels**

Strengthen national and sub-national capacities for preparedness and response. Experience shows that local governments and communities are the main actors that immediately respond to disaster events. The first response to emergencies is crucial for saving human lives as external assistance may not immediately come especially if the disaster affects a wide geographical area. In many small-scale disaster events little or no external assistance may arrive. The impact of disasters on communities in the hazard-prone rural areas can be reduced if national and local governments are assisted in preparing well in advance for the occurrence of hazard events. The initial activities to be undertaken under this component of the action plan include conducting a comprehensive review of disaster response capacities at provincial and national levels, strengthening response capacities through the formulation of hazard-specific preparedness and contingency plans, and the training of disaster response teams who are provided with the necessary skills and equipment to carry out effective disaster response operations.

- **Create policies and legal frameworks that will support national disaster risk reduction initiatives.**

It is essential to have strong coordination mechanisms at the national, provincial and district levels to integrate activities that support disaster risk reduction into sectoral programs and the planning process to ensure that natural hazard risks are being taken into consideration. This initiative shall, over time, offer protection from natural disaster episodes from communities residing in high-risk and hazard prone areas.

- **Plan for women, children, elderly and disabled.**

The gender dimension of vulnerability suggests that risks and impacts of environmental crises and natural disasters are experienced by women, children, the handicapped and men differently and are mediated by their differential access to and control over resources and familial relationships. Where life-saving skills are concerned, women are at a disadvantage due to social confinement and are more vulnerable to violence, personal injury, drowning, and health hazards. Female-headed households have less access to social, political and financial resources and are more likely to experience a more difficult recovery process than similarly poor male-headed households. Children and the elderly suffer more and mortality rates are found to be much higher among the very young and the very old. People with disabilities are one of the most neglected and alienated sections of the society and as such remain more vulnerable to

natural hazards. In the absence of any special provisions, they face particular difficulties during evacuation and in post evacuation shelters. Every concerned Ministry of the Government of Lao PDR should prepare their own Disaster Management Plans with a view to safeguarding women/children/elderly/disabled from specific disaster episodes.

In general, the effectiveness of disaster risk reduction activities in the Lao PDR should be measured through the following indicators:

1. A legal framework for disaster risk reduction exists.
2. A national multi-sectoral platform for disaster risk reduction is operational.
3. Level of funding allocated to disaster risk reduction and disaster management
4. Number of adaptation and risk reduction measures implemented.
5. Reduction in the number of deaths, injuries and impact from disasters.

Other appropriate and more specific indicators will be formulated in the monitoring and evaluation plan that will be developed as part of the implementation of the National Disaster Management Plan.

6. IMPLEMENTATION

6.1 Re-engineering Mandates for Disaster Risk Management

The strategic goals in the National Disaster Management Plan 2012-2015 are in alignment with the National Strategic Plan for Disaster Risk Management issued by the National Disaster Management Committee in 2003. Activities developed support the aim to safeguard sustainable development and reduce the effects from natural and human induced crises while developing the paradigm shift from a response modality to a preparedness and mitigation capacity at the national, provincial, district and village level.

The Government of the Lao PDR has first hand recognition of the impact of natural disaster episodes on its development strategies following recent floods and tropical storms. Typhoon Ketsana affected thousands of people in five provinces in 2009, displacing thousands of people and suffering economic losses assessed at US \$ 58 million. Many Asian/Pacific nations have initiated development planning activities that show substantial economic and social gains can be made by adopting disaster risk reduction strategies shown to be more affordable than repairing damaged infrastructure. The World Bank estimates countries could save US\$ 7 on recovery costs for every US\$1 spent on disaster risk reduction. Achieving this requires a comprehensive approach that emphasizes action taken prior to disaster rather than on post-impact recovery. The aim of disaster risk reduction is not to restore things the way they were before a disaster but to increase vulnerable communities' capacities and strengthen their coping strategies to deal more effectively with adverse events.

Further aims of the Government of the Lao PDR include the move from a public sector focused disaster capacity to a people centered approach that seeks to build preparedness, mitigation, early warning, response, reconstruction and rehabilitation abilities at the village, district and provincial levels. Lastly, the importance of protecting the natural resources of the nation – including forests, land and water is a vital responsibility.

For the National Disaster Management Office, with a critical role in the initiation of the National Disaster Management Plan, it faces inadequate capacity, authority and resources to fulfill its current mandate. Positioned within the Ministry of Labor and Social Welfare as an Office within a Division, the National Disaster Management Office presently lacks the authority to coordinate effectively with other national stakeholders and provincial/district stakeholders. Thus, a critical implemental task shall be to address the issue of the National Disaster Management Office mandate to (a) re-engineer its organizational structure within the Ministry of Labor and Social Welfare as a Department, or (b) re-position within the national Government at a level that demonstrates the importance of disaster risk reduction and (c) allocate an annual budget to support priority activities at the national, provincial, district and village levels.

Of equal importance to the success of the activities in the National Disaster Management Plan is the concurrence of the National Disaster Management Committee and acceptance of the specific roles and responsibilities for its members. The activities to be undertaken during the multi-year period must also have support for its fiscal and technical requirements.

Conversely, the Lao Red Cross and Non-Government Organizations must continue to work at the sub-national level to bring effective community-based disaster risk management to areas of high risk to natural and human induced disaster episodes. Lastly, continued technical and fiscal support of the United Nations and donor institutions is critical for the Lao PDR to meet its MDG and Hyogo Framework for Action milestones by 2015.

6.2 Implementation Mechanisms

The planning process initiated under the National Disaster Management Plan is envisioned to become the start of a continuous and sustained process of disaster risk management planning and action among the key disaster management stakeholders in the Lao PDR. Government agencies, non-government organizations, the United Nations and other disaster risk reduction stakeholders shall incorporate activities consistent with the National Disaster Management Plan to address a plethora of interventions linked to coordination mechanisms under the responsibility of the National Disaster Management Office.

The National Disaster Management Plan shall build on and enhance the role of the National Disaster Management Office to create inter-ministerial collaboration at all levels while also seeking technical and financial support for mutually supportive initiatives in disaster management and risk reduction.

6.3 Funding

Funding for the implementation of the National Disaster Management Plan will be provided from sources including the national and provincial budgetary allocations in addition to external and local budgets. All the relevant ministries and functional agencies are expected to implement their responsibilities under the National Disaster Management Plan within their specific budgets. The need for technical and fiscal resources from external sources, particularly international non-government organizations and international donor agencies is an imperative to allow for capacity and institutional development at the national, provincial, district and village levels while

striving to create a national awareness of disaster risks and the mitigation measures to lower the potential loss of lives and livelihoods to natural disasters..

The continued and strengthened linkages with international and regional disaster risk reduction institutions will increase access to technical innovations and tools to adapt and adopt to the Lao PDR environment.

The opportunity for disaster risk management funding from donors and international funding institutions is highly likely to support the Lao PDR National Disaster Management Plan and action initiatives during the 2012 - 2015 period. Specific initiatives already underway with external assistance include:

Laos Australia NGO Cooperation Agreement (LANGOC A), is a consortium between Australian NGOs and the Lao PDR government, funded by Australian Aid for strengthening community level preparedness and response to natural disasters. LANGOC A works closely with the NDMO.

UNDP and the NDMO have the Institutional Strengthening and Capacity Development on Disaster Risk Management in Lao PDR project to support initiatives at the community level and national initiatives including the development of a National Disaster Management Plan and ancillary legislation.

LNMC, ADPC and NDMO are preparing/prepared Flood Preparedness Plans for Khammouane and Savannakhet province with financial support from the GTZ and ECHO.

Emergency Relief for the 2008 Floods has been provided by most major UN Agencies (FAO, WHO, UNICEF, OCHA) and NGOs and bilateral donors (ECHO, US AID, Japan, Singapore, Sweden, Canada and Germany).

The Mekong River Commission (MRC) is currently implementing a Flood Mitigation and Management Program (FMMP) with the support of donors such as Japan and Denmark.

The Asian Development Bank is preparing a TA for flood management project.

A Priority Investment Plan was developed for mainstreaming DRR into the Agriculture sector by the NDMO and Ministry of Agriculture with technical support from ADPC and GTZ.

JICA is supporting a pilot Riverbank Protection in the Vientiane Municipality.

The World Bank is working with NDMO, WREA and MPI to support the operationalization of the Strategic Plan for DRM. This includes funding a \$1 million project assisting the Government to design an implementation plan for its DRM strategy and strengthen the hydromet, early warning and river basin management. It is also helping to strengthen the Government's capacity in carrying out damage and loss national assessment (DALNA) to measure impact of natural disasters.

While not an exhaustive list of potential donors currently operational in the Lao PDR, the NDMC through the NDMO should locate donors seeking to create greater resilience to the natural disasters likely to affect investments in development sectors.

6.4 Monitoring and Evaluation

The National Disaster Management Plan is a dynamic document and will be reviewed and evaluated annually to ensure consistency with national initiatives and Government priorities. Key performance indicators will be monitored and reported annually to assess the progress of the implementation of the Framework. The key indicators will:

- Measure the expected outcomes of the Plan.
- Set benchmarks.
- Measure the effectiveness of policies, strategies and programs and inform policy development.
- Identify agency accountability and responsibility for each performance indicator.
- Identify opportunities for improvement that lead to enhancement of the Disaster Management System

The National Disaster Management Office will be responsible for monitoring the progress of the implementation of the National Disaster Management Plan.

ANNEX A Disaster Risk Reduction Roles and Responsibilities in Pre-Disaster, Ongoing and Post-Disaster Cycle

NDMC MEMBER	RESPONSIBILITIES IN PRE-DISASTER PERIOD	RESPONSIBILITIES IN DISASTER PERIOD	RESPONSIBILITIES IN POST-DISASTER PERIOD	REFERENCE TO ACTION PLAN ACTIVITIES
Ministry of Defense	<p>The representative of the Ministry of Defense shall serve as the Chairman of the NDMC; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district and other units. responsible for disaster management specialized training and organizing simulation exercises using policemen and civilians;</p> <p>Assess vulnerability of the assets, infrastructure and personnel of the military forces to natural disasters in hazard-prone areas and integrate vulnerability reduction measures;</p> <p>Develop a disaster preparedness and response plan for the involvement of Lao PDR military in response and relief operations in different parts of the country;</p> <p>Assess resources for relief, rescue and evacuation work</p>	<p>Responsible for the National Search and Rescue Team (NASRET); coordinating joint emergency operations in disaster events;</p> <p>Deploy Army resources for disaster response upon receipt of instructions from the NDMA;</p> <p>Assist communities in evacuation and rescue the trapped groups and individuals;</p> <p>Undertake arial and field assessment in collaboration with other stakeholders to identify needs of survivors;</p> <p>Deploy Army resources for provision of relief to the survivors in collaboration with other stakeholders;</p> <p>Assist communities in evacuation and rescue the trapped groups and individuals;</p> <p>Provide essential medical assistance as required and transport injured to the hospitals;</p> <p>Undertake arial and field</p>	<p>Coordinating mitigation activities in post disaster periods;</p> <p>Assist civilian authorities in the reconstruction and rehabilitation of infrastructure as needed.</p>	<p>Supports tasks 2.2, 3.3, 4.2, 5.3, 6.1, 6.2, 6.4, 6.5, 6.6 in the National Disaster Management Plan.</p>

	by the military; Deploy Army resources for disaster response upon receipt of instructions from the NDMC.	assessment in collaboration with other stakeholders to identify needs of survivors; Deploy Army resources for provision of relief to the survivors in collaboration with other stakeholders		
Ministry of Labor and Social Welfare	The representative of the Ministry of Labor and Social Welfare serves as the Vice-Chair and assigned responsibility for the management of the National Disaster Management Office for organizing and coordinating preparedness, prevention, mitigation and recovery activities in pre-disaster periods. Undertake disaster management training for Lao PDR employees and the public nationwide.	Deploy additional staff to NDMO for better coordination and communication. Deploy resources to the relief and response efforts during disasters. Mobilize community volunteers and local level staff and resources for rescue, relief and response of disaster victims.	Acting as the center for disaster management information, assessments, collection and production of reports on an annual basis; and coordination of organizing of relief supplies, shelter other resources following a disaster episode.	Supports all activities in the National Disaster Management Plan linked to the NDMC, NDMO and the MLSW.
Water Resources and Environment Administration (WREA) – Office of the Prime Minister	Prepare flood protection plans for the country; Review and approve flood control / protection schemes prepared by provincial governments and concerned federal agencies; Make recommendations regarding principles of regulation of reservoirs for flood control;	Review of damage to flood protection works and review of plans for restoration and reconstruction works.	Measures for improvement of flood forecasting and warning system; Prepare a research program for flood control and protection; Standardize designs and specifications for flood protection works; Evaluate and monitor progress of the National	Supports tasks 1.3, 2.1, 5.2, 6.1 in the National Disaster Management Plan.

			Flood Protection Plan Implementation; Monitor the provincial government's implementation of the national Flood Protection Plan. The federal government provides the resources for meeting the capital cost of the project(s).	
Ministry of Public Security	The representative of the Ministry of Public Security shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district, institutions and major hospitals as needed; and organizing specialized disaster response training for medical teams prior to the onset of disaster events.	Responsible for coordinating the direct involvement of medical teams in emergency operations offering first aid and health care in addition to preparing death certificates of disaster victims; shall stockpile medications and supplies for use in any disaster episodes; responsible for hygiene and disease vector control;		Supports tasks 1.1, 2.2, 3.1, 4.1, 5.3, 6.3 in the National Disaster Management Plan.
Ministry of Agriculture and Forestry	The representative of the Ministry shall serve as Vice-Chair of the NDMC; shall appoint a disaster management contact person from the Ministry; Ensure a sectoral risk assessment exercise and prepare risk reduction action plan involving all its	Responsible for joint relief-of agricultural seeds and animal husbandry to disaster affected victims.	Support in institutionalizing training on Disaster Risk Reduction Approaches in agriculture and forestry sectors; Instruct Ministry staff to undertake awareness initiatives among communities on the importance of disaster risk	Supports tasks 2.1, 2.2, 5.3 in the National Disaster Management Plan.

	<p>departments. Ensure budgetary provision to support implementation of the sectoral risk reduction action plan. Develop programme for research with regards to hazard analysis and its affect in agriculture.</p>		reduction in agriculture.	
Ministry of Foreign Affairs	<p>The representative of the Ministry of Foreign Affairs shall serve as Vice-Chair of the NDMC; shall appoint a disaster management contact person from the Ministry. and, in the event of a national calamity or devastating disaster episode, shall seek international assistance following permission from the Lao PDR government; Liaison with the NDMC in order to ensure collaborative efforts for disaster risk reduction and preparedness.</p>	<p>In the event of a national calamity or devastating disaster episode, shall seek international assistance following permission from the NDMC; Develop operating procedures to fast track the requests for aid and to facilitate deployment of international response teams, and receiving of relief in case of an emergency.</p>	<p>Develop and maintain inventory of Embassy focal points for disaster preparedness and other aid giving organizations in order to quickly organize requests for assistance in case of disaster; Coordinate with foreign countries to receive aid in the case of a major catastrophe; Coordinate with international technical organizations and relevant UN agencies to receive technical and financial assistance for disaster risk reduction and preparedness.</p>	<p>Supports tasks 2.2, 7.2 in the National Disaster Management Plan.</p>
Ministry of Planning and Investment	<p>National policy and legal framework exists with decentralized responsibilities and capacities at all levels; Dedicated and adequate resources are available to implement disaster risk</p>	<p>Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities.</p>	<p>Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes</p>	<p>Supports tasks 2.1, 2.2, 3.2 in the National Disaster Management Plan.</p>

	<p>reduction plans and activities at all administrative levels; Community participation and decentralization are ensured through the delegation of authority and resources to local levels; A national multisectoral platform for disaster risk reduction is functioning; National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.</p>			
Ministry of Public Health	<p>The representative of the Ministry of Health shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district and other units; Identify hospitals and health facilities that are located in hazard-prone areas, analyze their internal and external vulnerability during emergencies, and increase the hazard resilience of such hospitals; Prepare and implement hospital disaster</p>	<p>Establish Emergency Medical Cells to ensure better coordination in disaster situations; Set-up medical camps and organise Medical Mobile Teams (MMTs) to be sent to the scene of disaster with minimum delay; Ensure communication links between hospitals and the scene of disaster.</p>	<p>Build acute health care system for post disaster response through strengthening the existing district development system; Establish a system of high readiness and list of personnel to be mobilized when warning is received or impact of disaster reported.</p>	<p>Supports tasks 2.2, 6.4 in the National Disaster Management Plan.</p>

	<p>preparedness plan for such facilities to be able to deal with emergency situations; Prepare plans and SOPs for tracking and evacuations of mass casualties as a result of a major disaster; Develop health care personnel proficient in disaster response (including improved education of nurses, emergency medical technicians, and doctors to have improved knowledge and preparedness of disaster management; Increase knowledge of psychiatrics on rehabilitative dimensions of disasters along with the health care of internally displaced people and women and children issues;</p>			
Ministry of Public Works and Transport	<p>Planning and execution of disaster plans in collaboration with other NDMC representatives; Engage in public awareness activities which will strengthen the Lao PDR capacity to mitigate against, prepare for and respond to hazard impacts.</p>	<p>Working alongside several other first responder government agencies to effectively and efficiently deal with the effects of disasters.</p>	<p>Assist with the restoration and improvement where appropriate, of facilities, livelihoods and living conditions of disaster affected communities, including efforts to reduce disaster risk factors.</p>	<p>Supports tasks 2.2, 5.3 in the National Disaster Management Plan.</p>
Ministry of Education	<p>The representative of the</p>	<p>Responsible for the</p>	<p>Encourage local educational</p>	<p>Supports tasks 2.2, 3.1, 3.2,</p>

	<p>Ministry of Education shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district and educational institutional as needed; integrating disaster management concepts into education programs in schools, organize disaster management training on living with natural hazards and managing environmental issues for teaching staff and students;</p> <p>Coordinate with NDMA and other technical agencies; e.g. FFC, PMD to receive information about disaster risks in the country;</p> <p>Identify and inventory the vulnerable educational institutions and infrastructure of the Ministry in hazard-prone areas;</p> <p>Implement actions to reduce vulnerability of the built infrastructure in education sector in hazard-prone areas, e.g. retrofitting, renovation, rebuilding etc</p>	<p>evacuation of students and general population to emergency shelters in schools in the event of a disaster;</p> <p>Identify and inventory the vulnerable educational institutions and infrastructure of the Ministry in hazard-prone areas;</p> <p>Implement actions to reduce vulnerability of the built infrastructure in education sector in hazard-prone areas, e.g. retrofitting, renovation, rebuilding etc.</p>	<p>authorities and teachers to prepare school disaster response plans and their implementation;</p> <p>Allocate funds for safer construction and disaster preparedness activities at school, college, and university levels in hazard-prone areas;</p>	<p>3.3, 4.3, 5.3 in the National Disaster Management Plan.</p>
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Ministry of Energy and Mining	<p>Designate one responsible person in the Ministry as the Disaster Management Focal Point;</p> <p>Issue necessary detail directives to the respective staff on their duties and responsibilities as a precautionary for disaster and post disaster situation;</p> <p>Prepare a sectoral risk reduction action plan of the Ministry;</p> <p>Ensure a sectoral risk assessment of the Ministry for disaster management activities;</p> <p>Ensure budgetary provision of the Ministry for its risk reduction and management activities;</p> <p>Undertake and manage risk reduction programs to ensure the resilience of infrastructure to hazards, and to reduce the vulnerability of services and systems.</p>	<p>Undertake planning to ensure uninterrupted services during hazard impact.</p>	<p>Issue detailed instructions to the employees about their duties and responsibilities at precautionary, disaster and post-disaster stages of natural disasters;</p> <p>Arrange regular workshop/on-the job training for working employees in disaster areas on disaster issues.</p>	<p>Supports task 2.2 in the National Disaster Management Plan.</p>
Ministry of Industry and Trade	<p>The representative of the Ministry of Industry and Trade shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry; develop</p>	<p>Ensure that disasters are timely assessed by Ministry officials for damages and losses and for recovery strategies;</p> <p>Implement an emergency sectoral response system.</p>	<p>Ensure disaster risk management issues are considered when constructing new factories or Industries;</p> <p>Develop business continuity policy and procedures at</p>	<p>Supports tasks 2.2, 5.3 in the National Disaster Management Plan.</p>

	<p>safety standards for industrial factories and other processing activities; managing safety standards for the use of chemicals, toxic substances in industry and their impact on the environment and the public; promote specialized training related to handling dangerous materials and industrial accidents; Mainstream disaster management principles and practices in development planning processes of the Ministry; Develop research programs with regards to hazards analysis and of the Ministry.</p>		<p>industry and higher levels; Prepare sectoral risk reduction action plan; Ensure budgetary provisions of the Ministry for disaster management activities; Establish a risk communication system of the Ministry.</p>	
Ministry of Finance	<p>The representative of the Ministry of Finance shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry.</p>	<p>Shall be responsible for the reserve and delivery of government funding for disaster activities upon the approval of the NDMC.</p>	<p>Propose, on behalf of the NDMC, government funding for short, medium and long term mitigation and recovery activities.</p>	<p>Supports task 2.2 in the National Disaster Management Plan.</p>
Ministry of Information and Culture	<p>The representative of the Ministry of Information and Culture shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Ministry and</p>	<p>Initiate timely early warning information, emergency operations, and mitigation information broadcasts through multi-media services. Coordinate with the NDMA</p>	<p>Promote disaster management public awareness and education media broadcasting programs and publications on environmental protection of natural resources.</p>	<p>Supports tasks 2.2, 4.3, 6.2 in the National Disaster Management Plan.</p>

	<p>establish focal points at the provincial, district and institutional levels as needed; Develop a communication action plan to ensure the availability of communication services in case of the occurrence of a disaster; Train the staff of communications ministry and the private sector media personnel from electronic, and print media to raise their awareness about disaster risks and the role of media in promoting community preparedness.</p>	<p>to receive information about the disaster risks and preparedness strategies, particularly about community preparedness.</p>		
<p>Postal and Telecommunications Department – Office of the Prime Minister</p>	<p>Increase sharing of knowledge on policy options, strategies and best practices for ICT connectivity. This includes expert group meetings, technical materials, training courses, seminars and workshops with an emphasis on ICT access points and community e-centers, in relation to multi-hazard risk reduction</p>	<p>Establish and maintain communications (telephone, fax, email) ; Design and implement awareness and public education programmes in cooperation with the NDMO including individual, family and community prevention, preparedness and response actions, warning signals and their meaning; Publicize short talks on government disaster risk management policy and practice;</p>	<p>Broadcast the individual and household measures to save lives and livelihoods; Create mass awareness through radio broadcasting; Arrange broadcasting of the necessary information relating to proper execution of building codes for earthquake risk mitigation; Arrange broadcasting of the govt. instructions/standing orders on earthquake disaster management; Broadcast programmes for the people of the affected areas for their mental boost</p>	<p>Supports tasks 2.2,, 5.3, 6.1 in the National Disaster Management Plan.</p>

		Organize awareness campaigns on the revised signaling system of cyclonic storm for the river and sea port; Prepare agency contingency plan to secure from earthquake effect the staff, equipment and spare parts.	up.	
Meteorology and Hydrology Department, WREA	Have overall responsibility for hydrometeorology early warning information services countrywide; Observe hazard situations and generate meteorological, geophysical and phonological data; Analyze data for issuing forecasts and warnings for aviation, agriculture, shipping, sports, irrigation etc; Issue forecasts and warnings for any approaching events that might cause damage and loss to life and property.	Disseminate warning about hazards to relevant users through speedy communication	Scrutinize, compare and publish data for appraisal of long term weather trends and earthquakes; Analyse extreme events observed in the past and their future trends; e.g. climate change, weather modification, land-ocean-atmosphere interaction, seasonal weather prediction and etc.	Supports task 2.2 in the National Disaster Management Plan.
Lao Red Cross	The representative of the Lao Red Cross shall serve as a member of the NDMC; shall appoint a disaster management contact person from the Lao Red Cross; Develop disaster	Responsible for initiating rapid assessments and producing disaster information following a disaster event; responsible for joint emergency operations in rescue and	Responsible for disaster management training, organizing drills and exercises for Lao Red Cross volunteers and the general public.	Supports tasks 2.2, 3.3, 6.1, 6.4 in the National Disaster Management Plan.

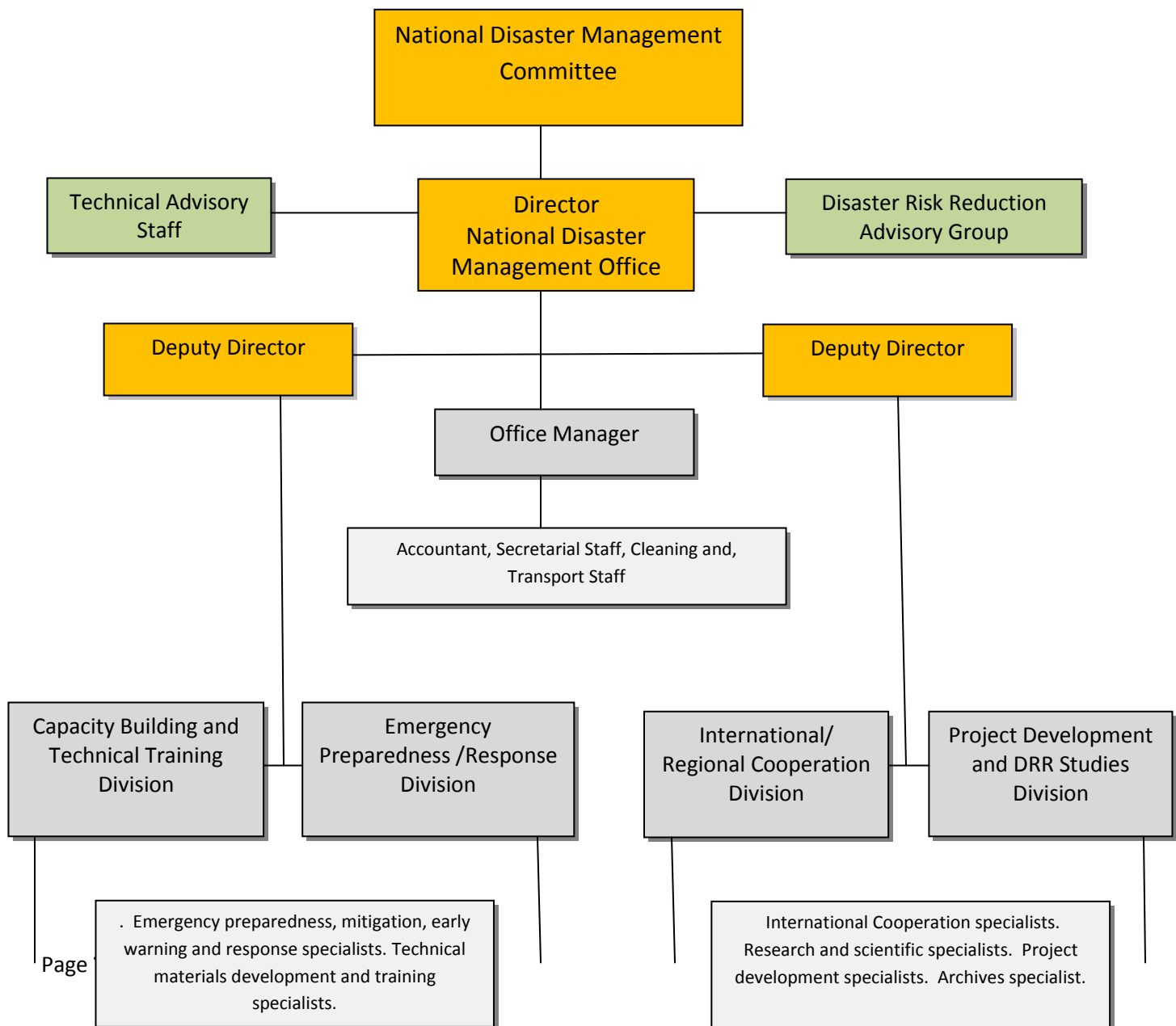
	<p>preparedness and response plans at national level and for all branch offices in the high risk areas</p> <p>Develop teams of volunteers for disaster preparedness and response;</p> <p>Train the volunteers in emergency preparedness and response (e.g. evacuation, first aid, fire fighting, early warning etc).</p>	<p>relief provision for disaster affected persons; initiate joint mobilization of relief assistance from Red Cross/Red Crescent partners;</p> <p>Work closely with local authorities in conducting joint assessments of damages and losses and needs of disaster survivors.</p>		
Youth Union	<p>Young people can act as informants within unofficial communication networks which evolve within a community setting as the need arises;</p> <p>children and youth play a major role as interpreters and relays of messages to their households and communities;</p> <p>Map need for a holistic approach to DRR - addressing vulnerabilities related to health, environment, education, religion, household economic security and other sectors, which impact together on a community and individual's wellbeing.</p>	<p>Direct involvement in disaster management work develops a better sense of community and civic consciousness.</p>	<p>Support post-recovery and reconstruction undertaken by village, district and provincial authorities.</p>	<p>Supports task 2.2 in the National Disaster Management Plan.</p>
Women's Union	<p>Give special attention to the</p>	<p>Make institutional</p>	<p>Ensure that needs of</p>	<p>Supports task 2.2 in the</p>

	<p>social, cultural and economic needs of women, children and most disadvantaged groups in disaster and risk management by using participatory tools such a vulnerability and capacity assessments;</p> <p>Raise awareness of the decision makers and staff at the Ministry about the special vulnerabilities and capacities of women with relation to disasters;</p> <p>Promote awareness amongst women in hazard-prone areas about disaster risks and disaster preparedness;</p> <p>Develop capacities of women's organizations on disaster risk reduction and preparedness.</p>	<p>arrangements for involvement of women in disaster risk reduction.</p>	<p>women survivors are addressed in post disaster situations during the relief, rehabilitation and reconstruction phases;</p> <p>Facilitate participation of women in the management of relief, rehabilitation and reconstruction activities;</p> <p>Support post-disaster rehabilitation of livelihoods of women survivors, which is mostly in the informal sector and is ignored many times.</p>	<p>National Disaster Management Plan.</p>
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Annex B NDMO Restructuring and New Terms of Reference

The following structure is proposed for undertaking the 2012-2015 activities proposed in the National Disaster Management Plan. The following 16 positions have been suggested for the National Disaster Management Office for the period 2012 -2015: Director General (1), Deputy Directors (2), Head of Divisions (4), Deputy Head of Divisions (4), Office Manager (1), Head, Information Management (1), Accountant (1), and Secretary (2). The recommendations are based upon examination of the hierarchy necessary for the National Disaster Management Office to perform the responsibilities articulated by the National Disaster Management Commission in addition to the regional/international networking tasks undertaken on behalf of the Government of Lao PDR.

Proposed National Disaster Management Office Organizational Structure



A four-person donor funded technical assistance team is also recommended to offer technical assistance to the newly recruited staff. The team would include a Chief Technical Advisor (1), Technical Assistant (1) Secretary/Translator (1) and a Driver/Messenger (1)

The Disaster Risk Reduction Advisory Group proposed could be filled by bodies such as the Inter-Agency Standing Committee Emergency and Disaster Preparedness and Response for Lao PDR in addition to other technical groups i.e. AADMER (ASEAN Agreement for Disaster Management and Emergency Response, the Mekong River Commission, and the National Committee on Communicable Diseases and Control.

DRAFT TERMS OF REFERENCE FOR PROPOSED NATIONAL DISASTER MANAGEMENT OFFICE 2012 - 2015

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE Director General

Objectives of Assignment

The Director General reports to the Chairmen of the National Disaster Management Committee and works with National Disaster Management Office staff and technical advisors with responsibilities pertaining to the coordination, monitoring and capacity development of disaster risk reduction in the Lao PDR.

Scope of Work

The Director General shall undertake the following specific tasks:

- Day-to-day management of National Disaster Management Office activities;
- Establish comprehensive working procedures related to the management of the annual working plans and oversee their compliance;;
- Put in place and facilitate results-based implementation of activities;
- Effective monitoring for ensuring implementation of strategic activities;
- Ensure that activities are executed according to the Annual Work Plan and within established budgets;
- Coordinate with relevant Government implementing partners and donors to ensure that expected results are delivered in a timely manner and in compliance with government and donor guidelines;
- Assess the programmatic impact and oversee the appropriateness and the accuracy of methods used to verify progress and the results;
- Manage and monitor the national disaster risks identified, inform the National Disaster Management Committee of such and propose mitigation measures to redress risks at the national, provincial, district and village levels;
- Prepare and submit the reports to the National Disaster Management Committee, donor agencies and international/regional disaster management stakeholders; and
- Performance of other duties as required in support of project implementation.

Requirements for Position

- A minimum of 20 years professional experience as a senior administrative or department director in a national institution;;
- Advanced university degree in social sciences, public administration, international development, engineering or a discipline relevant to disaster risk reduction;

- Experience working with government, non-governmental agencies, civil society and private sector, and the United Nations and donor agencies at the national and regional levels.
- Demonstrated ability related to management of project cycles, including project formulation, monitoring, reporting and evaluation, and understanding of donor requirements;
- Must be a proactive team player committed to adding value to disaster risk reduction activities;
- Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with national and international stakeholders;
- Knowledge of disaster risk in the Asian region and willingness and ability to travel within the region;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Director General will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four year 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE DEPUTY DIRECTOR

Objectives of Assignment

The two positions of Deputy Director report to the Director General of the National Disaster Management Office and each leads the activities of two specific departments (Capacity Building and Technical Training and the Emergency Preparedness/Response) and (International/Regional Cooperation and Project Development and DRR Studies). The two Deputy Directors supervise staff that is responsible for the initiation and accomplishment of specific activities linked to the annual objectives of the National Disaster Management Office.

Scope of Work

The two Deputy Directors will undertake the following specific tasks:

- Contribute to the development of a vision and policy statement for the National Disaster Management Office and the National Disaster Management Committee;
- Develop the executive, planning and operational roles and responsibilities of staff assigned to the National Disaster Management Office;
- Lead the process of developing annual implementation plans with clearly articulated objective, activities and benchmark reference to measure progress with staff;
- Provide guidance and mentoring to staff while supporting group dynamics in task management while monitoring department progress;
- Develop effective working relationships with staff and regional stakeholders in disaster risk reduction initiatives;
- Contribute to donor reporting requirements by preparing concise reports in a timely manner on project activity achievements, constraints encountered and how they were resolved, revisions to the implementation work plan and expenditures to the approved annual budget.

Requirements for Position

- A minimum of 15 years professional experience as a senior administrative or development manager, with government or organizations engaged in disaster risk reduction, capacity building and skills development and community animation ;
- Advanced university degree in social sciences, public administration, international development, engineering or a discipline relevant to disaster risk reduction;
- Experience working with government, non-governmental agencies, civil society and private sector, and donor agencies at the national and regional levels.
- Demonstrated ability related to management of project cycles, including project formulation, monitoring, reporting and evaluation, particularly donor requirements;
- Must be a proactive team player committed to adding value to National Disaster Management Office activities;
- Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with national and international stakeholders;
- Knowledge of Asian region and willingness and ability to travel within the region;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Deputy Directors will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years: 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE HEAD OF DIVISION/DEPUTY HEAD OF DIVISION

Objectives of Assignment

The Head of Division/Deputy Head of Division are technical positions reporting to the Deputy Directors of the National Disaster Management Office and each leads the activities of specific departments including the Capacity Building and Technical Training and Department, Emergency Preparedness/Response Department, International/Regional Cooperation and Project Development and DRR Studies Department. One Senior Specialist is assigned to each Department with additional Specialist performing tasks required for completion of annual activity targets linked to the annual/multi-year objectives of the National Disaster Management Office.

Scope of Work

The Head of Division (4) /Deputy Head of Division (4) will undertake the following specific tasks:

- Support the development of the National Disaster Management Office capacity building and technical training to permit knowledge to be used in critical planning and decision-making by national/regional stakeholders with responsibilities for disaster preparedness, mitigation, early warning, recovery, reconstruction and rehabilitation;
- Undertake technical activities as instructed by the Deputy Director;

- Collaborate with other staff and other disaster risk stakeholders to create effective mechanisms for mutually supportive activities to be successful;
- Contribute to the overarching goals of the National Disaster Management Office by active participation in weekly staff meetings and offering information technology support to achieve and add synergy to the objectives of the National Disaster Management Office.
- Maintain appropriate linkages to member states and the media to ensure that the goals/purposes are well understood and that its achievements receive public attention;
- Actively participate in in-house committees to develop policies, presentations and materials to raise awareness of the National Disaster Management Office tasks to create disaster resilience in the Lao PDR;
- Contribute to the organization and initiation of workshops and training sessions for government staff and disaster risk reduction stakeholders;
- Preparation of timely and accurate reporting of Departmental activities ;
- Assist the National Disaster Management Office and other disaster risk reduction stakeholders to conduct baseline studies and analysis of data to develop strategic planning for capacity development initiatives; and
- Any additional tasks and responsibilities as requested by the Deputy Director.

Requirements for Position

- A minimum of 5 to 10 years professional experience in a technical capacity i.e. information technology, emergency preparedness, mitigation, early warning and response, legal and international cooperation, project development and archival activities, with organizations engaged in disaster risk reduction
- Advanced university degree in social sciences, public administration, international development, engineering or a discipline relevant to disaster risk reduction;
- Experience working with government, non-governmental agencies, civil society and private sector, the United Nations and donor agencies at the national and regional levels.
- Demonstrated ability related to management of project cycles, including project formulation, monitoring, reporting and evaluation, particularly with donor requirements;
- Must be a proactive team player committed to adding value to National Disaster Management Office activities;
- Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with national and international stakeholders;
- Knowledge of the Asian region and willingness and ability to travel within the region;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Senior Specialist/Specialist will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years: 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE OFFICE MANAGER

Objectives of Assignment

The Office Manager is an administrative position reporting to the Director of the National Disaster Management Office. The Office Manager oversees the secretarial, transportation and security staff in addition to the administrative functions to ensure that the tasks required for completion of annual activity targets linked to the annual/multi-year objectives of the National Disaster Management Office are undertaken in a timely, efficient and effective manner.

Scope of Work

The Office Manager will undertake the following specific tasks:

- Supervise the activities of the secretarial pool to meet the requirements of the Director General and Deputy Directors.
 - Supervise the activities of the drivers in the transportation pool to ensure the vehicles are operated in an efficient and effective manner In support of core business and properly maintained in good working order;
 - Supervise the work of the cleaning staff to ensure that the premises and assets are protected around the clock and that the National Disaster Management Office is maintained at the highest standard of cleanliness and order;
 - Support in the development of human resources policies and procedures and the maintenance of personnel records and files;
 - Assist in the development of the National Disaster Management Office annual operating budget; and
 - Other tasks as proposed by the Director.
-
- **Requirements for Position**
 - A minimum of 10 years professional experience in a senior management role in a public/private sector organization;
 - Advanced university degree in, public administration, business administration or human resources;
 - Experience working with government, non-governmental agencies, civil society and private sector;
 - Demonstrated ability related to management of project cycles, including scheduling, personnel supervision and mentoring and conflict resolution;
 - Must be a proactive team player committed to adding value to National Disaster Management Office activities;
 - Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with staff;
 - Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Office Manager will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years: 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE HEAD, INFORMATION MANAGEMENT

Objectives of Assignment

This position will assist the senior staff with their informational management responsibilities pertaining to the work of the National Disaster Management Office. The Head, Information Management, under the supervision of the Office Manager shall undertake assignments for the Director General, Deputy Directors and Head of Divisions as required to support their data management responsibilities in a timely and accurate manner.

Scope of Work

The Head, Information Management will undertake the following specific tasks:

- Develop data base management systems for all Divisions for the National Disaster Management Office;
- Support the technical training of National Disaster Management Office staff to use and manage the data management programs;
- Support the information exchange between national, regional and international disaster risk reduction stakeholders;
- Support the data collection and collation requirements during video conferences, workshops and dialogues with disaster risk reduction partners;
- Develop a sound understanding of the disaster risk reduction terminology used by staff and the correct usage in Lao and English languages; and
- Undertake any other work as assigned by the Office Manager.

Requirements for Position

- A minimum of 5 years professional experience as a Information Technology specialist developed with a public or private sector organization, experience with a United Nation or non-governmental organization preferred;
- University degree in Information Management;
- Must be a self-starting team player committed to producing timely and accurate work;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Head, Information Management will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE ACCOUNTANT

Objectives of Assignment

The Accountant is an administrative position reporting to the Director of the National Disaster Management Office. The Accountant will ensure that financial transactions and reporting of

expenditures, procurement and documentation of inventory items and periodic fiscal reports and budgets are prepared in a timely and accurate manner.

Scope of Work

The Accountant will undertake the following specific tasks:

- Maintain an accounting system for the project consistent with standard government and donor practices that includes systems for advances/receipts, disbursements and monthly financial reconciliation statements;
- Audit the fiscal statements prepared by the financial and administrative department;
- Assist in the preparation of annual budgets for the National Disaster Management Office and monitor project line item expenditures and account balances;
- Review invoices submitted for payment for conformity to contractual terms; and
- Undertake any other fiscal activities as assigned by the Director.

Requirements for Position

- A minimum of 7 years professional experience as a Accountant with a public or private sector organization, experience with the Government, United Nation or non-governmental organization preferred ;
- University degree in finance, public administration, or business management;
- Demonstrated proficiency in use of office equipment with computer literacy in Microsoft Office, spreadsheets and power point presentations;
- Must possess and excellent understanding of fiscal management and committed to producing timely and accurate fiscal reports and budgets.
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Accountant will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE SECRETARY

Objectives of Assignment

This position will assist the senior staff with their responsibilities pertaining to operations of the National Disaster Management Office. The Secretary shall be supervised by the Office Manager and shall undertake assignments for the Director and Deputy Directors as required in a timely and accurate manner.

Scope of Work

The Secretary will undertake the following specific tasks:

- Provide overall secretarial and administrative support to the National Disaster Management Office senior staff as requested;
- Establish and maintain files of correspondence, reports, personnel and other project materials in a central data filing system;
- Maintain close relationship with colleagues to facilitate meetings, appointments and training initiatives; and
- Undertake any other clerical work as assigned by the technical staff.

Requirements for Position

- A minimum of 5 years professional experience as a Secretary with a public or private sector organization, experience with a United Nation or non-governmental organization preferred;
- University degree in public administration, linguistics, international development, or social science discipline relevant to disaster risk reduction as a part of development;
- Demonstrated proficiency in use of office equipment with computer literacy in Microsoft Office, spreadsheets and power point presentations;
- Must be a self-starting team player committed to producing timely and accurate work;
- Fluency in Lao and some English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Secretary will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 to 2015.

NATIONAL DISASTER MANAGEMENT OFFICE

TERMS OF REFERENCE HEAD, INFORMATION MANAGEMENT

Objectives of Assignment

This position will assist the senior staff with their informational management responsibilities pertaining to the work of the National Disaster Management Office. The Head, Information Management, under the supervision of the Office Manager shall undertake assignments for the Director General, Deputy Directors and Head of Divisions as required to support their data management responsibilities in a timely and accurate manner.

Scope of Work

The Head, Information Management will undertake the following specific tasks:

- Develop data base management systems for all Divisions for the National Disaster Management Office;
- Support the technical training of National Disaster Management Office staff to use and manage the data management programs;
- Support the information exchange between national, regional and international disaster risk reduction stakeholders;

- Support the data collection and collation requirements during video conferences, workshops and dialogues with disaster risk reduction partners;
- Develop a sound understanding of the disaster risk reduction terminology used by staff and the correct usage in Lao and English languages; and
- Undertake any other work as assigned by the Office Manager.

Requirements for Position

- A minimum of 5 years professional experience as a Information Technology specialist developed with a public or private sector organization, experience with a United Nation or non-governmental organization preferred;
- University degree in Information Management;
- Must be a self-starting team player committed to producing timely and accurate work;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Head, Information Management will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 to 2015.

DONOR AGENCY PROJECT STAFF**TERMS OF REFERENCE
CHIEF TECHNICAL ADVISOR****Objectives of Assignment**

Under the supervision of the Director General of the National Disaster Management Office, the Chief Technical Advisor will provide disaster risk management advice and support to the senior staff of the National Disaster Management Office for enhancing the quality and delivery of activities to mainstream and promote disaster risk reduction in the Lao PDR.

Scope of Work

The Chief Technical Advisor will undertake the following specific tasks:

- Provide technical and programmatic advice on disaster risk reduction to the Director and staff of the National Disaster Management Office and the National Disaster Management Committee;
- Provide on-going advice on the development of strategies for the implementation of each output based on the initial intent of the National Disaster Management Office work plan;
- Advise on the formation and capacity development of the staff to implement and oversee project activities;
- Advise on the integration of member states disaster risk reduction activities in concert with the National Disaster Management Office and support partnership development with regional/international stakeholders in disaster risk reduction.
- Analyze and review the implementation of project activities and provide advice to ensure their quality and relevance to present and future environmental situations;
- Promote coordination among Asian nations through information sharing, workshops and dialogues to maximize synergy and knowledge exchange;
- Serve as a disaster risk reduction resource person in the Asian/Pacific region;
- Assist in the identification and acquisition of needed project resources and fiscal support;
- Provide oversight on the monitoring and evaluation mechanisms of project activities;
- Provide support and advice to incorporate climate change adaptation across disaster risk reduction activities in risk knowledge, preparedness, mitigation and prevention;
- Ensure gender perspective is mainstreamed in disaster risk reduction work; and
- Perform other related functions as requested.

Requirements for Position

- A minimum of 15 years professional experience in development programming, particularly on the design, implementation and evaluation of disaster risk reduction projects;
- Advanced university degree in social sciences, public administration, international development, engineering or a discipline relevant to disaster risk reduction as a part of development;

- Experience working with government, non-governmental agencies, civil society and private sector, and the United Nations and donor agencies at the national and regional levels.
- Demonstrated ability related to management of project cycles, including project formulation, monitoring, reporting and evaluation, particularly donor requirements;
- Must be a proactive team player committed to adding value to National Disaster Management Office activities;
- Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with national and international stakeholders;
- Knowledge of the Asian region and willingness and ability to travel within the region;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Chief Technical Advisor will be employed at the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years – 2012 to 2015..

DONOR AGENCY PROJECT STAFF TERMS OF REFERENCE

TECHNICAL ASSISTANT

Objectives of Assignment

This position will assist the Chief Technical Advisor and have responsibilities pertaining to support of the National Disaster Management Office. The Technical Assistant will ensure that project activities in disaster risk reduction are of technical excellence, supporting the Hyogo Framework for Action, and strengthening networks and linkages between the National Disaster Management Office and national, regional and global risk reduction stakeholders.

Scope of Work

The Technical Advisor will undertake the following specific tasks:

- Provide support to the Chief Technical Advisor, Deputy Directors and staff of the National Disaster Management Office.
- Contribute collective expertise to the technical departments in the planning of annual implementation plans, monitoring of departmental objectives and activities, problem resolutions and skills development of staff;
- Advise on the development of operational strategies for information technology, analyses and evaluations and the policy and standards;
- Advise on the development of national and regional and geographic specific disaster risk reduction planning;
- Contribute to in-house/external assessments and its activities; and

- Advise on management and fiscal responsibilities and reporting for the provision of activities in training, advocacy, procurement and initiation of disaster risk reduction initiatives in the Lao PDR and with regional states.

Requirements for Position

- A minimum of 10 years professional experience in development programming, particularly on the design, implementation and evaluation of disaster risk reduction projects;
- Advanced university degree in social sciences, public administration, international development, engineering or a discipline relevant to disaster risk reduction as a part of development;
- Experience working with government, non-governmental agencies, civil society and private sector, and the United Nations and donor agencies at the national and regional levels.
- Demonstrated ability of team building and skills development aptitudes and mentoring/support to technical staff engaged in training, administration and finance and advocacy;
- Must be a proactive team player committed to adding value to the National Disaster Management Office activities;
- Ability to identify sustainable resolutions to problems, handle multi-tasking situations and negotiate resolutions with national and international stakeholders;
- Knowledge of the Asian region and willingness and ability to travel within the region;
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Technical Assistant will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years: 2012 to 2015.

DONOR AGENCY SUPPORT STAFF

TERMS OF REFERENCE SECRETARY/TRANSLATOR

Objectives of Assignment

This position will assist the Chief Technical Advisor and the Technical Assistant with their responsibilities pertaining to support of the National Disaster Management Office. The Secretary/Translator will ensure that overall project office secretarial and administrative support, including translation of correspondence and other documents are undertaken in a timely and accurate manner.

Scope of Work

The Secretary/Translator will undertake the following specific tasks:

- Provide overall secretarial and administrative support to the Chief Technical Advisor and the Technical Assistant as requested;
- Establish and maintain files of correspondence, reports, personnel and other project materials in a central data filing system;
- Maintain close relationship with National Disaster Management Office colleagues to facilitate meetings, appointments and training initiatives;
- Translate project documents and correspondence from Lao-English and English-Lao; and
- Undertake any other clerical work as assigned by the Chief Technical Advisor or the Technical Assistant.

Requirements for Position

- A minimum of 5 years professional experience as a Secretary/Translator with a public or private sector organization, experience with a United Nation or non-governmental organization preferred;
- University degree in public administration, linguistics, international development, or social science discipline relevant to disaster risk reduction as a part of development;
- Demonstrated proficiency in use of office equipment with computer literacy in Microsoft Office, spreadsheets and power point presentations;
- Must be a self-starting team player committed to producing timely and accurate work; and
- Fluency in Lao and English and strong skills in oral and written presentations.

Place and Duration of Assignment

The Secretary/Translator will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 -2015.

DONOR AGENCY SUPPORT STAFF

TERMS OF REFERENCE DRIVER/MESSENGER

Objectives of Assignment

This position will assist the Chief Technical Advisor and the Technical Assistant with their responsibilities pertaining to support of the National Disaster Management Office. The Driver/Messenger will operate the project vehicle to provide transportation services to staff and to undertake messenger services as required.

Scope of Work

The Driver/Messenger will undertake the following specific tasks:

- Provide transportation services as required for the performance of project related activities;
- Maintain vehicle with daily cleaning, checking fluids, tires and overall condition and maintaining a vehicle log book of travel;
- Undertake the receipt and delivery of mail and other articles as requested by project staff; and
- Undertake the purchase of office materials as requested by the Chief Technical Advisor.

Requirements for Position

- A minimum of 7 years professional experience as a Driver with a public or private sector organization, experience with a United Nation or non-governmental organization preferred ;
- Must possess an accident-free driving record for the past 5 years.
- Must possess good written and oral skills in Lao language with some knowledge of English.

Place and Duration of Assignment

The Driver/Messenger will be employed in the National Disaster Management Office in Vientiane, Lao PDR. The duration of this assignment is four years 2012 -2015.

Annex C Disaster Terminology

DISASTER RISK MANAGEMENT TERMINOLOGY

TERMS

Capacity-Building: Efforts aimed to develop human skills or societal infrastructure within a community or organization needed to reduce the level of risk. Capacity-building also includes development of institutional, financial, political and other resources, such as technology at different levels and sectors of the society.

Climate Change Adaptation: Adaptation is defined by the IPCC as “the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities”.¹¹ Examples of adaptation include preparing risk assessments, protecting ecosystems, improving agricultural methods, managing water resources, building settlements in safe zones, developing early warning systems, instituting better building designs, improving insurance coverage and developing social safety nets.

Community: a social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

Disaster : A serious disruption of the functioning of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources.

Disaster Risk Management : The systematic process of using administrative decisions, organization, operational skills and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards.

Disaster Risk Reduction: Disaster risk reduction can be defined as “actions taken to reduce the risk of disasters and the adverse impacts of natural hazards through systematic efforts to analyze and manage the causes of disaster including through avoidance of hazards, reduced social and economic vulnerability to hazards, and improved preparedness for adverse events”.¹² It is therefore tailor-made to help counteract the added risks arising from climate change.

Disaster Risk Reduction Plans: Documents that set out planning authorities’ policies and proposals for disaster risk reduction, which should be considered in the respective development plan and development actions. Due to the different geographical scales applicable at different levels, disaster risk reduction plans are specific to each level of government.

Emergency: An emergency is a situation that poses an *immediate risk* to health, life, property or environment. Most emergencies require urgent intervention to prevent a worsening of the situation, although in some situations, mitigation may not be possible and agencies may only be able to offer palliative care for the aftermath. While some emergencies are self evident (such as a natural disaster

¹¹IPCC Fourth Assessment Report, Working Group II, Glossary of Terms: <http://195.70.10.65/pdf/glossary/ar4-wg2.pdf>.

¹² UNISDR Terminology on Disaster Risk Reduction Based on the 2004 Terminology: Basic terms of disaster risk reduction: <http://www.unisdr.org/eng/library/lib-terminology-eng%20home.htm>.

that threatens many lives), many smaller incidents require the subjective opinion of an observer (or affected party) in order to decide whether it qualifies as an emergency.

Gender Mainstreaming: Mainstreaming a gender perspective is the process of assessing the implication for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.

Hazard: A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Mitigation: Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards. (Examples of structural measures are engineering works and hazard-resistant construction, while non-structural measures include awareness-raising, knowledge development, policies on land use and resource management, and facilities' operating practices.

National Platform for Disaster Risk Reduction: A nationally owned and led forum or committee of multi-stakeholders. It serves as an advocate of disaster risk reduction at different levels and provides coordination, analysis and advice on areas of priority requiring concerted action through a coordinated and participatory process. A National Platform for disaster risk reduction should be the coordination mechanism for mainstreaming disaster risk reduction into development policies, planning and programmes in line with the implementation of the HFA. It should aim to contribute to the establishment and the development of a comprehensive national disaster risk reduction system, as appropriate to each country.¹³

National Policy Framework: A set of policies adopted by a national authority to define and coherently address a particular issue and to guide decision-making, where these policies comprise relevant assessments, strategies, goals, approaches, rules, plans, activities, priorities, agents and responsibilities. A national disaster risk reduction policy framework can guide all stakeholders - sector agencies, local governments and others - in the development of complementary risk reduction policies in their areas of authority.

Preparedness: Pre-disaster activities that are undertaken within the context of disaster risk management and are based on sound risk analysis. This includes the development or enhancement of an overall preparedness strategy, policy, institutional structure, warning and forecasting capabilities, and plans that define measures geared to helping at-risk communities safeguard their lives and assets by being alert to hazards and taking appropriate action in the face of an imminent threat or an actual disaster. (Source: OCHA)

Prevention: Activities to provide outright avoidance of the adverse impact of hazards and means to minimize related environmental, technological and biological disasters. Depending on social and technical feasibility and cost-benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education related to disaster risk reduction, changing attitudes and behavior contribute to promoting a "culture of prevention".

¹³ UN/ISDR Guidelines National Platforms for Disaster Risk Reduction

Public Awareness: The processes of informing the general population, increasing levels of consciousness about risks and how people can act to reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster. Public awareness activities foster changes in behavior leading towards a culture of risk reduction. This involves public information, dissemination, education, radio or television broadcasts and use of printed media, as well as the establishment of information centers and networks and community and participation actions.

Relief/Response: The provision of assistance or intervention during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Resilience: The capacity of a system, community or society potentially exposed to hazards to adapt, by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase its capacity for learning from past disasters for better future protection and to improve risk reduction measures.

Risk: The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.

Risk Assessment/Analysis: A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend.

Vulnerability: A measurement of community elements at risk that are exposed to specific hazards, both natural and human induced, and that have a low level of resilience to cope with the impacts of that hazard or characteristics of that hazard that threatens many lives), many smaller incidents require the subjective opinion of an observer (or affected party) in order to decide whether it qualifies as an emergency.

Annex D

Linkages of the Key Strategic Goals to Key International and National Drivers for Change

Note: An X designates where a linkage exists between the specific driver and the Lao PDR National Disaster Management Plan.

Element of Drivers	Goal 1: Professionalize The Disaster Management System	Goal 2: Mainstream Risk Reduction	Goal 3: Strengthen Institutional Mechanisms	Goal 4: Empowering At Risk Communities	Goal 5: Expand Risk Reduction Programs	Goal 6: Strengthening Emergency Response Systems	Goal 7: Developing and Strengthening Networks
United Nations Millennium Development Goals:							
Eradicate extreme poverty and hunger		X	X	X	X		
Achieve universal primary education		X	X	X	X	X	
Promote gender equality and empower women	X	X		X	X	X	X
Ensure environmental sustainability	X	X	X	X	X		X
Reduce child mortality		X	X	X	X	X	X
Improve maternal health		X	X	X	X	X	X

Element of Drivers	Goal 1: Professionalize The Disaster Management System	Goal 2: Mainstream Risk Reduction	Goal 3: Strengthen Institutional Mechanisms	Goal 4: Empowering At Risk Communities	Goal 5: Expand Risk Reduction Programs	Goal 6: Strengthening Emergency Response Systems	Goal 7: Developing and Strengthening Networks
Combat HIV/AIDs, malaria and other diseases		X	X	X	X		X
Develop a global partnership for development	X	X	X		X		X
Reduce the impact of UXO	X	X	X	X	X	X	X
Hyogo Framework for Action 2005-2015							
Integration of disaster risk reduction considerations into sustainable development policies, planning and programming at all levels	X	X	X	X	X	X	X
Incorporation risk reduction into the design, implementation of emergency preparedness, response/ recovery programmes of affected communities.	X			X	X	X	

Element of Drivers	Goal 1: Professionalize The Disaster Management System	Goal 2: Mainstream Risk Reduction	Goal 3: Strengthen Institutional Mechanisms	Goal 4: Empowering At Risk Communities	Goal 5: Expand Risk Reduction Programs	Goal 6: Strengthening Emergency Response Systems	Goal 7: Developing and Strengthening Networks
Development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level.	X	X	X	X	X	X	X
<i>ISDR Guiding Principles: National Platforms for Disaster Risk Reduction</i>							
Increase public awareness to understand risk, vulnerability and disaster reduction globally		X		X			
Commitment from public authorities to implement disaster reduction policies and actions	X	X	X				X
Stimulate Interdisciplinary/ intersectoral partnerships and expansion UNFCC risk reduction	X		X				X

networks.							
Element of Drivers	Goal 1: Professionalize The Disaster Management System	Goal 2: Mainstream Risk Reduction	Goal 3: Strengthen Institutional Mechanisms	Goal 4: Empowering At Risk Communities	Goal 5: Expand Risk Reduction Programs	Goal 6: Strengthening Emergency Response Systems	Goal 7: Developing and Strengthening Networks
Improve scientific knowledge about disaster reduction	X		X	X	X		X
PRSP Comprehensive Disaster Management towards Poverty Reduction and Growth: Policy Matrix key strategic goals:							
Mainstreaming Disaster Management and Risk Reduction into National Policies, Institutions and Development Processes	X	X	X		X	X	X
Strengthening disaster management and risk reduction capacity	X	X	X	X	X	X	
Knowledge management on disaster risk reduction.	X			X	X		
Enhancing community							

level capacity for disaster risk reduction.			X	X	X		
Element of Drivers	Goal 1: Professionalize The Disaster Management System	Goal 2: Mainstream Risk Reduction	Goal 3: Strengthen Institutional Mechanisms	Goal 4: Empowering At Risk Communities	Goal 5: Expand Risk Reduction Programs	Goal 6: Strengthening Emergency Response Systems	Goal 7: Developing and Strengthening Networks
Ensuring social protection of the most disadvantaged	X	X	X	X	X		X

ANNEX E

The Millennium Development Goals and Disaster Risk Reduction

Disasters can affect a nation's core mission and retard progress across focus areas such as: social investment and urban development; modernization of the state; competitiveness; regional cooperation; and environment and natural resource management. In order to provide effective development assistance a nation needs to approach disaster risk management as an investment in sustainable development.

1. Eradicating extreme poverty and hunger

Recent statistical analyses prove a long-held theoretical position that human vulnerability to natural hazards and income poverty are largely co-dependent. At the national level, reducing disaster risk is often contingent upon alleviating poverty and vice versa. Many lower income people live in substandard housing that is less able to withstand natural forces. Some live in high-density settlements near cities, built on steep slopes that are vulnerable to landslides. Others live in low-lying areas that are at risk of flooding. In rural areas poverty drives deforestation and unsustainable agricultural practices. In addition, poor people have less access to resources to help them recover from physical losses. They are less likely to have savings, insurance, or access to credit, which could help them finance reconstruction costs. This situation can cause permanent setbacks in the lowest income quintiles and thwarts their efforts at climbing out of poverty.

2. Achieving universal primary education

Educational attainment is a fundamental determinant of human vulnerability and marginalization. Broadening participation in development decision-making is a central tenet of disaster risk management. The destruction of schools is one very direct way in which disasters can inhibit educational attainment, but perhaps more important is the drain on household resources. Households frequently have to make difficult decisions on expending resources on survival and coping with poverty, or on investments (such as education and health care) to alleviate human vulnerability and enhance longer-term development prospects. If affected by a disaster, the poorest have little choice and devote their resources to survival; sending children to school falls lower in their list of priorities.

3. Promoting gender equality and empowering women

Facilitating the participation of women and girls in the development process, including efforts to reduce disaster risk, is a key priority. Women across the world play critical roles in the shaping of risks in development. In some contexts, women may be more exposed and vulnerable to hazards. For example, those with responsibilities in the household may be more exposed to risk due to unsafe buildings. At the same time, women are often more likely than men to participate in communal actions to reduce risk and enhance development. Orienting disaster risk policy so that it builds on the social capital represented by women can enable a more informed development policy. Such a model will not be easy, but best practice does exist to point the way. Barriers to women's participation at the higher levels of decision-making often severely

limit their skills and knowledge available for reducing disaster risk. Overcoming disparities in access to education is a fundamental component of the disaster risk management agenda.

4. Reducing child mortality

Children under five years of age are particularly vulnerable to the impacts of hazards such as floods and drought through drowning and starvation as well as to environmental risks of inadequate sanitation and lack of drinkable water, which cause communicable diseases. In addition, health infrastructure is often damaged and made inoperable in a catastrophic event. The loss of caregivers and household income earners and the stress of displacement can have especially heavy tolls on the psychological and physical health of children less than five years of age. Policies to support sustainable development by reducing child mortality need to build in strategies to limit or reduce disaster risk.

5. Improving maternal health

As environmental hazard stress or shock erodes the savings and capacities of households and families, marginal people within these social groups are most at risk. In many cases it is women and girls or the aged who have the least entitlement to household or family assets. Maternal health is a strategic indicator of intra- and inter-household equality. Reducing drains on household assets through risk reduction will contribute to enhancing maternal health. More direct measures through investment in education and health will similarly contribute to household resilience as maternal health indicators improve. Children have already been identified as a high-risk group and maternal health plays a part in shaping the care received by young children.

6. Combating HIV/AIDS, malaria and other diseases

The interactions between epidemiological status and human vulnerability to subsequent stresses and shocks are well documented. For example, rural populations affected by HIV/AIDS are less able to cope with the stress of drought because of a shortage of labor. Individuals living with chronic terminal diseases are more susceptible to the physiological stress of hunger. For diseases transmitted through vectors, there is a risk of epidemic following floods or drought, similarly the destruction of drinking water, sanitation and health care infrastructure in catastrophic events can increase the risk of disease.

7. Ensuring environmental sustainability

Environmental degradation increases the vulnerability to natural hazards and often transforms a hazard event into a disaster. Environmental degradation compounds the actual impacts of hazard events, limits an area's ability to absorb those impacts, and lowers the overall natural resilience to hazard impacts and disaster recovery. For example, deforestation may aggravate the effects heavy rainfall causing landslides and floods. Unplanned urbanization poses a challenge because it creates conditions that increase human vulnerability to disasters and at a high damage propensity. Informal settlement often takes place in highly dangerous locations, such as steep hillsides vulnerable to landslides, riverbeds prone to urban floods and near industrial installations subject to technological disasters. The target of achieving a significant improvement in the lives of at least 100 million slum dwellers by the year 2020 will be

impossible without developing policies to confront their currently high risk from earthquake, hurricanes, flooding and drought. Natural hazards may also increase the risk of environmental degradation. For example, wildfires may result in deforestation and erosion, floods cause sedimentation and earthquakes may rupture gas pipelines or cause other types of industrial accidents with severe environmental impacts.

8. Developing a global partnership for development

Efforts to enhance sustainable development by reducing human vulnerability to natural hazards are challenged by competing priorities in national development agendas and by political incentive structures that favor disaster response over risk management. International and bilateral organizations must help generate a framework of incentives that encourage the private sector, academia and civil society to create partnerships with national and local governments to address disaster prevention as an integral part of development policies. Strong efforts are needed to build global partnerships for development that integrate the reduction of disaster risk.¹⁴

¹⁴ Adapted from “Reducing Disaster Risk: A Challenge for Development”, United Nations Development Program, 2004, p. 16.