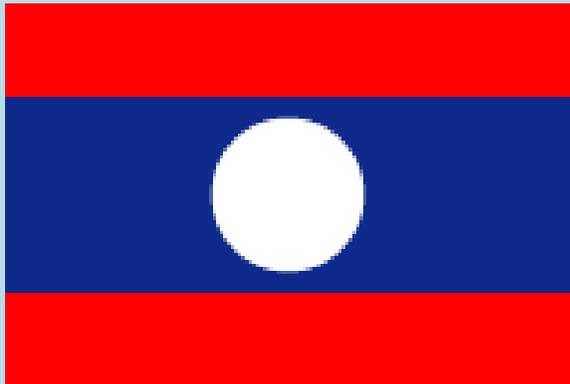


LAO PEOPLE'S DEMOCRATIC REPUBLIC



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1. NATIONAL PROFILE

1.1 General¹

Lao PDR is a land linked country bordering Myanmar, Cambodia, China, Thailand, and Vietnam. About 6.25 million people live in its 17 provinces, with most people – 67 percent – still living in rural areas. However, urbanization rate is 4.9 percent per year. The country is largely mountainous, with the most fertile land found along the Mekong plains. The river flows from north to south, forming the border with Thailand for more than 60 percent of its length.

Despite still being a least developed country (LDC), Lao PDR has made significant progress in poverty alleviation over the past 2 decades with poverty rates decline from 46% in 1992 to 27.6% today. The country is on course to achieve the Millennium Development Goal target of halving poverty by 2015, however the challenge now is to ensure that all Lao people benefit in the country's development.

1.2 Physiography²

Location: Southeastern Asia, northeast of Thailand, west of Vietnam

Geographic coordinates: 18⁰ 00' N, 105⁰ 00' E

Total Area: 236,800 sq km

Land: 230,800 sq km

Water: 6,000 sq km

Land boundaries: 5,083 km

Border countries: Burma 235 km, Cambodia 541 km, China 423 km, Thailand 1,754 km, Vietnam 2,130 km

1.3 Climate³

The Lao People's Democratic Republic (Laos) is the only country in Indochina that is completely surrounded by land. Most of the country is hilly or mountainous. The country's weather is dominated by the Asian monsoon, with the north monsoon blowing from November to March, and the south monsoon from May to September. A transition period exists between the two monsoons, during which

winds are light and variable. Laos has a single rainy season during the south monsoon, while infrequent rain and much sunshine persist for the rest of the year. Temperatures are generally high year-round. However, the mountains in the north occasionally experience cold periods in winter during the north monsoon. These periods are associated with outbreaks of cold air from central China. Sheltered from these outbreaks, the lowlands further south have a hot and sunny dry season. Despite the heat, weather conditions are more pleasant during the dry season than during the cooler wet season when humidity is higher and the weather feels muggy and oppressive.

Very occasionally, a typhoon from the South China Sea may cross over land to affect the country during the South monsoon, resulting in widespread torrential rain and strong wind.

1.4 Socio-economic Profile^{4,5}

Socio-economic Indicators		
GDP: Gross domestic product (million current US\$)	2011	8196
GDP per capita (current US\$)	2011	1303.0
GNI: Gross national income per capita (current US\$)	2011	1247.0
Population (millions)	2014	6.77
Urban (% of population)	2014	36.47
Sex ratio (males per 100 females)	2012	99.8
Life expectancy at birth (females/males, years)	2010-2015	69.4/66.4
Adult literacy rate (% ages 15 and older)	2014	72.7
Expenditure on education (% of GDP)	2014	3.31

1.5 Administrative Setup⁶

Administrative divisions: 16 provinces (khoueng, singular and plural) and 1 capital city* (nakhon luang, singular and plural); Attapu, Bokeo, Bolikhamxai, Champasak, Houaphan, Khammouan, Louangnamtha, Louangphabang, Oudomxai, Phongsali, Salavan, Savannakhet, Viangchan (Vientiane), Viangchan, Xaignabouli, Xekong, Xiangkhouang

2. DISASTER RISK PROFILE⁷

In terms of its geographical location, Laos seem to be well protected from typhoons and wind storms. Nevertheless, besides poverty, the country still suffers from the widespread effects of natural disasters, such as floods, droughts, infestations and fire.

According to information from the last 30 years, Laos is faced with serious floods and droughts with an average re-occurrence of every 1.5 years. Sometimes flood and drought occur in the same year, but in different provinces. Floods happen in the monsoon season from May to September, when the rain increases the amount of water in the upper Mekong basin, as well as the water level of the tributary rivers. Drought mainly occurs in mountainous areas and affects agricultural production. In some districts, people also may suffer from a lack of water.

There are also other hazards in Laos. Between 1997 and 2000, more than 500 cases of fires occurred. This is quite high when compared with previous years. The major disasters which have occurred in Laos have had a significantly negative impact on the socio-economic situation of the country contributing to poverty.

2.1 Risk Exposure Profile

Floods, droughts, and typhoons are the dominant hazards. Natural disasters in Lao PDR impact all development sectors, with agriculture, transport, and housing suffering most. Almost 30 floods have been recorded in the country over the last 40 years. The country is also susceptible to landslides and, in the northern parts, to earthquakes. It is estimated that typhoons cause an economic average annual loss of US\$17.6 million, followed by floods (US\$8.3 million) and droughts (US\$4.7 million). Recent natural disaster—typhoon Ketsana—resulted to an estimated damage and loss worth US\$58 Million, and a 0.4% loss of GDP.

2.2 Geography and Climate

There are two distinct seasons: a dry season (mid-October-April) and a rainy season (May - mid-October). El Niño and La Niña as well as tropical Monsoons impact the country's climate.

2.3 Disaster Risk⁸

Laos' average annual disaster profile: 50% floods, 22% epidemics, 13% storm, and 13% drought.

Major Disasters in Laos for the period 1982 to 2011 by total number of people affected

Disaster	Date	Affected
Storm	1/8/1995	1,000,000
Drought	December 1988	730,000
Flood	August 2001	453,000
Flood	September 2000	450,000
Flood	15/08/1996	420,000
Flood	September 1995	391,400
Flood	September 1991	332,000

Major Disasters in Laos for the period 1982 to 2011 by damages (000 USD)

Disaster	Date	Damage
Storm	July 1993	302,151
Storm	1/10/2009	100,000
Flood	August 1992	21,828
Storm	10/7/1992	3,650
Drought	July 1991	1,000
Flood	September 2000	1,000
Storm	1991	150

2.4 Disaster Hazards

The major natural disasters in Lao PDR are floods and droughts. Most flooding occurs during May to September when Monsoon rains accumulate in the upper Mekong river basin. In addition to river basin flooding, flashfloods in the northern mountainous region are also common. It is estimated that the south and central regions, where about two thirds of the country's population live, face on an average of 1.5 serious floods or droughts every year. Lao PDR is also susceptible to landslides, pest infestations and fire due to slash and burn agriculture.

2.5 Disaster Exposure

From 1970 to 2010, 33 natural hazard events have been registered affecting almost 9 million people and causing economic damages for over US \$400 million.

Droughts: one of the most severe was in 1977 affecting almost three and half million of people. **Floods:** in 1992 a heavy flood caused economic damages for over US \$21 million. **Epidemics:** disease outbreaks such as smallpox, malaria, diarrhea, dysentery, dengue fever and cholera have been registered. **Storms:** These storms as well as the impacts from southwest Monsoons have affected over 1 and half million of people and caused damages for over US \$400 thousand.

2.6 Disaster Vulnerability

Due to the high degree of poverty in the rural areas, even low intensity disasters have a big impact on rural households. Coping mechanisms include taking high interest loans, sending children to work or reducing expenditures in education, health and food. Since agriculture is dependent on rainfall, even a modest drought increases the food insecurity. On the other side of the spectrum, major urban centers such as Vientiane Capital are expanding rapidly. As newer infrastructures are built with inadequate land use planning and loosely enforced building codes, new vulnerabilities are fast accumulating.

2.7 Climate Change

Lao PDR has a low capacity to adapt to climate change because of its poor socio-economic development. Climate change is likely to decrease food security as production patterns change due to shifts in rainfall, evaporation, run-off water, and soil moisture. It is estimated that around 188,000 households in Lao PDR are at risk of food insecurity caused by drought.

Vulnerability Index

	Vulnerability Index	Risk Absolute	Risk Relative	Mortality Risk Index	Legend
Multiple					<p>Very Low Very High</p>  <p>Vulnerability Index: Estimated number of people killed per year (per mio. Exposed)</p> <p>Risk Absolute: Average killed per year.</p> <p>Risk Relative: Killed per million per year.</p> <p>Mortality Risk index: Average of both.</p>
Cyclone					
Flood					
Landslide					
Earthquake					

Top 10 Natural Disasters in Lao P Dem Rep for the period 1900 to 2014 sorted by numbers of killed⁹

Disaster	Date	No Killed
Epidemic	10/Oct/1994	500
Flood	25/Aug/1966	300
Epidemic	15/Mar/1992	143
Epidemic	Jan-13	77
Epidemic	Mar-87	63
Epidemic	Jun-00	44
Epidemic	Feb-95	34
Flood	1/8/2011	34
Flood	Aug-78	31
Flood	15/Aug/1996	30

Top 10 Natural Disasters in Lao P Dem Rep for the period 1900 to 2014 sorted by numbers of total affected people⁹

Disaster	Date	No Total Affected
Drought	1977	3,500,000
Storm	1-Aug-1995	1,000,000
Drought	Dec-1988	730,000
Flood	Aug-1978	459,000
Flood	Aug-2001	453,000
Flood	Sep-2000	450,000

Flood	1-Aug-2011	430,000
Flood	15-Aug-1996	420,000
Flood	Sep-1995	391,400
Flood	Jun-2013	350,077

Top 10 Natural Disasters in Lao P Dem Rep for the period 1900 to 2014 sorted by economic damage costs⁹

Disaster	Date	Damage (000 US\$)
Storm	Jul-93	302151
Storm	29/Sep/2009	100000
Flood	16/Sep/2013	61000
Flood	Jun-13	60000
Flood	Aug-92	21828
Flood	25/Aug/1966	15300
Storm	10/Jul/1992	3650
Flood	5/Sep/1968	1280
Drought	Jul-91	1000
Flood	Sep-00	1000

For some natural disasters (particularly floods and droughts) there is no exact day or month for the event, and for other disasters (particularly pre-1974) the available record of the disaster does not provide an exact day or month.

Summarized Table of Natural Disasters in Lao P Dem Rep from 1900 to 2014⁹

		No. of Events	Killed	Total Affected	Damage 000 US\$)
Drought	Drought	5	-	4,250,000	1,000
	ave. per event		-	850,000	200
Epidemic	Unspecified	3	44	9,685	-
	ave. per event		15	3,228	-
	Bacterial Infectious Diseases	2	534	8,244	-
	ave. per event		267	4,122	-

	Viral Infectious Diseases	4	285	38,000	-
	ave. per event		71	9,500	-
Flood	Unspecified	10	76	1,878,600	2,480
	ave. per event		8	187,860	248
	Flash Flood	1	34	430,000	-
	ave. per event		34	430,000	-
	General flood	11	395	2,180,993	158,128
	ave. per event		36	198,272	14,375
Storm	Unspecified	2	8	38,435	302,301
	ave. per event		4	19,218	151,151
	Tropical cyclone	3	64	1,397,764	103,650
	ave. per event		21	465,921	34,550

3. INSTITUTIONAL SETUP

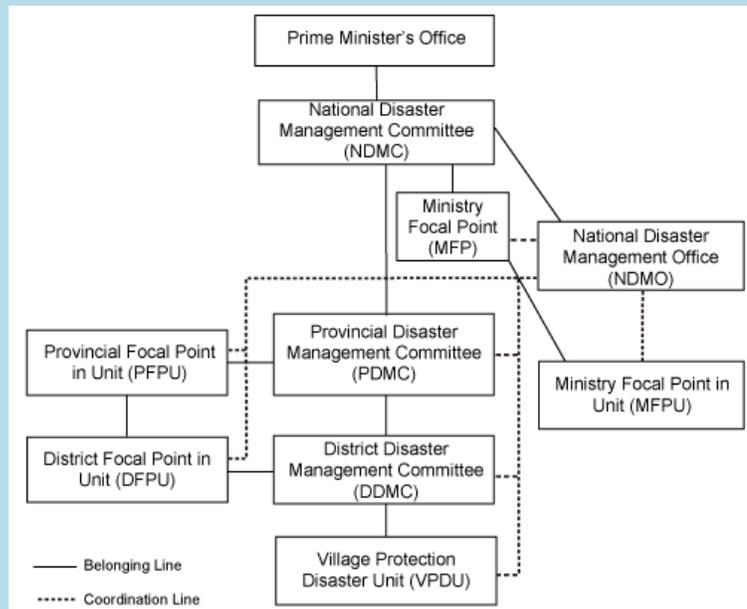
3.1 Legal System¹⁰

The Prime Minister's Decree No. 158 (1999) created the National, Provincial and District Disaster Management Committees (DMCs). It provided the basis for the development of a disaster management policy. NDMC Decree No. 97 series of 2000 assigned the roles and responsibilities of various sectors composing the NDMC. In December 2007, the other governmental decree was issued, which seeks to change the disaster management policy from a emergency response to a disaster risk management.

3.2 Organization

The National Disaster Management Committee is coordinating disaster prevention and protection activities and efforts in the country. It promotes disaster reduction activities of existing Line Ministries and Provinces on natural disaster management and protection which consists of representatives of key ministries, institutions and

provinces. National Disaster Management Office is a policy implementation organization under the Ministry of Labour and Social Welfare (MLSW). There are local level committees at the levels of provinces, districts, and villages.



4. INITIATIVES^{10, 11, 12}

4.1 Plan

The National Disaster Management Plan for the period 2001-2020 aims at: identifying the focal point in all sectors (state and privation); developing and establish early warning and information system in all of 142 districts in country; setting up information network in disaster prone villages; constructing warehouses for storing the emergency assistance materials in all provinces and some disaster prone districts; continuing public awareness activities with media; widely organizing training on DM for all sectors and levels; organizing simulation exercise with the involvement of rescue team unit in sectors and community; and raising capacity up on cooperation with other countries in the framework of Asian, Regional and United Nations to exchange information and experiences on DM. Also, Strategic Plan on Disaster Risk Management was formulated for the year 2003-2005, 2005-2010, and 2010-2020.

4.2 National Policy & Plans

- [Lao People's Democratic Republic: National progress report on the implementation of the Hyogo Framework for Action \(2011-2013\) - interim2012, NDMO, Lao People's Democratic Republic](#)
- [Lao: Decree on establishment of national disaster management committee1999, Lao People's Democratic Republic](#)

4.3 The Relief and Mitigation Efforts of Government and NGOs

From 1975, since the inauguration of the Lao PDR, Government policy on Social Welfare was 1) to help the migratory post-war population to permanently resettle, 2) to assist the disadvantaged groups of the population, many of whom were affected by natural disasters, with food, shelter and other basic needs. These activities were carried out by the Department of Public Welfare within the Ministry of Interior (MOI) of the Lao PDR.

To mitigate drought and flood, the MOI mobilized Government and public resources to upgrade and build water gates at the Mekong, water reservoirs, and drainage systems in cities. “A Free Labour Campaign” of Government for building those facilities was very popular with the public sector and communities. In 1980, the Committee on Social Welfare and War Veterans was established. This Committee was dissolved in 1987, when the Department of Public Welfare was transferred to the Ministry of Public Health, which carried out the same activities. The Committee on Social Welfare and War Veterans was re-established in 1990-93 and expanded to include Relief and Mitigation Programs. The joint Government/ NGO project on “Mitigation of Harmful Effects of Natural Disasters” also started in this period. The Government annually allocated funds equivalent to US\$ 700,000 to help disadvantaged persons and victims of disasters.

In 1993, the Ministry of Labour and Social Welfare (MLSW) was established. Since then, relief and mitigation activities have had a clearer status. The Social Welfare Department within the MLSW is responsible for running projects on relief and mitigation with NGO partners in areas which are either vulnerable to or which have been affected by disaster. The activities of these programs have focused on

mitigation and post flood or drought rehabilitation, such as repairing roads, canals, and irrigation schemes as well as mobilizing resources for replanting second crops. The Social Welfare Department has, at the same time, cooperated with its Provincial Departments to implement these activities by using government and donor funds and other available resources for the relief of victims of fire.

Until 1997, actions taken by the Government of the Lao PDR with assistance from international organizations, donor countries and NGOs had focused very little on disaster preparedness. During that time, the perception of the Government and communities about natural disasters such as flood and drought was associated with the idea of natural phenomenon, which cannot be managed.

In Lao culture, it is very common that people use superstition or spirit beliefs to explain natural disasters they are faced with. However, Government and local communities are now considering a new way of thinking. This is due to many factors such as climate change, increases in the frequency of flooding and drought, increases in cases of fire, environmental degradation, devastation of forest, land erosion as well as the economic loss and damage suffered as a result of disasters (in particular the two big floods of 1995 and 1996).

In June 1996, when floods occurred in several provinces, more than 450,000 people were affected and economic loss was very high. The Prime Minister established an ad-hoc committee, which enables ministries to deal with the effects of the flood. However, the main mandate of this ad-hoc committee was limited to relief and the organization of replanting vegetable crops and second season paddy rice cultivation. With the aim of raising awareness on the importance of Disaster Preparedness, the project on “Capacity Building for Lao Government officials on Disaster Management” (Lao/97/013) was signed between the Government and the UNDP on 21st August 1997.

4.4 The Development of Government Policy on Disaster Management

The Lao Government Development Program for 1996-2000 consisted of eight priority areas with an overall objective to eradicate absolute poverty in the country. The Country Strategy Note mentioned Natural Disaster Preparedness as a key rural

development activity. Lao communities are highly vulnerable to the disruption from natural disasters. Rural communities living on the edge of subsistence are particularly vulnerable to even moderate climatic disruptions which can jeopardise food security. Rain-fed fields providing only single annual harvest are often subject to floods or drought, which ruin crops, so villagers must forage for food or rely on emergency food donations to survive. Effective preparedness and the capacity to mount swift emergency responses when natural disasters strike will have a real impact in combating poverty and in promoting development.

Since September 1997, the study for drafting Government policy has become one of the main targets of the Capacity Building Project in the Ministry of Labour and Social Welfare, which received funding support from the UNDP. The National Disaster Management Office (NDMO) took responsibility for the formulation of the government policy on Disaster Management (DM). The NDMO has analysed and studied almost all government documents, laws and decrees which relate to DM, the environment, water, land management and other related issues. A study on the strategies, policies and frameworks of other countries in the region had also been carried out by the NDMO. The Prime Minister's Decree No. 158 (dated 23 August 1999) is a fundamental basis for policy development on DM in Laos.

In order to reduce losses and damages from flood and other disasters, the Government has been required to adopt a new vision and perception and a proactive approach. This means linking the strategy for relief and mitigation after disasters with preparedness and prevention activities. In accordance with this, the national Policy on DM of the Government of Lao PDR has been formulated as follows:

- The recognition of the problem associated with disaster as being part of a total Government responsibility and to ensure the best possible arrangements, given available resources.
- The adoption of all hazards and people-centric approach to Disaster Risk Management
- The recognition of disaster risk and vulnerability reduction as essential for sustainable development planning.

- The development of effective Risk Management arrangements that link various levels of Government and Lao communities
- The development of an attitude of self-help within the community through ongoing education and awareness programs.

The purpose of this policy is to facilitate the establishment of institutional arrangements for disaster risk management in the Lao PDR, which facilitate sustainable efforts for the prevention, mitigation, preparedness, response and recovery from natural and man-made disasters.

The Lao Government recognises disaster risk management as a key development priority that will encompass hazard mitigation and vulnerability reduction through an effective preparedness strategy aimed at reducing the effects of natural and man-made disasters, particularly in rural areas. Effective preparedness and the capacity to provide effective emergency response when disaster strikes will have a real impact in combating poverty and promoting sustainable development in Laos.

4.5 National Disaster Risk Priorities in Lao PDR

- i. To develop a rational Disaster Risk Management Plan which will focus on mobilization, deployment and coordination of National Resources and requests for international assistance.
- ii. To prepare Disaster Risk Management Plans at provincial, district and local levels.
- iii. To develop and train community level disaster response teams.
- iv. To target the initial efforts on the risk management of floods and droughts.
- v. To focus on capacity building of Government officers and personnel of associated agencies from the community level to the national level and on community mobilisation, i.e. motivating and supporting people to organise and take appropriate action to protect themselves, their property and their communities against hazards.
- vi. To improve disaster preparedness through:
 - A clear and comprehensive policy, which addresses all elements of disaster risk management planning

- Effective disaster planning and linkages at national, provincial, district and local levels as a basis for coordination action with clear allocation of role and responsibilities
 - Operational planning for all concerned government and non-government agencies to ensure effective response actions in time of emergencies
 - Effective implementation of specialist programs
 - Early warning systems for floods and droughts
 - Public awareness and training
 - Support for the development of self-reliance and self-help at community levels
- vii. to focus disaster prevention and mitigation on:
- Agricultural and sectoral programs aimed at food, income and water security and on reducing community vulnerability
 - Protection of key economic facilities
- viii. To improve disaster response and recovery by improving emergency management systems such as command, control and coordination, damage and need assessment, relief distribution and “food for work” rehabilitation and reconstruction programs.

4.6 Development of National Disaster Management Plan

Beside the National Strategy, action plans on DM are formulated in accordance with various sector plans. The National Disaster Management Action Plan consists of various programs, expressing the general vision to 2020, which is broken down into the following periods:

- 2001-2005
- 2005-2010
- 2001-2020

The General Objectives of the Action Plan to 2020

- i. Continuation of the program on building institutional arrangements of Disaster Management within the country at all levels according to the Prime Minister’s Decree No. 159 (dated 23 August 1999).

- ii. Establishment of focal point and identification of a contact person in every institution, and developing effective coordination and cooperation culture between agencies in disaster management.
- iii. Organisation of effective early warning and information management systems. This guarantees timely and effective dissemination of early warning information to the community level.
- iv. Building storage systems at regional and provincial levels in order to effectively dispatch material resources for relief and rehabilitation.
- v. Organisation of public awareness and education programs that aim at educating all members of society on the causes of disasters.
- vi. Development of training programs for all government departments and the public sector.
- vii. Establishment of rescue and emergency response teams.
- viii. Establishment of an Information Centre for Disaster Management.
- ix. Organisation of simulation exercises for Disaster Preparedness.
- x. Linkage programs between Disaster Management and other sector programs.

The Goals of the National Action Plan from 2001 to 2005

- i. Development of DM Organisations at the district level:
 - Establish Disaster Management Committee in 80% of the total number of districts which are vulnerable to disasters
- ii. Establishment of a focal point (FP) and identification of a Contact Person (CP) on DM:
 - Establish FP and identify CP in 40% of Senior Secondary Schools, 30% of Junior Secondary Schools and 20% of Primary Schools
 - Establish FP and identify CP in 60% of Professional Schools
 - Establish FP and CP in all faculties of the National University
 - Establish FP and CP in all Army Division levels
 - Establish FP and CP in 20% of factories (e.g. industry, garment)
- iii. Organisation of effective Early Warning (EW) systems:
 - Exchange EW information between the centre and 80% of the total number of districts

- Organise the dissemination of EW information to 30% of villages which are located in vulnerable areas
- iv. Building storage:
 - Build 3 regional stores
 - Build and repair 5 stores at the provincial level and some at the district level
 - v. Continue the organisation of 2 programs per year of PA and EP with media
 - vi. Training courses:
 - Organise 4 training courses per year for Government officials and the private sector at the provincial and district levels and 4 courses for the village level
 - Develop school programs on DM which focus on Primary Schools
 - vii. Establishment of special teams:
 - Establish rescue teams at provincial level in all provinces
 - Establish one quick response team at the central level
 - viii. Development of Information Centre on DM:
 - Based at the NDMO
 - Based at the Urban Research Institute (URI) for Urban Information on DM
 - ix. Organisation of 2 simulation exercises per year on Disaster Response
 - x. Link DM programs with programs for rural and urban development that focus on Flood and Drought Mitigation and Prevention, Fire Prevention, Land and Water Management, Environment and Forest Protection.

I. Provincial Plan Framework

The establishment of Provincial Disaster Management Committee (PDMC) in 2000 will go hand in hand with the continued implementation of programs on mitigation and preparedness, and the development of the Provincial Plans, which is the responsibility of the PDMCs. This process has now started and is using guidelines provided by NDMO as a key tool.

II. Overall Aim and Approach

The overall aim of provincial disaster risk management planning in the Lao PDR is to develop a planning framework that mirrors the National Plan, but which specifically focuses on the particular risks, hazards and vulnerabilities of each province.

The effective management of provincial hazards and risks requires the combined expertise and resources of the Provincial Government, local NGOs, and the community. In order to be successful these organisations and individuals must come together in a coordinated way and work within the framework of the provincial plan, which clearly identifies their respective roles and responsibilities. The primary responsibilities for disaster risk management in the provinces rests with the Provincial Disaster Management Committee (PDMC) which coordinates and liaises with the National Disaster Management Committee (NDMC).

III. Disaster Risk Management Priorities at the Provincial Level

1. To develop effective strategies for the risk management of floods and droughts
2. To focus on capacity building of provincial government officers and personnel of associated agencies from the community level, and on community mobilisation, i.e. motivating and supporting people to organise and take appropriate action to protect themselves, their property and their communities against hazards.

IV. Organizational Arrangements and Structure

Provincial, District and Local Committees

At provincial, district and local levels, disaster management committees need to be established with representatives of the concerned government bodies and NGOs.

Community Involvement

At the village level, community safety teams need to be established with links to local and district committees.

NGO Disaster Support Organisations

It must be ensured that NGOs' disaster management activities are linked to government plans and programs.

Coordination

It is essential that effective coordination arrangements are developed to ensure effective linkages between the various government levels, the NDMC, the NDMO and the national Emergency Operations Centre.

V. Plan Development

The provincial plan should be developed by the Provincial Government with support from the NDMO. A process similar to the one used in the development of the National Plan needs to take place, including participatory planning and stakeholder consultations to ensure that the plan reflects the needs and ownership of the community. The plan should include the following phases of disaster risk management at the provincial level:

Phase 1 – Pre-disaster Period

This involves preparedness measures undertaken in relation to:

Risk Assessment

- Identifying, assessing and monitoring of the potential hazards, risks and vulnerabilities
- Describing the potential effects on the community, property, services, the economy and the environment

- Determining resource requirements

Early Warnings

- Conducting public education programs
- Disseminating early warnings to all potentially affected communities

Communication

- Establishing effective links between the NDMO and the National EOC
- Establishing and testing provincial EOC
- Identifying all available communication back up systems (Government and private sector)
- Developing emergency communication back up systems

Utilization of available resources Personnel

- Identifying and recording all available resources (Provincial Government)
- Defining their roles and functions
- Identifying training needs
- Conducting regular training programs

Mobility

- Identifying available emergency transportation
- Identifying rescue and evacuation routes
- Identifying and preparing staging areas for national support resources

Evacuation

- Identifying and preparing evacuation points/ areas
- Arranging for stockpiling of critical relief supplies
- Identifying relief distribution points/ areas
- Preparing lists of available local resources

Materials and Equipment

- Conducting regular vulnerability assessment
- Preparing resource inventories at provincial, district and local levels

Training

- Identifying disaster risk management training needs
- Developing and maintaining an effective disaster risk management training program

Public Awareness and Education

- Developing and implementing a public awareness program
- Introducing disaster awareness training in schools
- Developing and disseminating a range of disaster awareness information

Phase 2- Emergency Response

The response management requirement for the emergency phase involves the bringing together in an integrated organizational network the resources of the many agencies who can take appropriate and timely action for the following activities:

Command, control and coordination

- Ensuring that the Primary and support agencies are in attendance or have been notified and are responding to the emergency.
- Ensuring that effective control has been established at the emergency scene.
- Activating the Provincial Emergency Operations Centre.
- Ensuring the appropriate coordination of resources and services.
- Sending regular situation report to the NDMO.
- Ensuring that consideration has been given to alerting the community establishing casualty procedures.
- Considering the need for international assistance.

Search and Rescue

- Conducting rescue, evacuation and recovery operations as necessary.

Evacuation and Relief

- Activating evacuation points/areas and distributing relief supplies.
- Providing relief and medical supplies to disaster victims.
- Undertaking rehabilitation activities.

Recovery

- Identifying immediate community and individual needs.
- Developing recovery plans based on community needs and priorities.
- Implementing agreed recovery management arrangements as required.
- Preparing damage assessment reports.

Phase 3- Post Disaster Phase

Once the emergency situation has been brought under control the following post disaster activities should occur:

- Providing relief and recovery services as necessary.
- Providing restoration and rehabilitation assistance to disaster victims.
- Conducting an inventory of resources.
- Preparing evaluation reports and implementing improvement strategies.

VI. Planning Review Process

The provincial Disaster Risk Management Committee is responsible for ensuring that the Provincial Plan is tested on a regular basis to ensure that it is workable and effective and that a thorough and accurate post disaster review is conducted following any activation of the Plan.

4.7 Disaster Management Structure and Effectiveness of Implementation of DM Plan

One of the main functions of the NDMO is to create a good climate for cooperation and to build a culture for coordination between various sectors in disaster management. Organizations, which have been developed at the central and provincial levels, function through a focal Point, which initiates monthly or bi-monthly meetings through the NDMO.

As a central coordination point, the NDPMO will set up a link with the provincial authorities. A good example to mention here is from the floods of 2000 and 2001, where the information and data collection of the flood was conducted more

effectively with more satisfaction and accuracy when compared with previous years.

Following the production of damage and needs assessment information, relief and rehabilitation activities are jointly implemented by the concerned organizations. Central Ministries deliver food, rice, vegetables seeds and medicine to the Provincial Disaster Management Committees who then distribute this to the district level. In fact, the measures taken after the floods in 2000 and 2001 could be seen as one progressing step forward in terms of coordination and collaboration of actions between several agencies implementing disaster management activities. Nevertheless, the present organizational structures need further improvement of its programs in many areas, such as:

- Strengthen policy support from government and leaders of the country.
- Determination of roles and responsibilities within local institutions.
- Development of Action Plans of various sectors and local level organizations, with consideration of local priorities and resources for Disaster Preparedness.
- Establishment of coordination rules amongst DM Agencies and with other sectors.
- Identification of the role and function of NGOs in DM.
- Continuation of building the capacity of local government officials and partners of NGO staff on DM.
- Regional and international cooperation.

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¹ www.la.undp.org/content/lao_pdr/en/home/countryinfo

² https://www.cia.gov/library/publications/the-world-factbook/geos/print/country/countrypdf_la.pdf

³ <http://app2.nea.gov.sg/weather-climate/climate-information/climate-of-cities-in-asia/climate-of-laos>

⁴ <http://data.un.org/CountryProfile.aspx?crName=Lao%20People%27s%20Democratic%20Republic>

⁵ <http://hdr.undp.org/en/countries/profiles/LAO>

⁶ The CIA World Factbook 2014 - Books

⁷ www.adpc.net/pdr-sea/publications/7-PL-Lao.doc

⁸ http://siteresources.worldbank.org/EXTDISASTER/Resources/8308420-1342531265657/ASEAN_DRFI_Appendices_June2012.pdf

⁹ <http://www.emdat.be/result-country-profile>

¹⁰ www.adrc.asia/nationinformation.php?NationCode=418&Lang=en

¹¹ <http://www.unisdr.org/partners/countries/lao>

¹² www.adpc.net/pdr-sea/publications/7-PL-Lao.doc