



# LAO PDR

## Disaster Management Reference Handbook

2014



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(World Factbook)

# Welcome - Note from the Director



**CENTER FOR EXCELLENCE**  
IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE

January 2, 2014

Dear Reader,

The Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA) has a mandate to provide and facilitate education, training, and research in civil-military operations, particularly operations that require international disaster management and humanitarian assistance and operations that require coordination between the Department of Defense and other agencies. In line with that mandate, CFE has conducted research to create reference books on disaster management roles, processes, capabilities and vulnerabilities.

This Country Disaster Management Reference for the Lao People's Democratic Republic (Lao PDR) is designed to provide decision makers, planners and responders a comprehensive understanding of in-country disaster management plans and structures, including information on key domestic disaster response entities, basic country background, and local and international humanitarian organizations present in the country. CFE produces country reference books to provide a commonly available baseline of information regarding disaster management environments. Laos is subject to a variety of disasters including floods, droughts, and landslides, and this reference provides a context for country-specific factors that influence disaster management.

This reference book has been compiled by CFE from publicly available sources. It is a working document and will be periodically updated to reflect changes in information. We request your feedback to improve this document and help fill any gaps to enhance its future utility. Please send any feedback or questions to [padmin@coe-dmha.org](mailto:padmin@coe-dmha.org).

Sincerely,

PAMELA K. MILLIGAN  
Director  
CFE-DMHA



CENTER FOR EXCELLENCE  
IN DISASTER MANAGEMENT & HUMANITARIAN ASSISTANCE

## Information about the Center for Excellence in Disaster Management and Humanitarian Assistance

### Overview

The Center for Excellence in Disaster Management and Humanitarian Assistance is a U.S. Department of Defense organization that was established by U.S. Congress in 1994 and is a direct reporting unit to U.S. Pacific Command. The Center is located on Ford Island, Joint Base Pearl Harbor-Hickam, Hawaii. The Asia-Pacific region is our priority of effort and collaboration is the cornerstone of our operational practice.

CFE-DMHA was founded because of a worldwide need based on lessons learned in complex humanitarian emergencies that took place in the Balkans, the African Great Lakes Region, Somalia and the Middle East since the beginning to mid-1980s. The need was for integrated education, training, certification, operational research, and interagency cooperation and coordination among many agencies and organizations, both civilian and military, to provide relief and regional stability.

### Our Mission

Facilitate collaborative partnerships, conduct applied research, and develop education, training, and information sharing programs in order to enhance U.S. and international civil-military preparedness, knowledge, and performance in disaster management and humanitarian assistance.

### Vision

Promote excellence in disaster management by connecting people, improving coordination, and building capability.

### Contact Information

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## Acknowledgments

The Center for Excellence in Disaster Management and Humanitarian Assistance would like to acknowledge the following partners for their valuable contributions to this handbook:



### US Agency for International Development

USAID staff work in more than 100 countries around the world to further America's foreign policy interests in expanding democracy and free markets while also extending a helping hand to people struggling to make a better life, recover from a disaster or striving to live in a free and democratic country. ([www.usaid.gov](http://www.usaid.gov))



### United Nations Office for the Coordination of Humanitarian Affairs

Regional Office for Asia and the Pacific (OCHA-ROAP)

OCHA plays a key role in coordinating international humanitarian preparedness and response in the region. OCHA's work in Asia and the Pacific is focused around four key areas: Emergency preparedness; Emergency Response; Regional partnerships; and, Humanitarian analysis. OCHA in Asia and the Pacific supports 36 countries and 14 territories. It has offices in Nepal, Bangladesh, Sri Lanka, Myanmar, Indonesia, Japan, the Philippines and Papua New Guinea. It also has regional offices in Fiji and Thailand. ([www.unocha.org/roap/](http://www.unocha.org/roap/))



### U.S. Pacific Command

The U.S. Pacific Command (USPACOM) protects and defends, in concert with other U.S. Government agencies, the territory of the United States, its people, and its interests. With allies and partners, USPACOM is committed to enhancing stability in the Asia-Pacific region by promoting security cooperation, encouraging peaceful development, responding to contingencies, deterring aggression, and, when necessary, fighting to win. This approach is based on partnership, presence, and military readiness.

USPACOM recognizes the global significance of the Asia-Pacific region and understands that challenges are best met together. Consequently, USPACOM will remain an engaged and trusted partner committed to preserving the security, stability, and freedom upon which enduring prosperity in the Asia-Pacific region depends. ([www.pacom.mil](http://www.pacom.mil))



Nagas (serpent deities) adorn the staircase of the west side of Phou Si in the center of Louangphrabang, the former royal capital of Laos. (World Factbook)

## Disaster Management Reference Handbook Series Overview

The Disaster Management Reference Handbook Series is intended to provide decision makers, planners, responders and disaster management practitioners with an overview of the disaster management structure, policies, laws, and plans for each country covered in the series. Overviews of natural and man-made threats most likely to affect the country are discussed. The handbooks also provide basic country background information, including cultural, demographic, geographic, infrastructure and other basic country data. Endemic conditions such as poverty, water and sanitation, food security and other humanitarian issues are included. A basic overview of the health situation in the country and disease surveillance is also covered.

The handbooks include information on key national entities involved in disaster management, disaster response and preparation, and the military's role in disaster relief is discussed. Information on UN agencies, international Non-Governmental Organizations (NGOs), major local NGOs, and key U.S. agencies and programs

in the country, are also provided. The overall aim is to provide a guide that brings together important information about disaster management and response for each country in an effort to provide a basic understanding for the reader.

Information in the handbooks are compiled and based primarily on trusted, reliable, publicly-available sources. Much of the information used is from U.S. or other government sources, UN sources, NGO websites, scholarly references, foreign government websites, and various media sources.

Whenever further information available may be relevant, a link to the original internet source is provided. Each handbook is a working document and will be updated periodically as new, significant information becomes available. Constructive feedback is requested to further refine this document.

We hope that you find these handbooks informative, reliable and useful in understanding disaster management and response for this country. For comments, questions or to request additional printed copies of our Disaster Management Reference Handbooks please contact the Center for Excellence at: (808) 472-0518.

Please visit our website ([www.coe-dmha.org](http://www.coe-dmha.org)) to view the latest electronic versions available.

# Executive Summary

This country book focusing on Laos is intended to be a reference for individuals deploying to conduct disaster preparedness engagements or disaster response operations in Laos, but it is not meant to be a checklist or manual for all disaster response operations. The research team conducted extensive research and analysis on existing Lao plans, policies, and capabilities related to disaster management and risk reduction. The team also reached out to United States Government (USG) stakeholders and open source research to compile this book.

Laos is exposed to natural disasters such as flooding, drought, earthquakes, cyclones, and infectious disease epidemics. In the past five years, Laos has been affected by severe flooding due to tropical storms causing hundreds of thousands of deaths and millions in damages. Forecasts project that the intensity and frequency of natural disasters in the Lao People's Democratic Republic (Lao PDR) will likely increase due to climate variation and change.

The impacts of natural disasters in Laos are felt mainly in the rural areas where economic livelihoods are primarily in the agricultural sector and food security is an issue. Its mountainous border provides a physical barrier to population migrations; however, the borders with neighboring countries are quite porous. The country has made significant investments to transform from a land-locked disadvantaged country into an opportunistic land-linked country. This transformation has led to major investments in transportation and energy infrastructure projects. The Government of Laos is identifying key cities for growth to meet such a surge in demand and is finding ways to increase water supply and distribution, but it has little money to invest itself. International donors are providing some funds, but not enough to keep up with the rising demand and the increasing pace of development.

The Lao military performs critical roles and is a key asset in all phases of disasters. The military is responsible for preparing and training for operations with lead or supporting roles in the pre-disaster, response, and early recovery phases. While the military support to disaster preparedness and response is important, the Ministry of National Defense has limited resources and capabilities.

Laos is making considerable progress in poverty reduction over the past decades with poverty rates on the decline from 46 percent in

1992 to 27 percent at present. The country is on course to achieve the Millennium Development Goal (MDG) target of reducing poverty in half by 2015. Laos' economic forecast is optimistic after the country's membership into ASEAN. The Government of Laos continues to progress in their development of disaster management plans and programs to diminish the vulnerability of their population to the effects of natural and man-made hazards. The Draft National Disaster Management Plan 2012-2015 adopts the Hyogo Framework for Action (HFA) 2005-2015 and captures Lao PDR's focus to build a comprehensive risk reduction culture and strengthen their disaster management capabilities by improving response and recovery management at all levels.



# LAO PDR Country Overview

Lao PDR Disaster Management Reference Handbook 2014

# Country Overview

The Lao People's Democratic Republic (Lao PDR), more commonly referred to as Laos, is located in Southeast Asia and sits between Thailand and Vietnam. This landlocked country spans roughly 236,800 square kilometers (147,140 square miles) of terrain consisting of mostly rugged mountains, with sporadically dispersed plains and plateaus. Lao PDR's population of nearly 6.5 million people consists of a variety of ethnic groups including: Lao (55 percent), Khmou (11 percent), and Hmong (8 percent). The remaining 26 percent of the country's population is comprised of over 100 minor ethnic groups, not all of which are officially recognized by the Government of Laos. The official national language is Lao; however, speakers of French, English, and various ethnic languages can be found within certain communities. The most prevalent of Laos's wide variety of practiced religious customs is Buddhism (67 percent). About 67 percent of Lao's population lives in a rural environment and supports the country's primary industry of agricultural production. While the vast majority of Lao PDR's population lives in small communities, the rate of urbanization has been steadily climbing at an annual rate of roughly 5 percent, a trend that is projected to continue through 2015.<sup>1</sup>

## Culture

With 47 official ethnic groups, Laos has one of the most ethnically diverse populations in the world. This diversity can be a great strength for the country through diverse knowledge and practices, but can also pose a challenge when there is tension between ethnicities. The many cultural differences may translate into different understandings on care practices, traditional risk reduction methods, and knowledge of disaster hazards. Ethnic minorities make up around 30 percent of the total population and primarily live in isolated areas. As a result, they are subject to poorer education, health, and economic conditions which may contribute to under-nutrition and other vulnerabilities.<sup>2</sup>

Buddhism provides a significant influence

throughout Laos. Despite the political change in the last three decades, monks and temples play an important role in the community by providing spiritual guidance and rituals that mark event in the lives of individuals from birth to death. Buddhism is identified with the history and culture of people in the region and monks are influential figures, especially in rural communities.<sup>3</sup> Lao-tians often maintain an accepting perspective, something that stems from the Buddhist belief of reincarnation.<sup>4</sup> The Lao believe their world is in a constant change with one incarnation flowing smoothly into the next. The widespread belief in reincarnation is often considered a primary influence on the Lao outlook, contributing to a patient mindset. The predominant Laotian view seems to be that if things are not going well, they will eventually get better in time.<sup>5</sup> Strong Buddhist influences, belief in reincarnation and a cultural inclination to accept what happens in one's life has the potential to contribute to a passive approach to disaster preparedness and risk reduction at the individual level.

Laos has a patriarchal culture and the eldest male in the family is considered the head of the household. Laotians have great respect for their elders, and age and seniority are important factors in authority in Laotian society. The respect for elders and seniors would indicate that juniors show deference to higher ranking personnel, which could reasonably be expected to carry over to disaster management and response approaches.

Laos is a predominantly rural country whose relatively low population density has fostered a village society which is reliant on subsistence agriculture. The heavy economic and livelihood dependence on farming means that much of Laotian life is affected by monsoons. Rice production determines heavy and slack periods of work, which are mirrored in school vacations, religious festivals, and government activity.<sup>6</sup> Rice is the staple food for all Laotians, and most families and villages are able to produce enough or nearly enough rice each year for their own consumption.

A lack of national government infrastructure and developed transportation networks in rural areas has contributed to the relative independence and autonomy of most villages due to their remote locations. Residence in a village is an important aspect of social identity, particularly for lowland Lao ethnic groups. For many upland ethnic groups, clan membership is a more important point of social identification. Laotians

have close-knit families which are normally large, at times with three generations living together. It is considered an honor to have children and a disgrace to be without them.<sup>7</sup> For all groups, the community has a kinship center of focus, although structures differ. Family and village structures provide support for people in remote areas in times of disaster; when government assistance may not arrive quickly, it is important that neighbors can rely on one another.

Laos ranks 140 out of the 177 countries on Transparency International's Corruption Perception Index (CPI) for 2013 with a score of 26 out of 100, which is close to the scores of its neighbors.<sup>8</sup> While this score may be cause for concern in some sectors, there are no indications that corruption has a significant influence on the provision and distribution of resources for emergency preparedness or response.

## Demographics

Understanding the demographic context of Laos provides insight into socio-cultural factors that will affect disaster management effectiveness, disaster vulnerabilities, and resident capabilities. It is important to reflect gender, ethnicity, economics, and vulnerable groups in the planning and implementation of disaster preparedness, mitigation, and response activities to address gaps and risks.

## Ethnic Makeup

Laos has a population of over 6 million comprising 47 officially recognized ethnic groups. The country has one of the lowest population densities in Asia and its villages tend to be scattered, remote and cut-off from essential services.

Ethnicities in Laos are separated into three groups: Lao Loum (lowland Lao), Lao Theung (midland Lao), and Lao Sung (upland Lao). Use of the general ethnic group classifications emphasizes the commonality of Lao nationality while obscuring significant differences among the smaller groups.<sup>9</sup> The country is officially a multiethnic nation, with Lao as the official language, but relationships among the different groups have sometimes been characterized by misunderstandings and competition over natural resources. The many ethnic groups of Laos have substantially different residential patterns, agricultural practices, forms of village governance, and religious beliefs.<sup>10</sup> The various

ethnic groups in the country play a minimal role in the political process as a number of non-Lao ethnic people hold positions in the government, yet there is no equal representation when provincial populations are considered. Ethnic minorities have less access to government services, so there is a greater chance that they can be excluded in the planning and implementation of development and disaster management programs. Development impacts can marginalize ethnic economies unless sufficient mitigation measures are implemented. Also, the higher rate of poverty among minority groups makes them more vulnerable socially and economically. In 1975, the Central Committee for Ethnic Minorities (CCEM) was established with the purpose of developing a policy regarding ethnicity in Laos, strengthening the solidarity and conciliation among all ethnic groups, and creating a unified force to protect the sovereignty and development of the country.<sup>11</sup>

Integration of ethnic groups is common in the resettlement villages orchestrated by the government to provide people access to government services and infrastructure. The government gains the benefit of increased control over the people instead of having remote villages scattered throughout the country.<sup>12</sup>

## Key Population Centers

Laos has made considerable investments to transform from a land-locked disadvantaged country into an opportunistic land-linked country. This has led to a major improvement in transportation linkage both within the country and with neighboring countries through the construction of many infrastructure projects. The development of large cities is concentrated in a few provinces located along the Mekong River. Over the past five years, Vientiane in the center, Luang Prabang in the north, and Savannakhet and Champasak in the south have shown the fastest growth of cities.<sup>13</sup>



Figure 1: map of Lao PDR Provinces<sup>14</sup>

Vientiane and a few provincial capitals are considered urban. These cities are the main market and administrative centers that attract trading and communications activity. However, the country has yet to develop manufacturing or industrial capacity. Around 6 million people live in Lao PDR's 17 provinces, with most of the population living in rural areas. However, urbanization is occurring at a rate of 4.9 percent each year.<sup>15</sup> The nation is mostly rural and indicators are showing the start of the rural-to-urban shift, this is indicated by the increase in urban populations.<sup>16</sup> Rapid modernization without proper urban planning could lead to various urban issues such as inadequate public facilities, housing and food, resulting in increased vulnerability.

The UN and the Lao government say many small towns in Laos are seeing an influx of migrants searching for better living conditions, which is increasing the stress on infrastructure and services to water and sanitation in the areas receiving migrants. The country is experiencing a high urbanization rate of 4 to 5 percent every year putting strain on local authorities to provide basic infrastructure. There are an estimated 140 small towns in Laos and many of them

are located in economic areas along bordering countries. UN-HABITAT says these small towns are being polluted because of the lack of adequate infrastructure. The government of Laos has identified water and sanitation as a development priority which has proposed an urban water sector investment plan estimated at US\$266.0M from 2005 to 2020. As the government improves the services in small towns according to UN-HABITAT, migrants moving there are creating unmanageable population growth.<sup>17</sup> Often, with increased urbanization, it is common to see new construction for low income families on marginal land using substandard materials and practices that make building more vulnerable to disasters. The research for this report did not show indications of these conditions in Laos, but as the pattern of urbanization continues, these factors may become more prominent.

The capital, Vientiane, is the second most populous city in Laos, but it leads the country with the highest population density with 209 people per square kilometer and is estimated to reach over 250 per square kilometer with a population of 1 million in the next few years. Vientiane is fueled by government investment along with foreign and domestic investment which will reach over US\$3.0B in the next few years. The capital is the most industrialized city with the most advanced infrastructure in the country. The majority of the economic market in Vientiane takes on retail trade, wholesale trade, and manufacturing. The growing demand of business activities has led to an increase in salaries paid to workers. The population is increasing rapidly mainly from internal migration who come for better employment opportunities, education and healthcare. Due to the rapid rate of urbanization in the capital, maintaining and improving the quality of public services will pose a challenge. With limited land in inner Vientiane and steep land prices, young and middle income families have begun to settle on the outskirts of the capital. These areas are now beginning to becoming very populous, which will ease the over population in the inner city.<sup>18</sup>

Savannakhet is the most populous province and is the second largest city behind Vientiane. In terms of population density, this province ranks a close third at 41 people per square kilometer. This province is important due to its geographical location; it is considered a cross road between northern and southern Laos and a linkage between the east (Vietnam) and west



(Thailand). Kaysone Phomvihane is the most urbanized city in the province, with over seventy percent of the Savannakhet's population being urban dwellers. Agriculture is the largest sector of the economy due to the quality of the land which attracts many foreign direct investments (FDI) mainly for sugarcane plantations, sugar production, eucalyptus, rubber and other industrial plant trees.

Champasak is the most populous province in the south and is bordered by Cambodia and Thailand. Its population density ranks second in the country at 42 people per square kilometer. This is an ideal location for agriculture due to its rich soil and the ideal altitude of the Bolaven Plateau. The plateau has quality soil which is ideal for planting coffee and other agricultural cash crops; coffee has become a major crop of the province. Champasak is mostly rural except for one urban district, Pakse. Pakse has experienced net immigration as many migrants from the southern region are moving to the city in search of better opportunities for employment and education.

A rise in dam construction along major rivers has led to more frequent village resettlements. The government has established criteria for the relocation of villages that include a population below 200, lack of access to roads or potable water, and reliance on slash and burn cultivation.<sup>19</sup>

The Nam Theun 2 (NT2) dam located in Khammuane province in central Laos has caused the resettlement of sixteen villages that are home to thousands of people. New villages were built in collaboration with the communities in an attempt to make the relocations seamless. The Nam Theun 2 Power Company (NTPC) and the Lao Government have committed to double the income of resettled villagers through livelihood programs. Experts are aiding the resettled villagers to adopt better practices to increase agriculture and income. The new villages include schools, roads, water, and sanitation infrastructure. The World Bank reported that resettled villagers' health increased due to improved water and sanitation.<sup>20</sup> Law Decree 192 was approved to ensure a development project does not impact people or their livelihood, but developers do not always adhere to these guidelines. Not all resettlements have the same outcome due to variance in resettlement programs because developers follow their own code of conduct. Resettlement projects help in the reduction of poverty amongst the countries

six million people. Laos' goal is to earn money from the sustainable use of hydropower to contribute to its goal of raising itself out of poverty by 2020. Villagers being resettled are creating a new livelihood focusing on agriculture, livestock, forestry and fishery along with rice production and seasonal crops. The health of villagers has improved due to better water and sanitation, regular check-ups and mosquito nets.<sup>21</sup>

The Xayaburi dam being built in northern Laos on the Mekong River has caused over two thousand villagers to be resettled. About nine hundred villagers have already relocated as dam construction is underway and environmentalists say that the dam will affect the livelihoods of thousands of people who rely on the Mekong. The Lao government reports that as a result of these relocations, villagers will need around five years to adjust to their new livelihoods.<sup>22</sup>

## Vulnerable Groups

The ethnic Lao comprise about 55 percent of the total population and predominate in the lowlands, while the ethnic minorities predominate in the highlands. Poverty is present more in the highland area due to its remoteness along with limited health care services, education, and less productive agriculture land. Ethnic minorities have comparatively less access to government services due to their geographical location and become unreachable during the rainy season. Social isolation is an issue for upland ethnic minorities, who are also left out due to their language, customs and beliefs. They also have limited access to the government and other services along with markets, education and health services.<sup>23</sup> Thus, development impacts can marginalize ethnic economies unless adequate mitigation measures are implemented. Additionally, the higher incidence of poverty particularly among minority groups makes them more socially and economically vulnerable. This diversity is a challenge in the way health services are provided and education due to cultural and linguistic barriers.

Women have lower literacy rates than men and girls have lower school-completion rates due to less schooling because they generally work longer hours than men. These gaps are emphasized more in the rural and highland areas, where poverty is worst. The Gender and Development Group (GDG) was established in 1991, a collaboration of the Lao Women's

Union, UNICEF and International Non-Governmental Organizations. Their goal is to empower women so they can live in a society without discrimination. They want to ensure they can work alongside men to reduce poverty and benefit from opportunities for development.<sup>24</sup> Oxfam supports the GDG to include women in income generation activities hoping to increase their place within a village and increase their confidence to speak at village meetings. Men are usually the heads of households and represent their families at meetings. Many women do not speak the national language and cannot demonstrate simple meeting skills resulting in less women participating in village development activities. The GDG support women and men in villages to produce products from agricultural products, villagers are trained to improve quality of products and marketing to increase income. In return, income has been increased and they are able to fund projects to building roads and buying equipment and tools.<sup>25</sup>

## Economics

Laos is a least developed and low-middle income<sup>26</sup> food-deficit country. Despite being a least developed country, Laos has been making significant progress in poverty reduction over the past few decades with poverty rates on the decline from 46 percent in 1992 to about 27 percent today. The country is on course to achieve the Millennium Development Goal (MDG) target of halving poverty by 2015. More than one quarter of the population of Laos lives under the national poverty line.<sup>27</sup> The Lao government has set a goal to graduate from least developed country status by 2020. The United Nations (UN) criteria for moving beyond LDC status include a per capita income threshold; a human assets index measured by health and education indicators; and a strong economy that can withstand shocks, such as natural disasters. Laos must meet two of the three criteria to be eligible for graduation.<sup>28</sup> In 2011, The World Bank raised Lao PDR's income categorization from low income economy to lower-middle income economy. Lower-middle income economies have an average income of US\$1,006 to US\$3,975. The World Bank revises its classification based on gross national income (GNI) per capita. Laos' GNI in 2011 jumped to US\$1,110 from US\$980 in 2010. Laos' GDP has grown fast due to its growing economy and

increased foreign direct investments compared to other low-income countries in the same region. According to the World Bank, Lao PDR's reliance on natural resources (mining and hydropower) increases the importance of the government's ability to manage its natural wealth.<sup>29</sup>

The main development challenge Laos faces is ensuring that the benefits from higher economic growth, averaging more than seven percent for the past five years, are evenly distributed and translated into inclusive and sustainable human development. The UNDP says widening gaps between rich and poor, women and men, ethnic groups, and residents of different regions of the country needs to be addressed if Lao PDR is to achieve all the MDGs by 2015.<sup>30</sup> Laos' economic forecast is more positive following the country's membership into ASEAN in 1997. Laos has endured regional economic turmoil which interfered with the country's development progress.

Laos PDR's economic growth is driven primarily by foreign direct investment in natural resource extraction (timber, copper, and gold) and hydropower. In the province of Oudomxay, four of the districts are the fastest growing rural economies in Laos. Investments are mainly in agriculture (rubber plantations) and cash crops which all go to the Chinese population in the north. The Chinese have about 30,000 hectares (74,000 acres) of rubber land in the province. Extraction of natural resources in this undeveloped country is on the path to increase.<sup>31</sup> The World Bank says that the hydropower and mining sectors have both contributed to Lao's rapid economic growth which accounted for one third of the country's 7.5 percent of economic growth between 2005 and 2010.<sup>32</sup> This growth has been attributed to increases in revenue, infrastructure improvement, and poverty reduction.<sup>33</sup> Continuing development in an environmentally sustainable way and the revenues generated benefit everyone are important factors for meeting Laos's long-term economic goals.<sup>34</sup>

Agriculture is the main source of employment in Laos. Less than 5 percent of the land in the country is suitable for subsistence agriculture, which nevertheless provides around 80 percent of employment with rice as the main crop.<sup>35</sup> There are two rice cultivation ecosystems: rain-fed upland cultivation and rain-fed lowland (wet season low land or paddy land cultivation).

Upland cultivation is traditional agriculture also known as slash and burn and covers twenty percent of the rice-cultivated area in the country. In March, farmers burn off the brush from their land so they can begin planting rice and other crops at the beginning of the rainy season. The Ministry of Agriculture and Forestry (MOFA) teaches farmers best practices on how to burn their brush to avoid forest fires. Laos has had forest fires in the past, but the research team for this report did not find any published reports on the extent of such fires. Smoke from the burned brush has also affected airplanes from flying up north from Vientiane.<sup>36</sup> Lowland cultivation is the main cultivation method in the Mekong valley and represents just over half of the rice cultivated in Laos. Both upland and lowland rice cultivation are done under natural rain yielding only one crop per year which makes it vulnerable to climate changes.<sup>37</sup> Since rice farming is the largest source of work in Laos, any impacts to the rice crop will have ripple effects throughout the district, provincial, and national economies.<sup>38</sup> People who grow rice have faced challenges through the years due to climate changes. Farmers know the traditional planting and harvesting seasons, but weather and climate changes have made it more difficult to predict the best times to plant crops so they will not be affected by flooding, drought, and other weather-related disasters. Farmers are seeking other alternatives to growing non-rice crops and have gotten support from the UNDP. UNDP says crop diversification is crucial to improve farmers' resilience and food security. Options being explored for alternative crops include lemons, cucumbers, and sweet bamboo.<sup>39</sup>

Small livestock consisting of chickens, ducks, and pigs is the main form of animal protein and income generation for rural farmers in Laos. Livestock diseases are common due to the lack of vaccinations and free-range production systems. The Department of Livestock and Fisheries (DLF) reports the main restriction to increased productivity of livestock in rural areas is disease. Livestock is mainly used for cash income versus rice production which is for food security. Almost all livestock are sold in contrast to only thirteen percent of rice production reaching markets.<sup>40</sup>

## Environment

Environmental considerations influence disaster management in profound ways, from

the types of risks that are prevalent to natural protections that mitigate disasters. This section outlines some of the key environmental factors that contribute to Laos's disaster hazards and affect potential response operations.

## Borders

Laos PDR shares borders with Burma (146 miles), Cambodia (263 miles), China (336 miles), Thailand (1,090 miles), and Vietnam (1,324 miles).<sup>41</sup> The eastern border with Vietnam extends along the crest of the Annamite mountains, which serve as a physical barrier. These mountains are sparsely populated by tribal minorities who traditionally have not acknowledged the border with Vietnam. To the west, the Mekong River forms the highly porous border with Thailand. Laos borders Cambodia to the south, and ancient Khmer ruins at Wat Pho and other southern locations attest to the long history of contact between the Lao and the Khmer. In the north, the country is bounded by a mountainous border with China and shares a short Mekong River border with Burma.<sup>42</sup>



Figure 2: Lao PDR Boundary Map<sup>43</sup>

Laos has two types of border crossings – international and local. International crossings are open to all foreigners who have a valid passport and visa. Local crossings are open only to locals on each side of the border who may walk back and forth with a border pass. Trafficking across the border is common; Laos is increasingly used as a transit country for Vietnamese, Chinese, and Burmese women involved in sex trafficking and forced labor in neighboring countries. Laos is a source country for women, children and men subjected to forced prostitution and forced labor. Laotian migrants seeking work outside of the country often become trafficking victims in their destination countries such as Thailand.<sup>44</sup>

### Geography

Laos is a landlocked Southeast Asian country which covers an area of 236,800 square kilometers (147,140 square miles). 20 percent of the country consists of lowland alluvial plains along the Mekong River and terraces in the central and southern areas. Half of the country is covered with hills, of which 16 percent is suitable for cultivation and is planted with rice, the staple food, and secondary food crops such as maize, tubers, peanuts and soybeans. Mountain ranges characterized by steep slopes and sharp crests rising between 1,000-2,000 m. above sea level cover 30 percent of the country to the north and along the eastern border with Vietnam. The highest mountain in Laos, Phou Bia, reaches 2,820 meters (9,250 feet) above sea level.

The southern panhandle consists of the Annamite mountain range to the east, the Khammuane and Boloven Plateaus west of the mountains, and the Mekong River that serves as the panhandle's western border. The Annamite Mountains ranges in elevation from 1,520 to 1,830 meters (5,000 and 8,000 feet) above sea level.<sup>45</sup> Due to the rugged terrain and limited resources allocated to develop infrastructure into the rural areas, transportation and communication in remote areas is limited. Rural roads become restricted during the raining season, making it difficult to access villages which are more than 6 kilometers (3.7 miles) from the main roads.<sup>46</sup> The Annamite range between Laos and Vietnam is a conservation landscape that covers one of the most biologically important regions of the mountain range. Due to the rugged nature of the terrain here, the habitat is mainly

moist evergreen forest which is mostly intact. The government is working with conservation groups along with rural communities to reduce poaching and habitat loss in the conservation area.<sup>47</sup>

Laos is home to numerous rivers and streams that provide great potential for hydropower development with 51 percent of the power potential in the lower Mekong basin contained within Lao PDR.<sup>48</sup> The largest is the Mekong River, which is the main geographical feature in the West. In the Southern part of the country, the Mekong River reaches a breadth of 20 kilometers (12.4 miles), creating an area with thousands of small islands. It is estimated that 60 percent of the water entering the Mekong River system originates in Lao PDR.

The geography of Laos poses a challenge to the country's food security. The terrain in the country can be divided into two zones: lowlands and uplands. The lowlands lie in flat plains along the Mekong in the west of the country, are better integrated into the national infrastructure, and tend to produce surpluses of rice. However, over 70 percent of the population lives in the mountainous upland areas where villages are scattered, remote and often cut-off from health facilities and other essential services. The uplands tend to be food-deficit areas. Laos is also the world's most heavily bombed country per capita. Two thirds of the country, mainly in the uplands, is still contaminated with unexploded ordnance (UXO) from the Second Indochina War, which continues to cause death and injury and prevents the use of land for agriculture and animal husbandry.<sup>49</sup>

### Climate

Laos' climate is tropical. The wet southwest monsoons from May to October and the dry northeast monsoons from November to April strongly influence Laotian weather. The northeast monsoon brings drier air and lower temperatures; generally, the mean daily minimum is approximately 21°C (70°F). Temperatures below freezing have been recorded in the northern mountains' higher elevations.<sup>50</sup> Laos has been identified as the 42nd most vulnerable country in the world to climate change. This is due to the country's sensitivity and exposure to climate-related hazards such as floods and droughts and the high proportion of subsistence farmers without alternative livelihoods resulting in a low coping capacity to deal with the ill-effects of weather extremes.<sup>51</sup>

Farmers along the Mekong River, which spans Cambodia, Laos, Thailand and Vietnam, produce enough rice to feed 300 million people each year. According to the Mekong River Commission, any changes in seasonal rains can lead to extreme flooding or drought, destroying rice cultivation. With much of the region at high risk of extreme weather, the Flood and Land Management workshop held in Luang Prabang in February 2013 brought together nearly 200 government officials, NGO and community representatives, in the hopes of improving the capacity of farmers and fishermen to cope with weather-related disasters.<sup>52</sup>

Over the last 30 years, Lao PDR has experienced recurrent natural disasters, including floods, storms, droughts, and pests, in part as a result of climate change. Historical records indicate that Laos faces serious floods and droughts every one and a half years. This pattern has continued in the recent past. The Mekong River extends for 1,900 kilometers (1,180 miles) in Laos and there are numerous waterways in the mountains, which contributed to serious flooding in 2008. In 2009, the country was hit by Tropical Storm Ketsana which damaged crops at the time of the harvest. A

rodent infestation in 2008 was the worst in over 40 years. In 2010, many parts of the country reported drought conditions which delayed the planting of rice. Smaller rice harvests lead to shortages, which then lead to a rise in price making it hard to purchase sufficient amounts on the market. These natural disasters represent threats that can lead to a rapid deterioration in the nutrition and food security situation for most of the population of Laos. Many households are affected from these disasters and will not have enough food until the next harvest.<sup>53</sup>

Environmental degradation combined with rising climate variability have resulted in increasing natural disasters – floods, droughts, erosion, landslides and pests. The high dependence of most rural people on agriculture and surrounding natural resources, together with continued gaps in adaptation to changing climatic conditions, likewise make the country highly vulnerable to the effects of climate change. The UNDP says there is a need to strengthen human and financial capacities to manage natural resources, particularly at the community level, and enforce laws.<sup>54</sup>





# LAO PDR Disaster Overview

Lao PDR Disaster Management Reference Handbook 2014

# Disaster Overview

Since last decade, the changing climate and environment in the region and within Laos, along with man-made intentional or unintentional factors, have worsened disaster hazards. The degradation of the environment, increased development, over-logging, continuation of slash and burn cultivation practices, and other conditions made people more vulnerable and increased losses to crops.<sup>55</sup>

## Hazards

This section provides information that can be used for disaster risk reduction and contingency planning efforts.

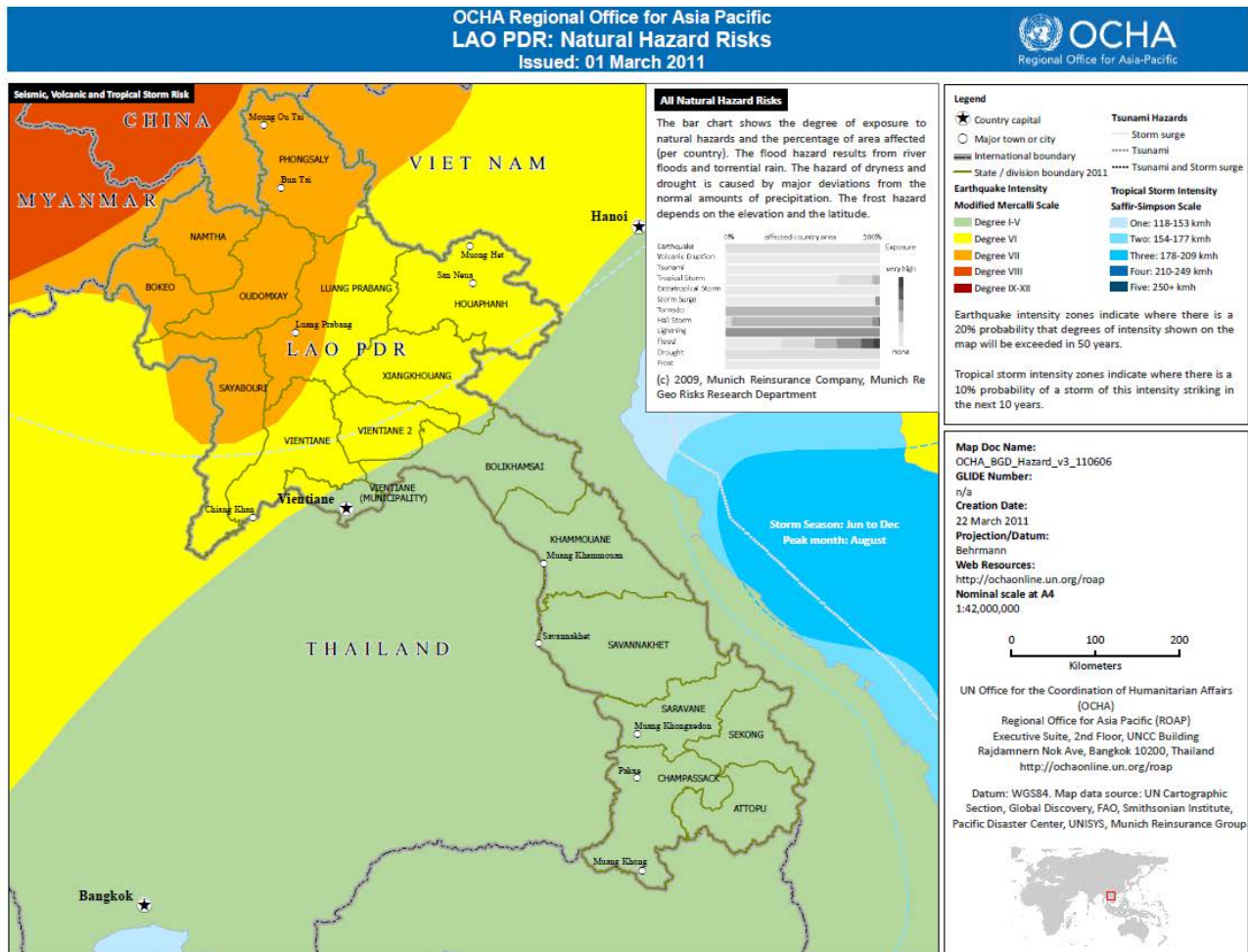
## Natural

Natural disasters such as floods, droughts and pests are common in Laos.<sup>56</sup> Laos has enhanced its border surveillance to mitigate the spread of avian influenza, and the geographical location of the country provides protection from typhoons and windstorms.<sup>57</sup> The impacts of natural disasters such as drought, flood, and pests are mostly felt in rural communities where livelihoods and local economies are primarily based on agricultural production. Other hazards such as human and animal diseases also have a significant impact as they affect livelihoods often over the longer term by reducing labor resources and assets.<sup>58</sup> The map below shows a composite view of natural hazards that threaten Laos.

## Floods

Floods occur from August to September in the central and southern provinces of the country,

Figure 3: LAO PDR - NATURAL HAZARD RISKS<sup>59</sup>



The names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations



following the southwest monsoon season. Roughly 75 percent of the country's annual rainfall is received during the period of May to October. The rainfall pattern varies throughout the country, from 1,200-1,300 mm in some of the Northern provinces to 1,500-2,200 mm in most provinces in the Mekong River valley. Flooding occurs regularly and often affects not only the main stream of the Mekong River but also many of its smaller tributaries. These floods have the greatest overall economic impact on the country and affect a greater number of people, as the areas affected are the primary locations of economic activity and contain 63 percent of the country's population.<sup>60</sup> Storms that cause floods, landslides and the destruction of homes leave people in need of food assistance, shelter, water and sanitation, healthcare and basic items. The common causes of landslides are to the effects of a higher wet season groundwater and water levels in soil.

The major effects are felt along the downstream areas of the Mekong River and its primary waterways, south and eastward from Vientiane province. The waterways are often engorged by heavy rainfall in their reservoir basins and then further backed up by floodwaters from the Mekong. Bolikhamxay, Savannakhet, Khammuane, Champasak and Attapeu are the worst affected provinces. Flash floods have occurred in the upper reaches of the Mekong waterways; generally the effects are destructive but brief and localized. There is a tendency towards more frequent flash floods caused by severe deforestation in the hill areas of northern Laos.<sup>61</sup>

The annual rainfall can be quite variable in different parts of the Laos. Villages located in the plains of the Mekong, a prolonged wet season flood or higher than normal levels can lead to a decrease in rice crops. The combination of late season drought with an early end of the rainy season can reduce crop yields up to 50 percent in some rural areas.<sup>62</sup>

In 2008, torrential rains caused flooding around the Mekong River affecting 228,320 people and killing a dozen people. The total loss was estimated at US\$4.4M. In the last three decades, there have been twenty-seven major floods. In 2011, Laos was hit by a string of tropical storms affecting 12 of their 17 provinces. It was estimated that around 500,000 people were affected by the flooding.

Flash floods and heavy monsoon rains in 2013 killed twenty people and damaged many

roads and crops. The rains affected hundreds of thousands of people throughout the country and left them without clean water and damage to their rice fields.<sup>63</sup> In the southern province of Champasak, 56 villages were hit by floods affecting 53,000 people. Many communities located in this province were more vulnerable to the impact of the floods due to their remoteness.<sup>64</sup>

## Drought

The area in Laos most prone to drought is the western provinces and some of the higher elevations of the southern provinces. Drought affects about 20 percent of the country's population, adversely affecting agricultural production.<sup>65</sup> Villages located east of the Mekong worry about drought, which is intensified by the absorbent nature of the sand soils which can affect rice cultivation. There is some extent of drought every year that will affect agriculture as well as human and animal health.

Drought occurs at two different seasons – early and late. Early season drought occurs during mid-June to mid-July and late season drought occurs at the end of early season drought through monsoon rains in September. Late season drought can reduce grain production up to 30 percent. During drought in the wet season along the Mekong River Valley lowland rice growing area is aggravated by the porous nature of the soil that exists in the area. In the uplands, the environment is normally impacted around the time of seeding which is April and May. Late season drought is not a concern under upland conditions where most upland crops are harvested by mid-October. The Northern provinces have greater reliance on upland agriculture, which are more susceptible to drought conditions.<sup>66</sup>

In the late dry season, both intentional and accidental fires occur as people clear and manage agricultural and residential land. In lowland areas, fires are used to burn crop residues to get the land ready for the upcoming growing season. In urban and residential areas, people burn leaves, trash and brush. In the mountains, fires could indicate permanent conversion of forest agriculture land or they could be associated with shifting cultivation. These types of practices have been going on for hundreds of years, and are not necessarily hazardous.<sup>67</sup>

## Rodents

The upland area of Laos has a high endemic rodent population. The rodents damage at least fifteen percent of the annual harvest, mostly rice. There are occasional periods during which losses reach up to one hundred percent due to the environmental conditions. The outbreaks of rodent infestation in some provinces are associated with the wet season's flowering and fruiting of particular species of bamboo. Upland farmers consider the rodent problem as the production limitation over which they have least control.<sup>68</sup> Bamboo is a very vital product to village populations in Laos, villagers collect the bamboo for building material and the shoots for eating and to sell. The northern mountainous areas of Laos are the most fertile areas for bamboo, but they can also be found in central and southern Laos.<sup>69</sup>

## Man-Made

### INDUSTRIAL

The economy in Laos has been growing the past few years due to many infrastructure projects creating many jobs. With an increase in industrial jobs, workplace accidents and health events become more likely, so the Ministry of Labour and Social Welfare through other agencies like the Lao Federation of Trade Unions and the Chamber of Commerce developed the 2<sup>nd</sup> National Occupational Safety and Health (OSH) Programme (2011-2015). The OSH promotes safe and improved work place environments for workers. Nine priority activities were created:<sup>70</sup>

- Establish Occupational Safety and Health Organizations at Provincial Level
- Enact Essential Occupational Safety and Health (OSH) Legislation
- Capacity Building for Occupational Safety and Health Staff
- Strengthen Occupational Safety and Health Inspection
- Improve Work Accident and Occupational Diseases Reporting Systems
- Occupational Safety and Health Research and Development

- Control and Prevention Work Accidents and Occupational Diseases
- Occupational Safety and Health Promotion and Dissemination
- Study and Research for Establish Occupational Safety and Health Institute

The Lao Federation of Trade Unions (LFTU) has the lead to promote workplace environment improvement at many workplaces at the local level which will lead to the reduction of industrial accidents in Laos. The Japan International Labour Association (JILA) has been supporting the training of workplace leaders in the Lao industry since 2007. The number of cases in Laos is minimal, so the emphasis for now is to engage in training activities to prevent workplace accidents.<sup>71</sup>

As Laos continues to develop an industrial and manufacturing base, and as more of the economy and livelihoods become dependent on industry instead of agriculture, potential industrial hazards should be assessed and reflected in safety precautions and training to minimize the number and scale of incidents. The risks include rapid onset types of disasters like explosions and slow onset disasters like leaks, and the precautions and responses to each should be addressed in business processes and first responder capabilities.

## Infectious Disease

Communicable (infectious) diseases are the leading cause of illness and death in Laos. Lack of sanitation and water supply, malnutrition, poor health education and lack of hygiene habits, inadequate access to health care, do not help in the spread of infectious disease in the country. Non-communicable diseases (non-infectious) are on the rise in Laos and create a challenge to the already strained health system. Alcohol abuse, tobacco related illnesses, and illicit drug use are examples of health impacts of the changing lifestyles of the Laotian people.

Seasonal Influenza is widespread year round, with the highest percentage of positive diagnosis being identified during the third and fourth quarters. Although Seasonal Influenza typically peaks between August and September, the standard flu season in Laos generally lasts from June through December. Laos will need to continue to strengthen its public health surveillance and response capacity to be prepared

for early detection and rapid response to an emerging disease. Malaria is one of the most important diseases affecting the rural population, outbreaks usually occur after the rain in September and November. Laos has controlled malaria with 90 percent of its population and the disease is now contained to just a remote population.<sup>72</sup>

Almost a decade ago, little to no information was available regarding influenza issues in Laos. In 2007, data from the first laboratory-based influenza surveillance system established in Laos was reported. Subsequently, between 2008 and 2010, three central hospitals in Vientiane, Laos admitted over 50,000 patients that met the Influenza-like illness (ILI) case definition, which specified symptoms of a fever greater than or equal to 38 degrees Celsius (100.4 degrees Fahrenheit), in conjunction with a cough or sore throat.<sup>73,74</sup>

Poor health services are aggravated by poor health environmental conditions. Access to clean water and waste water treatment are both extremely limited. Only 52 percent of the population in Laos has access to safe drinking water and only 37 percent use toilets. For HIV/AIDS, Laos is still a low incidence country, with an infection rate of about 0.05 percent among men and women aged 15-24 (1,400 cases). However the country is bordered by Cambodia and Thailand – countries with the highest rates of HIV in Asia- and by China and Vietnam, where HIV infection rates have been rising rapidly.<sup>75</sup>

## Endemic Conditions

As disaster management planners and responders engage in Laos, it is important to recognize existing conditions that are independent of specific events. Understanding endemic conditions in the planning phase will help responders better understand the true impacts of a disaster. Addressing endemic conditions may be considered as a part of disaster risk reduction programs but some of these conditions cross into development, law enforcement, and security

## Malnutrition

Rural households in Laos mainly rely on their own food production and rice farming is the main livelihood activity of the majority of rural households. Access to land has been an issue

that impacts agricultural production because large parts of the country are contaminated with UXO. Local markets are the next main source for food if they can be accessed, but during lean seasons the price of food increases which leads to lower household food consumption.<sup>76</sup> Laos has a high rate of rice consumption compared to other countries. Rice provides approximately 80 percent of caloric intake in rural areas. Rice alone is not adequate nutrition and an over-reliance on rice has helped make Laotian children the most undernourished in the region (31 percent of children under the age of five are underweight, and 48 percent have stunted growth).<sup>77</sup>

Malnutrition amongst children under five years old remains a challenge for Laos. As national economic growth continues apace, overall poverty levels in Laos have decreased. However, Laos still has the second highest malnutrition rate in East Asia. Experts say Laos has many challenges that contribute to malnutrition such as geographic isolation, poor awareness about health, and a reliance on subsistence farming in the rural areas. A UNICEF nutrition specialist stated that nutritional knowledge is low especially in isolated areas of the country. Pregnant women and children under five years old are the most at risk of immune deficiencies and learning disabilities due to inadequate food intake.<sup>78</sup>

To fight malnutrition in Laos, the government and international partners conceived a plan to provide much needed assistance to approximately 200,000 children. UNICEF was a major contributor to this effort, and distributed micronutrient powder and zinc. As humanitarian assistance is a preferred avenue for strengthening bilateral relationships, assisting Laos' effort to combat malnutrition presents a potential avenue for enhancing cooperation.<sup>79</sup>

## HIV/AIDS

Laos is the only Southeast Asian country to maintain a low prevalence in regards to HIV/AIDS, but the government has not categorized HIV/AIDS as low risk. The first case of HIV in Laos was reported in 1990 and the first AIDS patient was diagnosed in 1992. As Laos expands economically, vulnerabilities to the HIV/AIDS epidemic are gaining attention.<sup>80</sup> Increased cross-border traffic and access to sex workers put Laos in a constant state of alert for HIV/AIDS. The main facilitators of HIV/AIDS transmission are the “three M’s” - men, mobility, and money. Laos

is in a dormant epidemic stage. The HIV/AIDS epidemic occurred in two waves. The first wave in the early 1990s was mainly due to the “three M’s” exemplified by male migrants returning from work in bordering countries. The second wave in the early 2000s was due to an increase in domestic female sex workers and their clients and this has continued to be the main source of Lao’s HIV/AIDS cases.<sup>81</sup>

The government says there are an estimated 1,600 people in Laos receiving treatment for HIV and that number is expected to rise to 7,000 by 2015. There are a reported total of 8,500 cases of HIV/AIDS in Laos, putting them far behind their regional neighbors. As Laos continues to open its borders, health officials are preparing for a potential outbreak in a country that does not list HIV prevention as a priority. The National Strategic and Action Plan on HIV/AIDS/STI Control and Prevention for 2011 to 2015 reports that the prevalence among sex workers is an estimated 0.43 percent.<sup>82</sup>

Nationwide there are over 10,000 sex workers, according to the government. The provinces that see the highest cases are Savannakhet, Vientiane and Champasak due to their locations near the borders of Vietnam, Thailand and Cambodia. According to health officials, being surrounded these countries with high infection rates could pose a serious threat to Laos. The Deputy Director for the National Center for HIV/AIDS/STI said that “prevention measures need to be put in place in order to stop the virus from spreading.”<sup>83</sup> With Laos playing the role of a transit country, a greater cross-border flow of people and goods could lead to increased venues offering sex and drugs.

The United Nations Office on Drugs and Crime (UNODC) is sponsoring programs to address drugs and human trafficking and other criminal activities. For over a decade, UNODC has developed programs to reduce HIV/AIDS resulting from injectable drug use, drug law enforcement and other areas. Laos’ position in the region makes them vulnerable to these issues due to their shared borders. One area of concern for Laos is the migration of Chinese people from the Yunnan province to the Northern provinces in Laos and the potential risk of the spread of HIV/AIDS infection to the local people.<sup>84</sup> The HIV/AIDS Asia Regional Program (HAARP) is a program designed to strengthen the will and capacity of governments and communities in Southeast Asia and China to reduce HIV-related harm associated with injecting drug use.<sup>85</sup>

## Deforestation

Laos has lost nearly one third of its forests over the past 35 years and could lose more along over the next decades if additional protections are not put in place. Forests are being replaced by agriculture fields to grow rice, rubber and other crops. A conservation expert with the World Wildlife Fund said there are two paths that Laos can take in regards to its forests: the first path leads to further decline in biodiversity and livelihoods, while the second path of properly

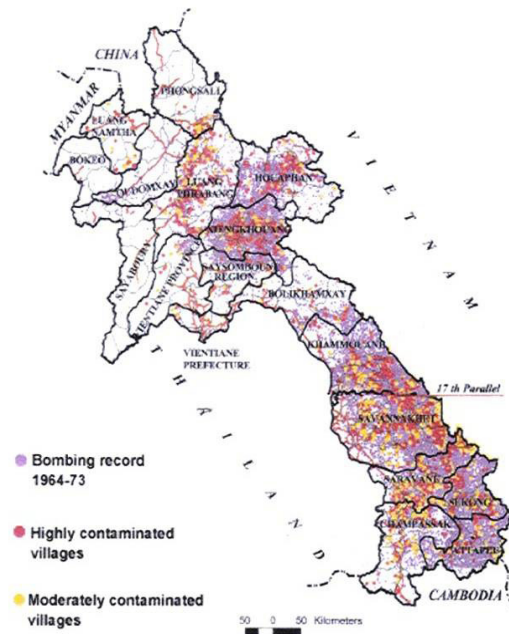


Figure 4: UXO Contamination in Laos

managing natural resources could lead to a strong and thriving future for Laotians.<sup>86</sup> The forests of Laos are suffering from widespread destruction because of a booming black market for logging trade at the Laos-Vietnam border. In 2011, the Environmental Investigation Agency (EIA) reported Vietnamese involvement in smuggling logs from Laos to Vietnam to make furniture which would then be sold overseas.

Laos began land reform in the early 1990’s to stop deforestation, to intensify agriculture production and to improve the government revenue base through land taxation. The Lao government is working on additional land reform measures that could have significant impacts on Lao’s forests. The President of the National Assembly of Lao’s Committee on Economic Planning and Finance said “land policy is a priority in Laos and land disputes are a top concern of Lao’s multi-ethnic population.” He

added that “the competition for land amongst the many sectors is growing and as a nation, we must act to prevent conflicts to ensure the limited land is developed to ensure it contributes to national development goals and reduces poverty among the rural population.”<sup>87</sup> The EIA recommends that Laos enforce its current raw log ban, close loop holes, and improve monitoring of log flows in the country. In 2005, Laos had 16 million hectares of forests but that number has since decreased to around 1.5 hectares.<sup>88</sup>

The World Bank has signed a grant agreement of US\$31.8M to aid the Government of Lao People’s Democratic Republic’s sustainable forest management project. The project targets the expansion of areas under the approved Participatory Sustainable Forest Management plan along with the development and piloting of a landscape approach for forest management. In addition, the project aims to increase the number of people with monetary and non-monetary benefits from forests, decrease the rate of forest cover loss, enhance carbon storage from improved protection and forest restoration, and reduce emissions from deforestation and forest degradation in project areas. The grant follows Laos’ Forestry Strategy to the year 2020, with the goal of improving the quality and quantity of forested areas, as well as generates a sustainable stream of forest products.<sup>89</sup>

In addition to the economic and biodiversity impacts noted above, the extent of deforestation Laos has experienced makes landslides all the more likely when the seasonal monsoon rains and floods hit. Not only will landslides be more prevalent, but they will be larger and more destructive as larger sections of land lose established root systems to help hold the soil in place.

## UXO

Lao PDR is the most heavily bombed country, per capita, in history and estimates forecast that the clearance of all UXO in Laos will take at least one hundred years to complete.<sup>90</sup> Approximately twenty-five percent of villages in Laos are contaminated with Unexploded Ordnance (UXO). More than 580,000 bombing missions were conducted over Laos between 1964 and 1973. Cluster munitions or ‘bombies’ (as they are called locally) are the remaining forms of UXO in Laos. Roughly 20,000 people have been killed or injured due to UXO

accidents after the Vietnam War.<sup>91</sup> In 2001 alone, there were around 90 casualties from UXO. This pervasive contamination creates a major obstacle to the country’s land which could be used for agriculture or animal husbandry. UXO removal increases the safety of people in the nearby communities and expands land for food production and other developments. The United Nations reported that clearing around 200,000 hectares (approximately 500,000 acres) of land affected with UXO could make it vacant for rice production.<sup>92</sup> The organization UXO Lao was established by the government with support from UNDP, UNICEF and other stakeholders through Prime Minister’s Decree Number 49. It is a National Executed (NEX) project under the Ministry of Labour and Social Welfare and UNDP. UXO Lao has cleared land in support of international development projects which include schools, hospitals and health care centers.<sup>93</sup>

As mentioned, the clearance of UXO will increase the availability of land for growing rice and help Laos fight their malnutrition battle. According to the United Nations, the UXO clearance efforts being performed by the United States may have a large role in aiding Laos to combat malnutrition. Since 1993, the U.S. government has provided over US\$60.0M to UXO efforts with plans of providing more assistance in the future. The U.S. has also supported risk education for teaching school children about the dangers of UXO in heavily contaminated districts. In 2012, the U.S. government funded the construction of a new operations and logistics building for the UXO Lao’s Savannakhet clearance teams. This building will improve the efficiency of the UXO Lao teams operating in this area of the country.<sup>94</sup>

## Animal Disease

Animal diseases are endemic in Lao and outbreaks have serious impacts on livestock. Common diseases that affect cattle are hemorrhage septicemia, anthrax and foot and mouth; pigs are mainly affected by swine fever; and poultry are most susceptible to Newcastle Disease and fowl cholera. Most of the cattle diseases can be cured with antibiotics and some can be prevented with immunizations.<sup>95</sup> In 2008, a Veterinary Law was passed to fight avian influenza (AI), and this law established a regulatory framework to strengthen veterinary services, including requirements for greater transparency for reporting AI and other emerging diseases. The Veterinary Law also put

in place disease control measures and bio-security and hygiene standards. The Food and Agriculture Organization (FAO) said that poultry is one of the most inexpensive sources of protein and a failure to protect it could worsen food security and poverty.<sup>96</sup> Improved disease prevention and surveillance is also needed since many emerging infectious diseases are transmitted from animals to humans.<sup>97</sup>

In 2012, Laos had roughly twenty veterinarians, with the military only having one veterinarian whose primary role was animal husbandry. USAID, through Tufts University, is sponsoring Laotian students to attend a veterinarian program. An organization called Veterinarians Without Borders is aiding subsistence farmers to develop veterinary capacity in districts located in Central Laos. Increased services mean healthier animals. Veterinarians Without Borders is collaborating with local villages to train primary animal health workers on a project called PAHWs. By working with the local communities, these organizations improve animal husbandry skills and awareness about animal healthcare.

Laos rose to 6,800 hectares.<sup>100</sup> Overall, opium cultivation in the region has doubled since 2006. The value of opium produced in Laos and Burma is estimated at US\$431.0M. The number of people growing opium in Laos has risen to around 38,000 households.<sup>101</sup>

In 2012, the United Nations Office on Drugs and Crime (UNODC) reported that Laos' opium production grew 66 percent. Numbers are heading in the wrong direction for opium production and will continue to worsen unless farmers have a viable and legal option to provide them food security for themselves.<sup>102</sup>

## Opium



Figure 5: Opium Cultivation<sup>98</sup>

The Golden Triangle (where Laos, Burma and Thailand meet) is one of Asia's main opium producing areas. Oudomxay province is at the regional crossroads of the Laos opium trade; it is hours by road to China, Thailand, Vietnam and Burma.<sup>99</sup>

Farmers in Laos are moving to more remote land to avoid having their crops destroyed by the authorities. Opium eradication programs were successful until 2006 when the country declared they were free of the practice. In 1998, around 27,000 hectares of opium poppy were growing in Laos which was reduced in 2006 to 1,500 hectares. In 2012, opium poppy cultivation in



# LAO PDR Government

Lao PDR Disaster Management Reference Handbook 2014

# Government

## Government Structure for Disaster Management

Lao PDR is a single-party socialist republic governed by the Lao People's Revolutionary Party (LPRP), the lone legal political party. The government organizational structure consists of the Presidency, the National Assembly, the Government Cabinet, and the Judiciary body. The Prime Minister leads and manages the government functions, ministries, and ministry-equivalent organizations<sup>103</sup>. Combined leadership from the Prime Minister and Ministry Directors on the national level as well as Provincial and District Disaster Management Committees are critical to the success of the country's disaster management.

The Government of Lao continues to significantly progress in their development of disaster management plans and programs to diminish the vulnerability of their population to the effects of natural, environmental, and man-made hazards. The government has systematically committed Cabinet and Ministries leadership support and defined their specific roles and responsibilities by official governmental decrees. Committees, plans and programs established at the national, provincial and district levels of government are in various levels of maturity. The Draft National Disaster Management Plan 2012-2015 adopts the Hyogo Framework for Action (HFA) 2005-2015 and captures Lao PDR's focus to build a comprehensive risk reduction culture and strengthen their disaster management capabilities by improving response and recovery management at all levels.<sup>104</sup>

## Overall Disaster Management Structure

The Draft National Disaster Management Plan 2012-2015 (denoted from here on as The National Plan) depicts the Lao PDR National Disaster Management structure. The disaster management structure has evolved from a single disaster management committee initiated

in 1999 on the national level (committee and history described in the National section) to encompass provincial, district, and village level disaster management. Representatives from governmental and non-governmental entities support the committees. The organizational structure is supported by designated action items and expected outcomes in The National Plan's Action Matrix. The action items delineate the country's Action Agenda to achieve the disaster management strategy through the efforts of all levels of government to build a more resilient country.

## National

At the National level, two main organizations coordinate and manage disaster management according to the government's direction.

### National Disaster Prevention Committee (NDPC)

The Environmental Protection Law dated April 1999, established the National Disaster Prevention Committee (NDPC) as the responsible entity for the coordination of monitoring, prevention, and response activities for natural disasters with local administrations. Although the law founded this entity a few months later another national committee was created as the coordinating organization for the government for disaster management.<sup>105</sup>

### National Disaster Management Committee (NDMC)/National Disaster Prevention and Control Committee (NDPCC)

Lao PDR built a simplistic national government structure to guide the country's disaster risk reduction and emergency management response management in 1999 with Prime Minister Decree 158. These actions were taken after the government had received instrumental assistance from the United Nations Development Programme (UNDP) to build disaster management capabilities from 1997 to 1999. Decree 158/PM dated August 23, 1999 created the National Disaster Management Committee to support the Lao Government in disaster preparedness and management. The initial formation of the NDMC encompassed a total of 13 Chiefs or Directors from various selected ministries.<sup>106</sup> The NDMC served as a coordinating body for disaster preparedness and



management. The committee was responsible for planning policies, obtaining statistics on disaster victims, requesting assistance, mobilizing resources and funding, public education, direct disaster relief operation, preparedness, and response and interagency coordination between the international and non-governmental agencies and assisting provincial governors to establish provincial and district management committees.<sup>107</sup> The responsibilities of the committee addressed internal and external agency coordination involved with disaster management and initiated the process to build capacity at the provincial and local levels.

As of October 2011, Prime Minister Decree 373/PM renamed the NDMC to the National Disaster Prevention and Control Committee (NDPCC) which is chaired by the Minister of National Defense. The Draft National Disaster Management Plan 2012-2015 accessible through open source lists the previous terminology of NDMC.<sup>108</sup> For this report, the government organizations will be noted with both terminologies for clarity.

The current NDMC/NDPCC structure as outlined in the draft National Disaster Management Plan for 2012-2015 increases the ministry representation to 19 members with detailed roles and responsibilities for pre-disaster, disaster onset, and post-disaster phases. Committee members include governmental and non-governmental representation which strengthens disaster preparedness for effective response at all levels by involving relevant stakeholders within the community (HFA Priority 5). Each of the three non-ministerial organizations plays an important role within the community. The Lao Youth Union and Lao Women's Union in particular are examples of community empowerment as the organizations identify and assist vulnerable populations (HFA Priority 4) in the disaster management process. The Lao Government partners with the Lao Red Cross volunteers trained in the areas of disaster preparedness and response for evacuation, first aid, firefighting, early warning, etc. The Red Cross teams are responsible for initiating rapid assessments and producing disaster information, joint emergency operations in rescue and relief provision for disaster victims, joint mobilization of relief assistance with Red Cross/Red Crescent partners, and conducting joint damage assessments and disaster survivor needs with local authorities.<sup>109</sup>

The Lao Youth Union members fulfill several

roles in the community in different capacities. The union helps to drive community and civic consciousness by becoming directly involved in disaster management work. The members hold the major responsibility of interpreters and messengers for disaster risk information to the community. The youth help to address population vulnerabilities related to health, environment, education, religion, household economic security and other sectors which impact the well-being of the individuals and community as a whole. Their assistance continues throughout the post-recovery and reconstruction phase as they support the village, district, and provincial authorities.<sup>110</sup>

The Lao Women's Union focuses on the social, cultural, and economic needs of women, children, and disadvantaged groups through the use of vulnerability and capacity assessments. The union ensures government officials are aware of the special needs of women in disasters and works with women's organizations to educate and develop capacities on disaster risk reduction and preparedness.<sup>111</sup>

LAO PDR NATIONAL DISASTER MANAGEMENT COMMITTEE

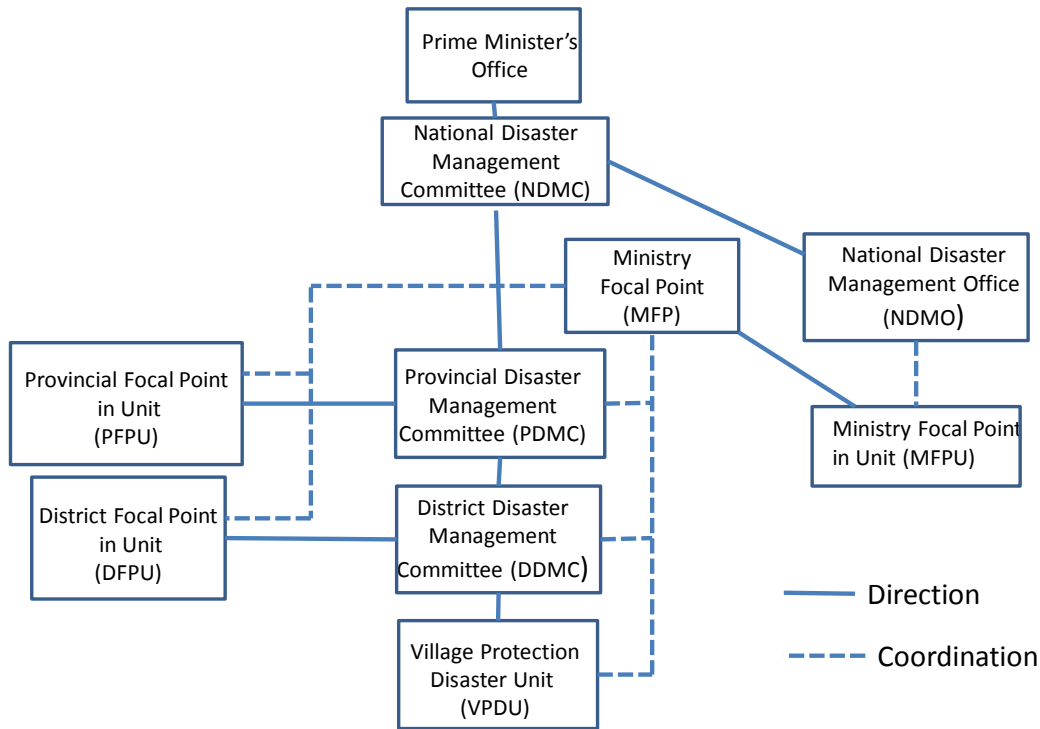


Figure 6: NDMC Organizational Chart

**National Disaster Management Office (NDMO)**

Prime Minister Decree 158 established the National Disaster Management Office (NDMO) as the Secretariat for the NDMC, which was founded by the same decree. Ministry of Labor and Social Welfare (MLSW) Decision 097/MLSW) dated June 2000 defined the mandate of the NDMO and the roles and responsibilities of the NDMC members. The NDMO is responsible for preparing the national disaster and emergency response plans and strategic policy coordination for disaster relief operations in the country. The NDMO can serve as the lead agency for the government in regional and international disaster management as designated by the Prime Minister's office. The disaster management functions covered by the NDMO involve collection and dissemination of information, early warning, surveillance, joint training, and use of standards and protocols required for regional and international cooperation. Additional NDMO responsibilities include advising the NDMC/NDPCC, coordinating with ministerial focal points, promoting disaster mitigation and preparedness activities at the local level, implementing

community awareness activities, providing training, guidelines, and plans for effective disaster management, and establishing disaster management implementation teams at the national, provincial, and district levels.<sup>112</sup>

**Provincial**

**Provincial Disaster Management Committee (PDMC)/Provincial Disaster Prevention and Control Committee (PDPCC)**

As mandated by decree and written in The National Plan, the Provincial Government is required to develop the Provincial Disaster Management Committee (PDMC)/Provincial Disaster Prevention and Control Committee (PDPCC) chaired by the Governor. The PDMC/PDPCC members are comprised of disaster preparedness and response stakeholders from the public sector, police and armed forces, civil society organizations, industry, religious organizations, province, and Lao Red Cross. National support will be provided from the NDMC for technical and capacity building. Within the larger governmental structure, the PDMC/PDPCC will be the conduit for

information and resources and the link between the national objectives with provincial priorities. The Governor will appoint one senior official to coordinate the disaster management activities in the Province. The PDMC/PDPCC responsibilities are directed at strengthening disaster preparedness at the provincial level (HFA 5) and supporting national priorities and guidelines. The PDMC/PDPCC primary tasks mirror the NDMO in terms of disaster plan development with preparedness, mitigation, and response strategies (based on district risk assessments), education and training, community/public awareness, and interagency coordination. The PDMC will monitor hazards and disaster threats and emerging disaster prone areas together with the impact on the vulnerable population.<sup>113</sup>

### **Provincial Focal Point Unit (PFPU)**

The National Plan depicts a disaster management organizational chart with a Provincial Focal Point Unit (PFPU) however the unit is not described under Section 4.4 Role of Provincial, District and Village Structures and Responsibilities. While the District Focal Point Unit is mentioned in the National Strategic Plan on Disaster Risk Management in Lao PDR, the PFPU is not detailed. It could be ascertained that the PFPU responsibilities would be similar to the District Focal Point Unit but at the provincial level.

## **District**

### **District Disaster Management Committee (DDMC)/District Disaster Prevention and Control Committee (DDPCC)**

The District Disaster Management Committee (DDMC)/District Disaster Prevention and Control Committee (DDPCC) is the third tier in the national disaster management organization. The DDMC/DDPCC will be chaired by a district representative with members from the district level department heads, NGO leaders, and civil society members. The committee members are required to conduct bi-monthly meetings in non-disaster periods and as frequently as needed during emergency situations. Each DDMP has the important task of developing the comprehensive District Disaster Management

Plan which captures detailed hazard information specific to the area. The National Plan speaks to the major areas in the district plan which encompasses 1) coordination with government agencies, NGOs, and private sector for prevention and mitigation of disasters, 2) district locales vulnerable to different hazards and risks, 3) disaster operations for resource requirements, procurement of emergency supplies, disaster shelters, 3) restoration of emergency services for medical, shelters, procurement of supplies, water, gas, power, telecommunication, and roadways, 4) recovery plans and populations for damage assessment, and 5) restoration of critical infrastructure and community livelihood with emphasis on vulnerable populations.<sup>114</sup>

### **District Focal Point Unit (DFPU)**

The National Plan depicts a disaster management organizational chart with a District Focal Point Unit (DFPU) however the unit is not described under Section 4.4 Role of Provincial, District and Village Structures and Responsibilities. The National Strategic Plan on Disaster Risk Management in Lao PDR for Disaster Risk Management does describe district focal points with specific institutions detailed.

Goals ending in 2005 from the Strategic Plan state:

Establish DM focal points and contact persons as appropriate at:

- 10% of total primary schools
- 20% of junior secondary schools
- 30% of upper secondary schools
- 50% of professional schools
- 80% of military divisions
- 40% of factories<sup>115</sup>

## **Village**

### **Village Disaster Protection Unit (VDPU)**

The last tier in the disaster management organization is the Village Disaster Protection

Unit (VDPU) in the communities. Only a small number of communities have begun this process as the frontlines of disaster management in their villages with the village leaders heading the VDPU. The VDPU will prepare the plans and procedures for the disaster management programs for their locations, identify and map hazards and conduct the risk and vulnerability analysis, maintain operational control during a disaster event and mobilize resources and funding as needed, and incorporate civic groups in the disaster reduction and relief operations.<sup>116</sup>

## Laws, Policies, and Plans on Disaster Management

### Development of Government Policy on Disaster Management

The origins of Lao Government policy on disaster management began with the Lao Government Development Program from 1996-2000. The objective of the program was to eradicate absolute poverty in the country. Natural Disaster Preparedness was identified as an important rural development activity as Lao communities are extremely vulnerable to natural disasters. Disasters disrupt the food security for the communities that are barely subsisting on their agricultural livelihoods. Government policy for disaster management was handled by the Ministry of Labour and Social Welfare until the NDMO was established. Upon assuming the responsibility for policy formulation, the NDMO has thoroughly reviewed and analyzed government documents, laws, and decrees related to disaster management, the environment, water, land management, and other related issues. The NDMO also completed a study on the strategies, policies, and frameworks from other countries. Prime Minister Decree 158, August 1999 was recognized as the fundamental basis for disaster management policy development in Laos.<sup>117</sup>

In 2001, the National Policy for disaster management linked the relief and mitigation after disasters with preparedness and prevention activities. The purpose of the policy was to establish disaster management guidelines which would facilitate sustainable efforts for the prevention, mitigation, preparedness, response and recovery from natural and man-made disasters. The policy stated:

- The government's responsibility to deal with

the problems encountered due to disasters with the resources available

- Adopted an all hazards and people first approach to Disaster Risk Management
- Acknowledged disaster risk and vulnerability reduction as essential for sustainable development planning
- The development of effective Risk Management actions by coordinating the different levels of Government and the communities
- The promotion of community preparedness and their involvement through the education and awareness programs<sup>118</sup>

### Future Laws

GFDRR is supporting the development of a legal framework for hydro-meteorological services to improve disaster preparedness and response projected for 2014-2016.<sup>119</sup>

### National Disaster Management Action Plan

The Action Plan covers three major time frames from 2001 to 2005, 2005-2010, and 2010-2020. The general objectives of the Action Plan can be classified into main sections involving programs, training and disaster preparedness.

- Develop Programs
  - a. Continue to build disaster management program in accordance with the Prime Minister's Decree 158
  - b. Organize public awareness and education programs to understand causes of disasters
  - c. Link disaster management and other sector programs
- Develop Training
  - a. Develop training programs for the government and public sectors
  - b. Coordinate simulation exercises to prepare for disasters
- Improve Disaster Preparedness and Response
  - d. Establish focal points and contact persons for each organization to facilitate coordination between disaster management agencies

- e. Organize effective early warning and information management systems to ensure timely dissemination of early warning information to the communities
- f. Build storage facilities at the regional and provincial levels for effective distribute resources during disaster and recovery situations
- g. Establish rescue and emergency response teams
- h. Establish an Information Centre for Disaster Management<sup>120</sup>

## National Strategic Plan for Disaster Risk Management

The National Strategic Plan for Disaster Risk Management was issued by the Minister of Labor and Social Welfare and Chairman of the NDMC in April 2003. The Strategic Plan includes some of the same focus stated in the Action plan with specific details in the goals. The plan has defined goals for time periods ending in 2005, 2010, and 2020. The 2005 goals focused on the establishment of DDMCs with the development of regulations and organizational structures. The 2010 goals built upon the goals from 2005 and completed or expanded the specific tasks to the next level. The table below contrasts the progression that the government wanted to achieve and the end states desired for these timeframes.

Goals to 2005	Goals to 2010
Establish DDMCs in 80% of the total 142 districts (113 districts)	Establish DDMC in all 142 districts
Establish disaster management focal points and contact persons in schools, military and factories	Establish disaster management focal points in all major government agencies, private sector, other
Develop disaster management regulation and code	N/A
Enhance/establish information system to disseminate and receive information at 30% of total 142 districts and establish information center at NDMO and urban disaster information at Urban Research Institute	Enhance capability for information dissemination to all 142 districts
Build resource storage facilities in at least 3 parts of the country (Provincial Dept. of Labor and Social Welfare and districts)	Establish storage at provinces and some districts vulnerable to disaster
Conduct annual public awareness and education programs through media (2 events)	Continue sustainable public awareness and education programs through media
Organize annual disaster management training for government officials, private sector, provincial, district, and village leaders (4 events) and organize 2 rescue drills or simulation exercise	Expand disaster management training in all sectors at various levels and organize drills and simulation exercises with participation from emergency rescue teams
Integrate disaster management concept into urban and rural development with focus on flood, drought, fire, land management, bank erosion, water management, protection of environment, forest and other natural resources (NDMO is center)	Enhance capability and coordination with ASEAN, region and international to exchange expertise, disaster management information and joint implementing projects, simulation exercises and relief drills
Establish rescue and relief teams (specific locales)	N/A

Table 1: Strategic Plan Goals

The Strategic Plan goals to be completed in 2020 aim towards a safer and more resilient nation with disaster management plans, policies, laws, and infrastructure in place to ensure timely assistance to the population impacted by disasters and swifter return to normalcy after a disaster.<sup>121</sup>

## **Draft National Disaster Management Plan 2012-2015**

The Draft National Disaster Management Plan 2012-2015 is the major plan developed by Lao PDR to build a resilient nation based on the Hyogo Framework. The Disaster Management Vision of the Lao PDR government described in the 2003 Strategic Plan is still applicable to current the National Plan. The country's four key strategic objectives are 1) safeguard sustainable development and reduce the impacts and damages caused by natural and man-made disasters, 2) transition from relief to mitigation of disaster impacts to preparedness for the community, society and economy before a disaster occurs with emphasis on hazards such as floods, drought, landslide and fire, 3) ensure that disaster management becomes a joint responsibility between the government and people by building community capacity, and 4) promote sustainable protection of the environment and the country's forests, land, and water resources.

The four-year action plan presents disaster risk threats for the country and the issues faced with risk reduction/mitigation, capacity building, climate change adaptation, livelihood security, gender mainstreaming, community empowerment, and response and recovery management. The plan delivers the national disaster management strategy and the action plan to achieve the desired outcomes. Implementation recommendations highlight areas of deficiency and proposed solutions and actions to remedy the situation with mandates, funding, and external assistance.<sup>122</sup>

## **Provincial Disaster Management Plan**

The PDMC is tasked with the responsibility of preparing a Provincial Disaster Management Plan which is founded on the district level risk assessments and details strategies for preparedness, mitigation and response. The discussion on the PDMC responsibilities is detailed in the government structure section.

The National Plan's Action Matrix notes Action Agenda item directed towards the PDMC, DDMC, and Village committees, 3.1.1.5 Establish local level contingency planning frameworks with provision of resources for risk reduction to enforce their planning actions.

## **District Disaster Management Plan**

The DDMC is tasked with the responsibility of preparing a District Disaster Management Plan which addresses disaster risk reduction and emergency response. The details of the district plan are covered in the government structure section.

## **Seventh National Socio-Economic Development Plan (7th NESDP 2011-2015)**

The Seventh National Socio-Economic Development Plan (7<sup>th</sup> NESDP) has been prepared using the country's socio-economic strategy as the basis. The intent of the 7<sup>th</sup> NESDP is to change the country's status as least-developed country by year 2020.<sup>123</sup> The NESDP has diverse targets such as the eradication of poverty to less than 19% of the population and to protect the country from natural disasters (forest fires, flooding, drought, river bank and mountain erosion).<sup>124</sup> The 7<sup>th</sup> NESDP is also written to mainstream disaster risk reduction into development planning and to create the legal frameworks and strategies for Disaster Risk Management (DRM). The GFDRR has been working with the Lao Government to manage the country's risks and build resilience since Typhoon Ketsana. As a result of the GDRR's efforts the Lao Government is integrating Disaster Risk Management into the main planning documents such as the 7<sup>th</sup> NESDP and urban development law.<sup>125</sup>

## **Government Capacity and Capability**

The Lao Government has markedly progressed in their disaster management development as of 1999. The disaster management structure continues to evolve and key national plans and strategies have been written to incorporate disaster planning into all levels of government. The October 2012 NDMO Interim National Progress Report documents the Lao Government's disaster management actions against the Hyogo framework with progress

levels ratings. The Priority for Action items and the ratings provide insight on the government's progress.

A summarization of the results is detailed below:

Priority for Action 1: Core Indicator 1, Level of Progress Achieved: 4

*National Policy and legal framework for disaster risk reduction exists with decentralized responsibilities and capacities at all levels.*

Description: The national policy for disaster risk reduction was established in 1999 under PM Decree 158 which founded the NDMC and NDMO. In 2011, the NDMC was renamed to the NDPCC. In 2012, the PM Decree on Disaster Risk Management was developed. Disaster risk reduction had been incorporated into the 7<sup>th</sup> NESDP and in process for the Urban Planning Law and livelihood activities.

Discussion on Context and Constraints: Finances, staffing, and insufficient mechanisms and capacities are the main constraints on the implementation of Disaster Risk Management Policies. Lack of understanding of the disaster risk reduction framework, concept, approach, and mechanism by key sectors causes delays in the Disaster Risk Management policy and legislation and in mainstreaming disaster risk reduction into development activities. The capabilities and advocacy of the policy makers at the national and local level on disaster risk management should be continue to be developed.

Priority for Action 1: Core Indicator 2, Level of Progress Achieved: 3

*Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels.*

Description: Due to the occurrence of disasters, the government has increased the budget for disaster risk management activities. The Lao Government approved a Disaster Prevention Fund. Funding and technical assistance is received from internal and external donors and development partners. The environmental protection fund is being modified. The line ministries and the Lao Red Cross allocate an annual budget for disaster management activities.

Discussion on Context and Constraints: The major portion of the government funding is directed towards recovery purposes instead of risk reduction and there is no policy to address these issues. There is funding from international organizations and donors however it is insufficient for disaster risk management and disaster risk reduction. The NDMO requires the financial commitment from the government to improve the office's effectiveness in assisting the country to build capacities in disaster prevention. The 7<sup>th</sup> NESDP addresses key areas of disaster risk reduction and management however the supporting resource allocation is missing.

Priority for Action 1: Core Indicator 2, Level of Progress Achieved: 3

The NDMO plays a critical role in The National Plan however the office will be unable to fulfill the responsibilities if identified deficiencies in the areas of capacity, authority, and resources are not addressed. As the NDMO resides within the Ministry of Labor and Social Welfare, it lacks the authority to effectively coordinate with the national, provincial, and district stakeholders. To rectify the authority issue, the NDMO's position within the government's disaster management organization should be re-engineered to either elevate the NDMO to a departmental level within the MLSW or another position at the National Government which signifies the importance of the disaster risk reduction work. The NDMO's budget should subsequently be increased to support the priority activities with the national, provincial, and district levels.<sup>126</sup> The National Plan also proposes 16 positions for the NDMO to support its responsibilities. Four main functional divisions are responsible for the 1) Capacity Building and Technical Training, 2) Emergency Preparedness/Response, 3) International/Regional Cooperation, and 4) Project Development and DRR Studies.<sup>127</sup>

Priority for Action 1: Core Indicator 3, Level of Progress Achieved: 3

*Community participation and decentralization is ensured through the delegation of authority and resources to local levels.*

Description: Local authorities are receiving funding to implement disaster relief and recovery projects, but there is no established funding mechanism or budget authority for DRR. The

Provincial and District level disaster prevention and control committees provide much of the capacity and capability for the local level. External development partners have been key to implementation of DRR projects and the strengthening of community institutions.

Discussion on Context and Constraints: Budgets have not been established for local level DRR, which is closely linked to a lack of DRR mainstreaming and integration in development activities. DRR projects to date have focused on a select group of provinces that face specific threats; DRR has yet to be widely expanded to additional disaster threats and provinces.

## Early Warning

### Early Warning Institutional Responsibilities

MLSW Decree 097/MLSW dated June 2000, assigned the Ministry of Agriculture and Forestry (MAF), the responsibility for hydrological and meteorological early warning information to the nation. Within the MAF, resides the Water Resources and Environmental Administration (WREA). Prime Minister Decree 1409/PM dated October 2008, mandates WREA to provide the government with policy advice and to propose legislation from the meteorology and hydrology realm. WREA has been tasked to conduct the meteorology and hydrology activities related to management, monitoring, and data collection. WREA has the ability to “establish, terminate, and improve the organizational structure” of water resources authorities. While WREA functioned at the national level there were efforts underway to integrate provincial-level water resources and environmental functions.<sup>128</sup>

Other governmental agencies are mandated authority to provide early warning tied to their functional responsibilities in addition to WREA. The Flood and Drought Committee under MAF will issue warnings related to agricultural impact of floods and droughts. The National Tourism Authority (NTA) is mandated to notify travelers and tourists when an emergency occurs. The Mekong River Commission (MRC) fulfills a major role in monitoring the Mekong levels, issuing forecasts, and facilitating cross-boundary information exchange.<sup>129</sup>

### Surveillance and Information Exchange Processes

The Lao Government has established surveillance processes with designated departments and agencies dependent on the disaster management functions. The Department of Meteorology and Hydrology (DMH) has the major role of providing early warnings for any hazard detectable by its meteorology and hydrology equipment stationed throughout the country. Domestic stations feed data to DMH and the data is utilized for weather and flood forecasts. DMH does receive regional data from the Global Telecommunication System (GTS). Another source of data is from the MRC as the commission monitors Mekong River conditions and flood forecasts. The MRC Regional Flood Forecasting Unit issues a daily flood forecast at 10 am during the flood season time period from June 1 to October 31. The MRC distributes a five-day forecast to the responsible agencies within the states. The MRC website can be accessed to obtain dissemination process details and flood bulletin/warnings. The MRC’s primary responsibility is to provide timely forecasts to the disaster management offices and other related offices of the member countries. The disaster offices receiving the information will inform the public and agencies according to their procedures. Therefore, the MRC mainly communicates with the DMH and the NDMO at the central level instead of interacting with the provincial or district level authorities.<sup>130</sup>

This surveillance section will document the systems in place for disasters other than communicable diseases which is detailed in a separate section.

### Early Warning Procedures

DMH is the pivotal entity required to report threats and hazards to the government authorities and NDMO. The Forecast and Warning Dissemination chart from NDMO shows the different lines of communication once DMH initiates the process. An example of the warning process is described below.

- Threat of flooding is occurs due to the Mekong reaching dangerously high levels.
- DMH will issue a written warning to the PMO.



- The warning is sent to the NDMO, MAF, and all line-ministries at the same time.
- Next, the warning will be broadcast through the media outlets.

If the warning is for a specific province, DMH will notify the appropriate provincial DMH office. While the disaster management organization exists, the Prime Minister can authorize notification through the ministries without NDMC/NDPCC or NDMO involvement as seen in previous flooding situations.

Single sector or multi-sector hazard impact will influence the warning system process as well. A hazard that occurs within the mandate of a single department or ministry will be reported through the vertical hierarchy from the technical district level of the said ministry to the central level. If resources are required beyond the responsible ministry, the ministry will notify the Prime Minister. The Prime Minister will ascertain whether the NDMO and NDMC should be involved. Events with multi-sector impact will most likely trigger the participation

of the disaster management organizations at the national through district levels. The NDMO created an early warning communication system using mobile phones and radio systems from the central level to the provincial and district levels.<sup>131</sup>

### Surveillance of Communicable Disease Outbreaks and Reporting

Laos conducts both active and passive surveillance in both the military and civilian health sectors. They lack the ability to conduct zoonotic surveillance due to resources. Laos rapidly detects emerging diseases through routing monitoring of indicator-based and event-based surveillance (IBS/EBS) data. Laos has seven influenza-like illness (ILI) sentinel sites located in three central hospitals and four provincial hospitals.<sup>132</sup>

The first key area of the National Work Plan for Emerging Infectious Disease (EID) and Public Health Emergency (PHE) of Lao PDR 2012-2016 (hereafter the National Work Plan) is

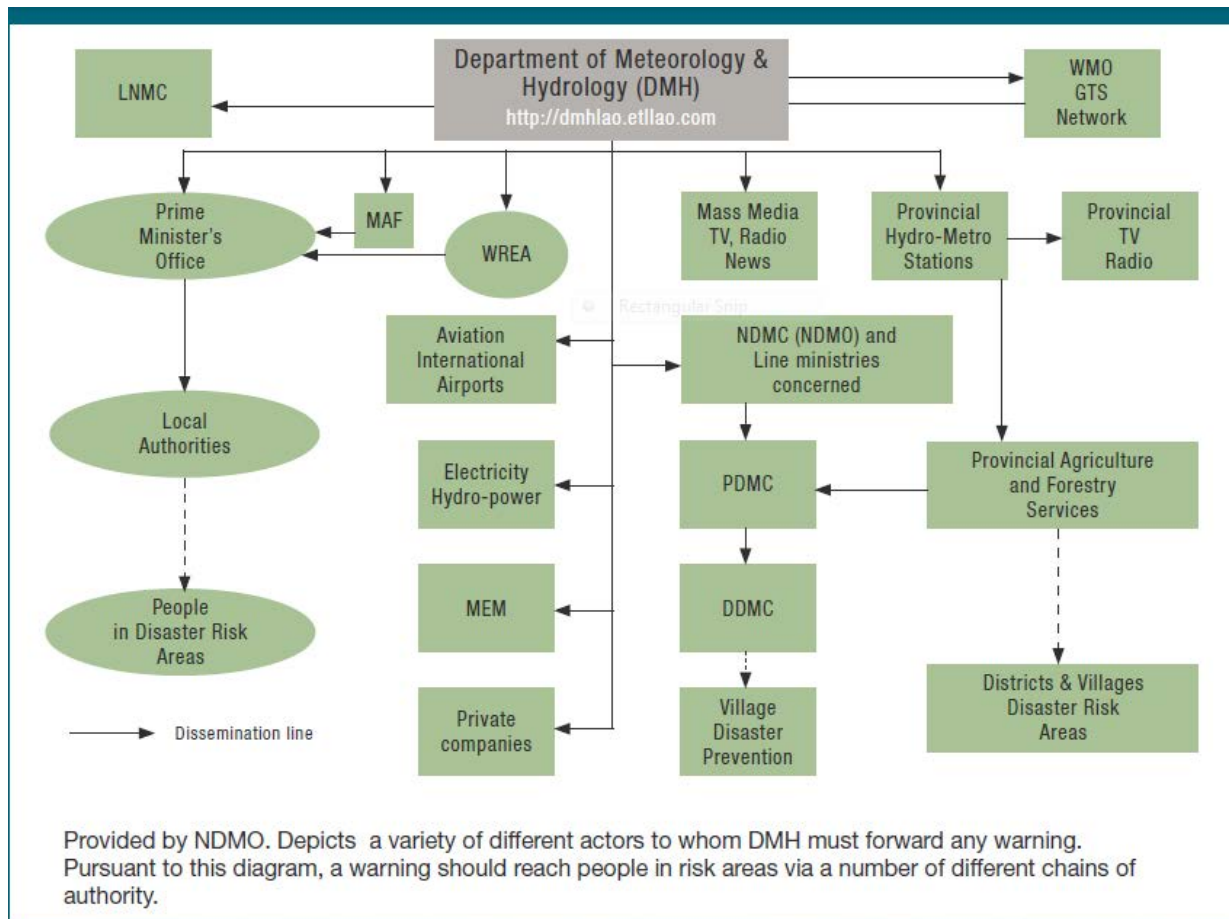


Figure 7: Forecast and Warning Dissemination in Lao PDR

surveillance and response. The Draft Strategy for National EID Work Plan 2011-2015 (hereafter the Draft Strategy) lists key components for surveillance and laboratories. There are four (4) supporting activities that help build surveillance capabilities in Laos:<sup>133</sup>

1. Nationwide system;
2. Hotline;
3. Sentinel surveillance; and
4. Laboratories

The Mekong Basin Disease Surveillance (MBDS) is comprised of six countries-- Cambodia, China (Yunnan and Guangxi Provinces), Lao PDR, Myanmar, Thailand and Vietnam--and a number of development partners who search to reduce morbidity and mortality caused by outbreak-prone diseases in the sub-region. MBDS started in 2001 to increase local capacity, share information and cooperate in outbreak response and pandemic influenza preparedness. The goal of MBDS is to reduce infectious disease morbidity and mortality through sub-regional cooperation focused on identified border areas.<sup>134</sup>

The National Progress Report on the Implementation of Hyogo Framework for Action 2011-2013 stated that Laos should concentrate on the insurance and efficiency system of epidemic surveillance and communicable disease control. They should also monitor and control on border diseases with Thailand, Burma, China, Vietnam and Cambodia that are still needed to focus on. It continues to state that Laos should improve knowledge and capacity building on epidemiological surveillance network and to have measure ready against disease outbreak or epidemic and be able to respond to an emergency, at an earlier state, on time, where it begins, despite what levels at the central or provincial in order to manage the outbreak at a severe stage. The task should be the responsibility of all people such as hygiene; bit by bit upgrade and improve laboratory activities to be in the level of ASEAN or international standard in order to ensure that the result of analysis are accurate and trusted.<sup>135</sup>

Since 2007, influenza-like illness and severe acute respiratory illness surveillance has been established at eight different sites in Laos. The data reveals that up to forty percent of people have tested positive for influenza during the flu season. The best way to prevent influenza is through a flu vaccine, but in a low-income

country like Laos, influenza vaccines are not part of routine public health. The flu season in Laos begins in July and ends in December.<sup>136</sup>

In 2008, NEIDCO and CARE International setup a hotline to report suspected disease outbreaks or deaths in birds and poultry using funding from the Centers for Disease Control and Prevention (CDC). The hotline also is a source for the public to receive information regarding Avian Influenza (AI). The government also realized that initial reports of suspicious poultry deaths were slow to develop and as a result, the surveillance and response capabilities were sometimes not reacting quickly enough.<sup>137</sup>

In 2012, Laos launched a seasonal influenza vaccination program to protect high-risk adults including pregnant women. This program is the result of six year collaboration between the CDC, WHO and the Lao Ministry of Health to grow the country's influenza capabilities. Lao's National Center for Laboratory and Epidemiology (NCLE) has the capability to conduct lab surveillance and sends data to WHO's Global Influenza Surveillance and Response system. By participating in this system, emerging influenza viruses in Laos can be reported more quickly. Laos is able to determine the best time to vaccinate the country and which vaccine to use bases on the information. Dr. Andrew Corwin, Influenza Coordinator for CDC at the U.S. Embassy in Vientiane says that, "Lao PDR has exerted commendable efforts to date, and has together with CDC and WHO taken great strides to monitor influenza and clear the way in terms of policy and regulatory requirements for flu vaccination efforts."

Public Health information is communicated from the district and provincial health departments to the NCLE, Ministry of Health (MoH), NEIDCO, and WHO. The NCLE is the agency responsible for notifying WHO in the advent of a public health emergency of international concern. NCLE will follow the International Health Regulations (IHR) decision process for a communicable disease in the formal notification to WHO. When NCLE notifies WHO, it will also initiate internal notification processes by reporting to the MoH and NEIDCO. The MoH and/or NEIDCO will communicate the confirmed cases to the head of the Secretariat of NCCDC (Minister of PMO) who reports to the Prime Minister. The Prime Minister will issue an order to the ministries, provincial governors, and government agencies on the health emergencies and then the ministries will activate their lines of

communication to the provincial levels. NCLE will keep in communication with the WHO and follow their responsibilities under the IHR.<sup>138</sup>

While there is a mechanism of reporting health emergencies through international guidelines, the domestic reporting process is linked only to the ministries. In the IFRC Legal Preparedness Report, there is no mention of coordinating with the NDMC or NDMO. In review of the draft National Plan, the disaster management organizational structure does not indicate coordination for health emergencies with the NCCDC.

The communicable diseases notification process does not delineate a method to notify the media as the documented in the Forecast and Warning Dissemination chart however this avenue should not be difficult to activate. The radio system is state run and is the primary source of official information for the country. Other sources of media such as television, cellular phones and the Internet are increasingly being accessed by the people as alternate sources of information especially in rural areas. The Ministry of Information, Culture and Tourism is the state body exercising control over broadcast and print media outlets and broadcasts and publications must be cleared by censors before release.<sup>139</sup>

For broadcast media, three TV stations operate in Vientiane with two of the stations being government owned, and the third one is jointly owned by the government and a Thai company. Twenty-two provincial stations operate with nearly all programming received via satellite from the government operated stations in Vientiane. The border areas have more access to broadcasts from stations in Thailand and Vietnam. The state-controlled and state-operated Lao National Radio broadcasts on five frequencies with 1 AM, 2 SW, and 2 FM. Radio programs are relayed via satellite to the provincial radio stations and constitute most of their programming. On the borders, Thai radio broadcasts are available as well as transmissions from multiple international broadcasters as another source of information.<sup>140</sup> The forecast and warning process established by the DMH utilizes the radio, TV, and news outlets as well as posting notices on their website.

## Military Role in Disaster Relief

The Military perform critical roles and are key assets in all phases of disasters. As

chairman of NDMC/NDPCC, the Minister of National Defense oversees the lead national level disaster management committee. The military are responsible for preparing and training the Army, Navy, and Air Force components for disaster response and relief operations with lead or supporting roles in the pre-disaster, disaster, and post-disaster phases. While the military support to disaster preparedness and response is important, the ministry has limited resources. The country's Defense budget is extremely constrained and military expenditures were as low as \$22M or .24% of GDP in 2012. Military forces were numbered at 29,000 and 100,000 paramilitary.<sup>141</sup> The restricted military resources should be kept in mind in reviewing the military's role in disaster response.

The Minister of National Defense is the chairman of the NDMC/NDPCC. Military roles and responsibilities are organized and documented in the National Plan Annex A by disaster phase.

### Pre-Disaster Phase:

The Minister of National Defense will chair the NDMC/NDPCC and appoint a disaster management contact person from the Ministry and establish focal points at the provincial, district, and other units. The military is responsible for disaster management training and coordinating simulation exercises utilizing the police force and civilians. The military will organize assessments to determine the vulnerability of the military forces' assets, infrastructure, and personnel to natural disasters in hazard-prone areas and integrate risk reduction measures. A disaster preparedness and response plan will be developed to detail the military's role in disaster response and relief operations throughout the country. Military resources specific to relief, rescue, and evacuation work will be assessed. Army resources will be deployed for disaster response upon receipt of NDMC/NDPCC directives.

### Disaster Phase:

The military will deploy the Army resources based on NDMC/NDPCC's guidance. The military is responsible for coordinating the joint emergency operations. As the lead for the National Search and Rescue Team (NASRET), the military will assist the communities to search and rescue trapped victims. Together with other

stakeholders, the military will conduct aerial and field assessments to identify the needs of the disaster survivors and provide Army resources to meet these needs. Medical treatment and transport of the injured to hospitals will be provided.

## Post-Disaster Phase:

Mitigation activities will be coordinated post-disaster. The military will assist the civilian authorities as reconstruction and rehabilitation of infrastructure is conducted.<sup>142</sup>

In addition to the duties outlined in the National Plan, the MoND will provide over-flight permission for military aircraft bearing relief goods which seeks to gain entry into Laos. After reviewing the situation, the MoND will instruct the Department of Civil Aviation to issue the appropriate permission or license.

## Foreign Assistance

### Request for International Assistance and Declaration Process

The formal request process for international assistance has not been fully developed in Laos due to the ambiguity of the country's internal declaration process. Analysis of the Lao PDR Government laws and policies revealed one clear reference to the formal declaration process in Article 67 of the Constitution which states that the President has the authority to “declare states of emergency all over the country or in any particular locality.” The definition of a state of emergency and whether natural disasters or communicable disease emergencies are encompassed in this description leads to the lack of clarity about the disaster declaration process and whether a declaration is necessary to activate response.<sup>143</sup>

In practice, the President has declared disasters after notification from the Prime Minister or the President of the National Assembly. Notifications from the affected provincial or district authorities or line-ministries can also be communicated to the NDMC/NDPCC members. Upon receiving the information, the NDMC/NDPCC will convene a meeting with the relevant government agencies to discuss the situation and response related to roles and responsibilities and financial

resources.<sup>144</sup>

MLSW Decree 097/MLSW describes the roles and responsibilities of the NDMC members and the translated document identifies MoFA as the responsible agency for requesting and coordinating international assistance and aid upon authorization of the Government. The Government approval implies the Prime Minister's authorization. The Prime Minister has the primary responsibility to issue the official request or can designate another government body such as MoFA. MoFA has exercised this responsibility as seen in the 2008 floods and the issuance of a Notice appealing to the international community for assistance. The Ministry of Finance (MoF) is tasked with contacting and cooperating with the international financial and foreign financial institutions relating to finances according to the Law on the State Budget.<sup>145</sup>

Other avenues to reach out to the Lao Government if the official request is delayed include different methods of communication with the government. The UN agencies can reach out to the government to offer assistance or the INGO willing to assist to the government can coordinate through the UN Resident Coordinator. There are also agreements already in place between United Nation agencies and the Lao Government which stipulate procedures for responding to a disaster.<sup>146</sup>

## Foreign Assistance Logistics

### Humanitarian Transportation - Air

Foreign aircraft can operate in Lao PDR by abiding by the international and national laws and agreements required by Lao PDR.

- Lao PDR agreed to the terms in the Convention on International Civil Aviation (1944) which includes articles related to health measures for aircraft.
- The Law on Civil Aviation requires that aircraft flying within Lao PDR's airspace must be registered and have nationality and registration marks and the required documents. The Law does not stipulate specific requirements for the use of foreign aircraft in emergency situations.
- Foreign registered aircraft will need to obtain

permission from the Department of Civil Aviation (DCA) under the Ministry of Public Works and Transports to operate in Lao.

- Foreign registered aircraft will need to obtain permission from MoFA to operate in Laos.
- Air Service Agreements (ASA) are necessary for a foreign commercial aircraft to fly and land in Laos.<sup>147</sup>
- Guidelines and Processes for emergency situations
- Laos signed the ASEAN Multilateral Agreement on Air Services which assists in granting approval for overflight and landing permission for recognized ASEAN air services.
- Lao PDR Government designates aircraft bearing relief goods to be non-commercial or cargo flights. Request for over-flight permission is submitted through diplomatic channels through MoFA for civil aircraft or MoND for military aircraft. Both entities will recommend approval to the DCA to issue the necessary permit or license.
- The PMO, MoFA, or MoND have the authority to exempt the relief aircraft from government imposed fees although grounding fees may still apply.

### Humanitarian Transportation – Water

According to law, boats conducting business along border rivers such as the Mekong River are required to register with border customs checkpoints as well as show registration documentation before goods are unloaded.

### Humanitarian Transportation – Land

The Law on Land Transport differentiates between transport company-owned vehicles and individual or organizational owned vehicles. Specific requirements according to category are listed as examples of the process that should be followed in Lao PDR.

Vehicles used for transport enterprises and specialized transport must complete the requisite list of:

- Bill of lading and vehicle use permit
- Registration as a transport vehicle

- Valid license plates
- Compliance with transport technical (requirements)
- Insurance
- Payment of annual road usage fees
- Submitted for technical inspection per regulations
- Insurance Requirements:
  - All transport vehicles used in country must have third party insurance
  - International and cross-border transport must have insurance for the driver and transported goods
  - Insurance should be obtained from a company registered in Lao PDR
  - Foreign insurance might be recognized dependent on the policy and if it applies to Lao PDR

### Driving License:

There are no laws or regulations to address allowances made for exceptional circumstances such as a disaster or communicable disease emergency. Informally, the Department of Transport confirmed arrangements could be made for emergency/disaster situations.

- Foreign drivers should obtain a driving license issued in Lao unless there is an agreement between countries (Vietnam)
- Foreigners should have an International license issues overseas valid for one year or transfer a license to international license by applying to the Department of Transport which could take a month.<sup>148</sup>

### Customs

In the event of a disaster, the Lao PDR Customs Laws and Regulation does not facilitate the receipt of humanitarian assistance. The Laws and Regulations, Part 6: Import Duty Exemption and Diplomatic Privileges list humanitarian assistance materials, presents, assistance materials, loans, or debt serving the Government

as exempt from duty. However, the definition of humanitarian assistance is not clearly defined nor the exemption procedures provided.<sup>149</sup> The Lao Government does have the means to improve the customs process if the government signs the International Convention on the Simplification and Harmonization of Customs Procedures (the revised Kyoto Convention). As of September 6, 2013, Lao PDR is not listed as one of the 91 ratifying parties.<sup>150</sup>

The Customs Law in general governs the import and export processes and is administered by customs authorities under the Ministry of Finance (MoF). While the Customs Law has provisions for importation of goods for diplomats, embassies, and international organizations located in Lao PDR, unregistered organizations are liable to pay business and excise tax on all items imported into Laos. The chart below illustrates the process.

While INGOs established in Laos may have a Memorandum of Understanding (MOU) for equipment and materials necessary for normal operations, the existing MOU would require a time consuming amendment to allow for the exemption of additional resources imported for humanitarian assistance. Alternative means do exist for International Organizations (IOs) and INGOs to import duty free goods. Subsequent to Lao requesting assistance from an organization, the IOs and INGOs can solicit support from the line-ministries to facilitate the import of goods. An official letter from the ministry to the organization which certifies the non-commercial use of the goods and status of the organization as a humanitarian assistance provider will expedite the customs clearance process. The described process is not written into law and may not be the most efficient process in a disaster situation. Contracting private companies with the proper import licenses to import goods for

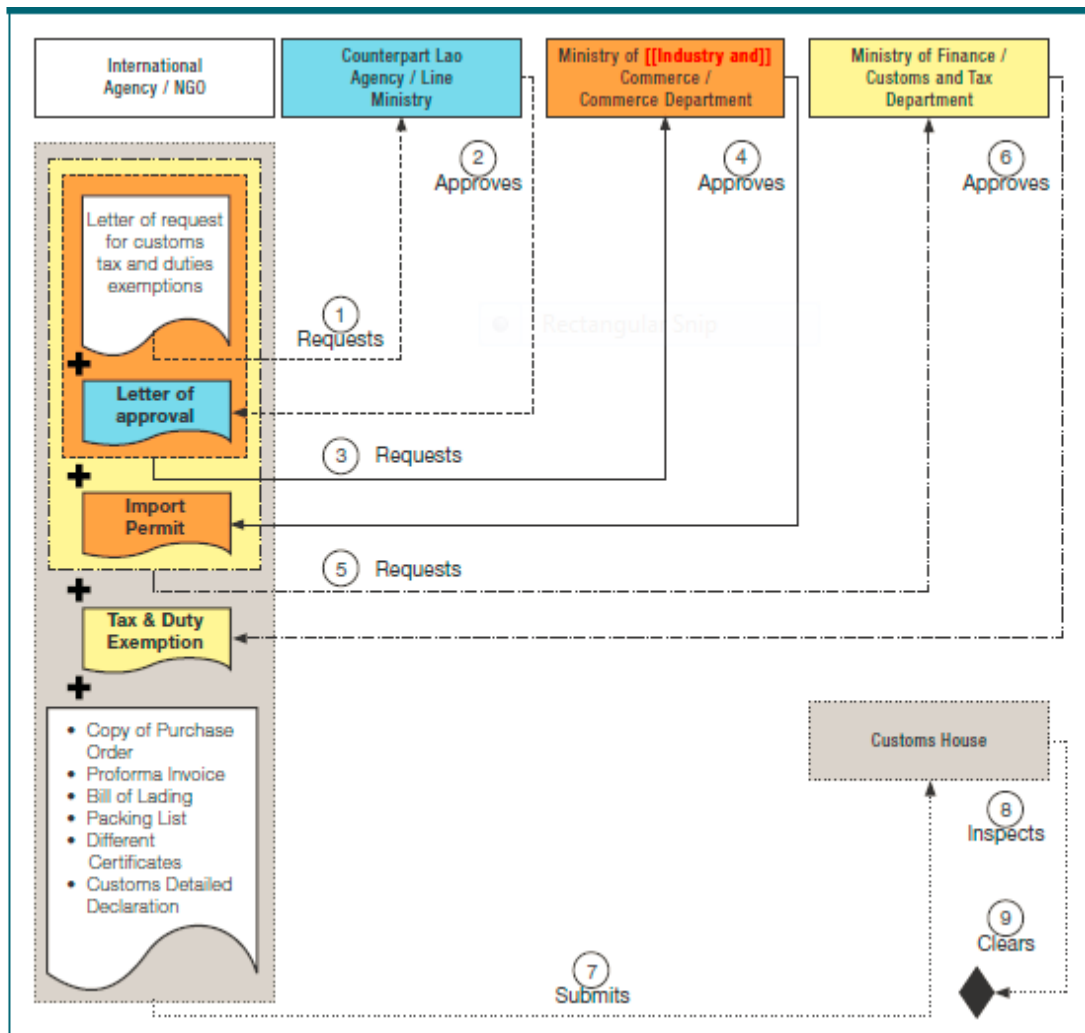


Figure 8: Lao PDR Import Processes<sup>151</sup>

relief is another option to avoid the drawn out importation process. Freight companies with experience in the process can expedite the process if a duty is paid.<sup>152</sup>

According to the Law on Customs the unloading of goods at a border check point is not allowed until the goods or documents have been declared to the customs officials. The law does allow emergency goods to be unloaded or temporarily stored in a bonded warehouse. Exempted and non-exempted goods require the importers to complete a detailed customs declaration. Goods can be removed from the bonded warehouse before payment of custom duties through the use of a security contract of 120% of the calculated payable duties and taxes. A legal entity such as a government organization can provide an MOU for the security contract. The usual practice is for the government organization to write an official letter in support of the organization requiring the import of goods. This security contract process is the preferred method to use for disasters due to the short length of time (as little as 4 hours) it takes to complete. Once the good reach the final destination, the last inspection will be completed by the local customs authorities. The security contract will expire once the duty and taxes are paid or the exempt status verified.<sup>153</sup>

No processes are in place to permit pre-clearance for relief goods in preparation for a disaster. Establishing contacts with ministry officials to provide the required documentation for an expedited customs clearance and duty and tax exemptions is the best method to utilize for the import of relief goods.

Specific types of goods require assistance from designated governmental authorities.

The National Authority for Post and Telecommunications (NAPT) approves the import license for telecommunications equipment. The license process involves the following steps which can be expedited during emergencies:

1. Organization applies to the Frequency Spectrum Management division of the NAPT to be allocated a radio channel and this process takes up to three weeks.
2. Organization should request an official letter from MoFA which recognizes the organization's status in Laos.
3. After the radio channel is received, the

international organization applies for the importation license with a written request to the NAPT submitted together with the MoFA letter.<sup>154</sup>

The Food and Drug Department (FDD) within the Ministry of Health authorizes all food imports. There is a Law on Food which specifies the food donations from domestic and foreign sources shall be deemed safe and of good quality as certified by the relevant agency. In conjunction with the Law on Food, there is a National Food Safety policy dated February 2009 which seeks to ensure imported and exported food meet national and international quality standards. Imported food requires certification documents for origin, analysis, and other sanitary related certificates.<sup>155</sup>

MoFA authorizes duty and tax exemptions for vehicles for Embassies, Consulates, Representative Offices, International Organizations and Foreign Experts on mission to Laos. MoFA must approve a declaration submitted first before the organization can import or order the vehicle. For INGOs, the MOUs will limit the number and type of vehicles. The method of choice to circumvent the long process of amending an MOU or working through agreement requirements is to hire vehicles in Laos instead of importing. Even hiring vehicles can be a challenge due to the small rental market.<sup>156</sup>

All medication must be approved by the MoH before importation into Laos. An official request can be sent to MoFA for approval and MoFA will forward to the MoH. The importer of the medicine should also provide the certificate of sale, the Good Manufacturing Practice (GMP) certificate, and Certificate of Analysis. For a communicable disease emergency, hospitals may directly make requests to the Department of Curative Medicine in MoH. MoH and NEIDCO may fill the requests by asking for donor support for specific medication and supplies.<sup>157</sup>

## Foreign Military and Civil Defence Assets

Foreign military and civil defense organizations provided for international humanitarian assistance should follow the Oslo Guidelines. The legal framework for Military and Civil Defense Assets (MCDA) which are comprised of relief personnel, equipment, supplies and services does not exist in Laos if the UN requests the military support.<sup>158</sup>

## International Assistance through or supported by Laos

While Laos is centrally located in South East Asia, the country's air and road infrastructure are less developed than other countries when viewed from the transit perspective for humanitarian assistance. Foreign transport in transit through Laos must have a bill of lading and vehicle use permit. Goods in transit will be exempt from duty dependent on the regulations. The customs process on entry into Laos will be 1) good movement permit and security issued by customs officials after inspection, 2) Payment of security deposit written in security contract by goods transit person, 3) Inspection on exit of country to certify quantity and type of goods are the same as entry, and 4) Security deposit is returned if the goods pass inspection.

Lao law does not directly provide for the transit of international assistance to the neighbouring countries for disaster relief however the Law on Land Transport provides for international and cross-border transport and recognition of agreements between countries which authorize the transit. Laos will also comply with the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) which speaks to allowances between countries to transit personnel, equipment, facilities, and materials and exemption of taxation and duties.<sup>159</sup>





# LAO PDR Infrastructure

Lao PDR Disaster Management Reference Handbook 2014

# Infrastructure

Laos, a country classified by the United Nations (UN) as one of the least developed countries (LDCs), has long had what could be considered a least developed infrastructure.<sup>160</sup> However, over the past few years, Laos has seen significant changes and improved infrastructure.

The continuous effort to improve the country’s infrastructure helps increase its economic growth. According to Deputy Minister of Foreign Affairs Alounkeo Kittikhoun, “throughout its implementation, we have made considerable progress. Regarding infrastructure development, the Lao government adopted and introduced a new policy with the aim of converting the country from being landlocked to a land link.”<sup>161</sup>

In addition, Laos PDR has benefited from various contributions with the country’s development efforts. One in particular is from the Asian Development Bank (ADB). The ADB energy sector has assisted the country since the late-1980s focusing in on hydropower projects, high-voltage grid extensions, rural electrification, and capacity building to manage power sector infrastructure and utility operations.<sup>162</sup>

## Airports

To enter the country of Laos PDR, passports and visas are required upon entry. In order for visitors to be granted permission to pass through, a visa is required (can be obtained at arrival), two passport size photographs and US\$35. Access to the country can be made through the ports of entry: Wattay Airport, Vientiane; Pakse, Savannakhet, and Luang Prabang Airports; Friendship Bridge, Vientiane and Savannakhet; Nam Heuang Friendship Bridge, Sayabouly Province; and border crossings at Boten-Mohan, Dansavan-Lao Bao, Houaysay-Chiang Khong, Thakhek-Nakhon Phanom, Nong Haet-Nam Kan, Nam Phao-Kao Cheo, Veun Kham-Dong Calor, and Vangtao-Chong Mek.<sup>163</sup>

According to the Lao Airport Authority (LAA), Laos has 14 airport fields. However, not all of them are operational. The main airport is Wattay International Airport located in Vientiane Capital. There are minor airports, but the main runways are located in Louanpang, Pakse, Savannakhet, Oudomxay and Luang Namtha. The non-operational airports are in Attapue, Saravan, Samnue, and Sayaboury due to inoperable air conditioners at these respective locations.<sup>164</sup>

### e 9: Airport in Laos

Town	Airport name	ICAO	IATA	Usage	Customs	Runway	IFR	Runway length
Attopeu	Attopeu	VLAP	AOU	Civ.	No	Unpaved	No	4300 ft
Ban Houeisay	Ban Houeisay	VLHS	OUI	Civ.	No	Paved	No	4900 ft
Louang Namtha	Louang Namtha	VLLN	LXG	Civ.	Yes	Paved	No	4400 ft
Louang Prabang	Louang Prabang	VLLB	LPQ	Civ.	Yes	Paved	No	7200 ft
Oudom Xai	Oudom Xai	VLOS	ODY	Civ.	No	Paved	No	3900 ft
Pakse	Pakse	VLPS	PKZ	Civ.	Yes	Paved	Yes	5300 ft
Phonesavanh	Phonesavanh	VLVP	n/a	Civ.	No	Composite 50 percent permanent	No	3100 ft
Sam Neua	Sam Neua	VLSN	NEU	Civ.	No	Paved	No	3700 ft
Saravane	Saravane	VLSV	VNA	Civ.	No	Unpaved	No	4900 ft
Savannakhet	Savannakhet	VLSK	ZVK	Civ.	No	Concrete	No	5300 ft
Sayaboury	Sayaboury	VLSB	ZBY	Civ.	No	Unpaved	No	4200 ft
Thakhek	Thakhek	VLTK	THK	Civ.	No	Unpaved	No	4500 ft
Vientiane	Wattay	VLVT	VTE	Civ.	Yes	Paved	Yes	9800 ft
Xieng Khouang	Xieng Khouang	VLXX	XKH	Civ.	No	Paved	No	8500 ft

Table 2: Summary of Airports in Lao PDR

On November 17, 2013, Bangkok Post reported that Japan has recently agreed to provide financial support to expand the international airport in Vientiane, Laos.<sup>165</sup> The expansion is necessary to accommodate the influx of visitors to Laos.



Figure 10: Map of Airports in Laos<sup>166</sup>

The people of Laos mainly depend on road transport, while river and air transport are also popular. Over the past few decades, the country has witnessed a steady increase in each of these modes of transport.<sup>167</sup>

According to a study report on the Legal Preparedness for Responding to Disasters and Communicable Disease Emergencies, Lao PDR has adopted the Convention on International Civil Aviation (1944), 9<sup>th</sup> edition 2006 (Chicago Convention). This agreement includes any incidences that occur when using airports and other facilities. There are two health related articles, specifically Article 14 and Article 89 that covers the spread of communicable diseases and declaring a national emergency, respectively.

Article 14: Through air navigation, it states that proactive measures need to be taken to help counter the spread of communicable diseases. There is also a requirement for agencies concerned with international regulations to be updated on sanitary measures within the

aircraft. Furthermore, every state involved shall assist in preventing the spread of cholera, typhus (epidemic), smallpox, yellow fever, plague, and such other communicable diseases. Article 89 states that if a national emergency is declared and the state notifies the Civil Aviation Council, the convention will not affect the freedom of action of any state affected.<sup>168</sup>

There have been key challenges regarding access between the countries:

1. Freedom of transit transport and exchange of traffic rights are not fully observed by countries parties.
2. Border crossing formalities and procedures both in Laos and in its transit countries remain major obstacles;
3. Limited use of ICT system to expedite border crossing formalities and procedures;
4. Documents for border crossing formalities and procedures are complicated and superfluous. Simplification and harmonization in these areas are needed;
5. Lack of staff qualified on Trade and Transport Facilitation issues.<sup>169</sup>

## Seaports

Due to Laos PDR being a landlocked country, they have no entry way to the ocean. However, Laos PDR does utilize existing ports in Vietnam and Thailand. International trade and transport services depend on neighboring countries for access to seaports.

An agreement on commercial navigation in Lanxang-Mekong River between Lao PDR, China, Myanmar and Thailand has been signed.<sup>170</sup>

## Land Routes

As outlined on the below map, public ground transportation within Laos is largely limited to a couple of bus routes from Vientiane. Those who need to travel out to remote locations can only do so by either bus or car. With the limited choices to get from one point to another, there have been plans to build a railway system in the country.

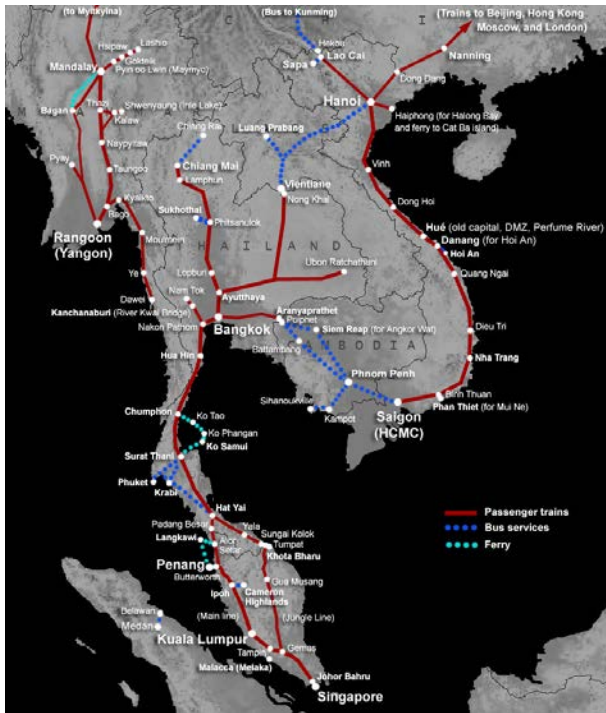


Figure 11: Passenger Routes Through Laos<sup>171</sup>

## Roads

Roads in Laos are essential pieces of transportation infrastructure throughout the country, since the majority of freight and passenger traffic in the country is by land, as shown in Figure 12.<sup>172</sup> With the growing number of people who depend on road transportation, the demands for road improvements are not met quickly enough due to the limitations of available transport options.

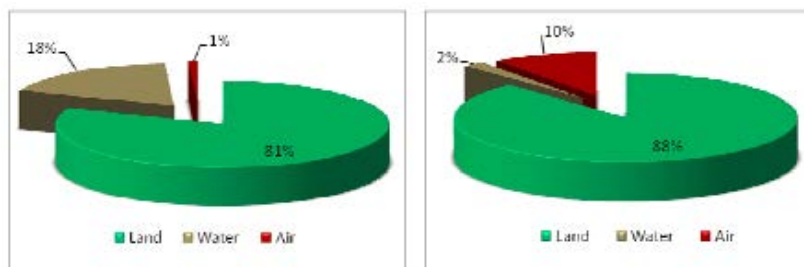


Figure 12: Transportation System Distribution in Laos

In the past few years, road improvements have been a priority for the government. Through this effort, there have been more than 3,000 kilometers (1,864 miles) of improved roads.

There are about 250-540 vehicles a day that travel on well-established roads. Rural roads in comparison take about 10 percent of that volume. There are 11,356 kilometers (7,056 miles) of rural

roads throughout the country. About 40 percent of villages have no access to road at all.

Due to the increase in demand, urban transport has become a popular means of transportation. The tuk-tuk is a three wheeled, motorized vehicle used for short distances. Taxis are also available, but are more prevalent in areas such as markets, bus terminals and the Friendship Bridge. There are also private passenger transport services as well as buses that are operated through the Vientiane Municipal Transport. The province has a bus station in their capital and services are typically run by private operators.

Road No. 9 is a road that strategically links Laos with Thailand and Vietnam. According to a press release from ADB, the bank will provide a package of a US\$40M loan and grant for Laos to develop the towns, which are located along National Road No. 9, to make them cleaner, greener, and better able to benefit from their strategic location.<sup>173</sup>

## Bridges

There are several bridges in the Laos PDR that give an opportunity for people travel to and from other locations. More importantly, it helps connect ties with the neighboring countries.

The Thai-Lao Friendship Bridge was the first bridge to be completed in April 1994. The bridge spans across the lower areas of the Mekong River that connects the Nong Khai province to Vientiane. However, once the bridge was completed, the Lao Government regulated access prohibiting private vehicles from passing through. There was a huge concern that the vehicles coming from Thailand would cause accidents, congestion and pollution. The bridge is mainly used by commercial trucks and buses and has helped Laos' landlocked position to connect economically with its neighbors in the region. The First Thai-Lao Friendship Bridge is open daily

from 6:00 a.m. to 10:00 p.m., but officials will allow travelers to cross after hours in cases of medical emergencies.

The Second Friendship Bridge was opened in December 2006 connecting northeastern Thailand in Mukhadan province to Savannakhet province in Laos. However, it was not until 9

January 2007 when the new bridge was open to traffic after the two sides reached an agreement on remaining matters.<sup>174</sup>

The Third Thai-Lao Friendship Bridge officially opened on November 11, 2011 and is located across the Mekong River. This bridge connects Nakhon Phanom and Khammoun Provinces allowing more integration within the Mekong sub region. The bridge makes Khammuan the shortest route for exporters trucking goods to the central seaports of Vietnam from the six northern provinces of Thailand.<sup>175</sup>

The Fourth Thai-Lao Friendship Bridge is near completion and the opening ceremony is yet to be announced. The bridge will link Bokeo province with Chiang Rai province in Thailand across the Mekong River.<sup>176</sup>

The Thai-Lao Friendship Bridges not only provide improved commercial access routes between Thailand and Laos, but in the event of disasters they may be used for evacuations and for responders to enter Laos to access affected areas and deliver relief supplies.



Figure 13: Thai-Lao Friendship Bridges

## Railways

Currently, Lao PDR has 3.5 kilometers (2.1 miles) of railways that operate from south of

Vientiane to the Lao-Thai Friendship Bridge.

There have been several studies done to ensure the expediency of building one in the country. The benefit of having the railway as an additional means of transportation would be access to Laos' A significant upgrade to Laos' infrastructure is the first high-speed rail between China and Laos to link Vientiane with Yunnan province. Work on it was supposed to start in early 2011 but China has pressed for more feasibility studies to confirm the financial viability of the project. The political will from both countries to complete the project appears to remain steadfast, but the economic forecasts of the costs versus the returns pose obstacles to the survival of this ambitious project.



Figure 14: Projected Laos Railways

## Utilities

Although the Lao PDR has moved forward with advancing some development within the country, they are still facing some challenges.

## Power

Of the 5.7 million people living in Laos, only 48 percent are connected to the electrical grid, mainly in towns and cities.<sup>177</sup> Access to power within the country is scarce due to infrastructure issues and affordability. For those who cannot afford electricity, there is no choice but to use firewood and kerosene.

A small energy company called Sunlabob Rural Energy Ltd, has made a significant difference in Lao PDR's poor rural communities. They have invented solar based systems and the solar-powered lanterns in particular can be rented for as much as the cost of kerosene lamps.

Another option is the home system model. Sunlabob trains Lao franchisees to install solar photovoltaic equipment in their villages and trains local technicians in maintenance. The franchisees act as back-up technical support to the village technicians. The equipment is rented to a village-appointed committee, which then sub-leases it to households at prices it sets.

Rent covers all costs, including replacements and operational servicing costs. In the event of breakdowns, rent payments are suspended until repairs are made.

The third option is designed for larger villages. It utilizes solar, hydro and generator power, creating an electrical grid with sufficient energy to power a variety of ventures, such as health clinics, rice mills and water pumps.<sup>178</sup>

The key energy sector objectives of the government include bringing electricity to all by expanding and improving the main grid or, where cost effective, by off-grid electrification; and earning foreign exchange by setting up export-oriented hydropower projects and exporting electricity.<sup>179</sup> Of the 5.7 million people living in Laos, only 48 percent are connected to the electrical grid, mainly in towns and cities.

Bank (CDB). A loan agreement with representatives from Sinohydro and Electricite du Laos (EDL) was made during President Choummaly Sayasone's official goodwill visit to China.

According to a press release from Nam Ou River Basin Hydropower Co., Ltd, the loans amount to about US\$660.0M. They will finance construction of the Nam Ou 2, 5 and 6 hydropower project located in Luang Prabang and Phongsaly provinces under the first phase of the river basin development project.

According to the plan and agreements between the Lao government and the developers, seven hydropower plants will be developed in the build-operate-transfer model on the Nam Ou, generating about 5 billion kWh a year with a production capacity of 1,156MW.



Figure 15: Nam Theun 2 Hydroelectric Project<sup>183</sup>

## Hydro-Power (Dams)

While the Lao PDR imports all of its petroleum products, it has large hydropower potential, and a major portion of existing hydropower capacity is for power exports.<sup>180</sup>

A resource-based production boom, fueled by hydropower development for energy exports and mining, has been an important driver behind the country's growth.<sup>181</sup>

Nam Theun 2 Power Company (NTPC) is the company formed by the Lao Government and the private shareholders in the Nam Theun 2 Hydroelectric Project to build and operate the Project for the first 25 years of its operation. NTPC is dedicated to running a world class hydropower facility and to improving the living conditions of people in the areas around the Project.<sup>182</sup>

Another hydropower development is located on the Nam Ou River in northern Laos. This effort is funded through China Development

“Three dams will be built initially and will start generating about 2 billion kWh per year from 2016, with the remaining amount to depend on the demand for electricity in Laos.” EDL, on behalf of the Lao government, holds 15 per cent of shares while Sinohydro holds 85 percent.

With a well-established presence in the hydropower and infrastructure sector in both China and abroad and with support from the Lao government and financial institutions, Sinohydro will continue to work to provide affordable and renewable energy for Laos that will yield economic and environmental benefits for the people of the region.”

Civil works on the three dams began last year after a concession agreement and power purchase agreement were signed, witnessed by high ranking officials from Laos and China. The first batch of loans will be granted soon after the Lao National Assembly approves the project.<sup>184</sup>

## Water

Laos is known to have the largest amount of fresh water available within Asia and there

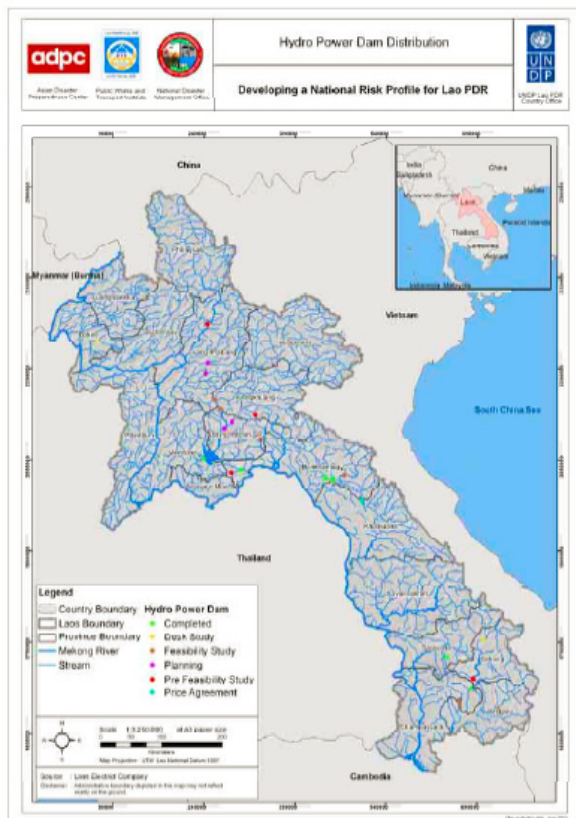


Figure 16: Laos Hydropower Locations

are no signs of scarcity in supply. There are also considerable fluctuations in precipitation throughout the year and among different areas of the country.<sup>185</sup> Additionally, while Laos has abundant amounts of fresh water nation-wide, the water that is available is not always safe for drinking or hygiene use due to contamination or water-borne diseases.

It has been noted that ground water contamination may be caused by the lack of waste water treatment in Vientiane and provincial towns. Faulty storm water drainage systems add to the problem of contaminating available ground water reserves.<sup>186</sup> With the climate changes that Lao PDR endures, they are easily impacted by the effects of floods and drought. The post disaster effects have left people in most instances with water-borne diseases. In November 2011, an initiative was started through the Water and Sanitation (WASH) project to provide clean water and safe sanitation for 30,000 people in Northern Lao PDR.







# LAO PDR Health

Lao PDR Disaster Management Reference Handbook 2014

# Health

In 2011, Laos had a population of roughly 6.4 million and of those people, 37.3 percent were under the age of 15 and 3.7 percent were over the age of 65. The average life expectancy in Laos is 67. As noted earlier, the population is mainly dispersed living in rural areas with difficult access to schools, food, and healthcare. The government has been taking action to promote Primary Health Care (PHC) and “Health for All”. Progress in expanding coverage of health interventions is still an on-going battle. Non-communicable diseases were the cause of 48 percent of deaths in Laos with communicable diseases, maternal, perinatal and nutrition accounting for 41 percent of deaths in 2008. The Ministry of Health (MoH) says improving health management, leadership capacity, and performance are critical to improving health delivery in Laos and achieving the MDGs.

Population Under the Age of 15	37.3%
Population Over the Age of 65	3.7%
Average Life Expectancy	67 years old

A studied conducted in 2005 showed that 77 percent of people in Laos had used traditional medicine at some point in their life. It found that traditional medicine is popular in all regions of the country. Laotian traditional medicine is influenced by Buddhist and Indian traditional medical systems. Laotian traditional medicine is the main type practiced. Traditional treatments include: cupping, streaming, massage, herbology and acupressure. Other types of traditional medicine include herbal, acupuncture and Chinese traditional medicine. Traditional medicine is used at childbirth and to treat the sick. Many turn to it because of its perceived efficacy, accessibility, and lower cost. Practitioners who practice traditional medicine do not have formal medical education and include monks, herbalists, magic healers, and massage therapists.

Laos has limited medical and human resources to support an outbreak and if a disease outbreak were to occur in Laos, it would result in shortages of many goods and services. The resources available during an outbreak would need to be carefully managed to obtain the greatest return. Access to health services remains limited mainly for the rural majority. The Lao government acknowledges these challenges; the Sixth National Socio-Economic Development Plan 2006–2010 said the health sector and health service delivery system did not meet the requirements of the population.

## STRUCTURE

The Ministry of Health (MoH) is directly involved with the medical teams in an emergency situation that covers first aid, health care and the issuing of death certificates for victims. The MoH is responsible for hygiene activity and control over disaster-borne diseases. The Ministry organizes specialized training for medical teams who work in emergencies and post-disaster environments.

The National Committee for Communicable Disease Control (NCCDC) is chaired by the Prime Minister and is responsible for managing communicable disease prevention and emergency response and ensuring compliance with all national decisions and international engagements. It has the power to give instructions and make decisions on resources such as funding, coordination and authorization for work with international partners.<sup>188</sup> This committee was established by the Prime Minister Decree No. 337 in 2005 after the SARS threat and during the first avian influenza outbreak in Laos.<sup>189</sup>

In 2006, National Emerging Infectious Diseases Coordination Office (NEIDCO) (formerly the National Avian and Human Influenza Coordination Office) was created to control and prevent Avian Influenza with the assistance of international organizations (IOs) and international non-governmental organizations (INGOs). NEIDCO is responsible for coordinating the National Centre for Laboratory and Epidemiology (NCLE). The National Pandemic Influenza Response Plan for the Health Sector states that NCLE is designated as the lead for surveillance, outbreak investigation, laboratory diagnosis and response to communicable diseases or any unusual health occurrence.

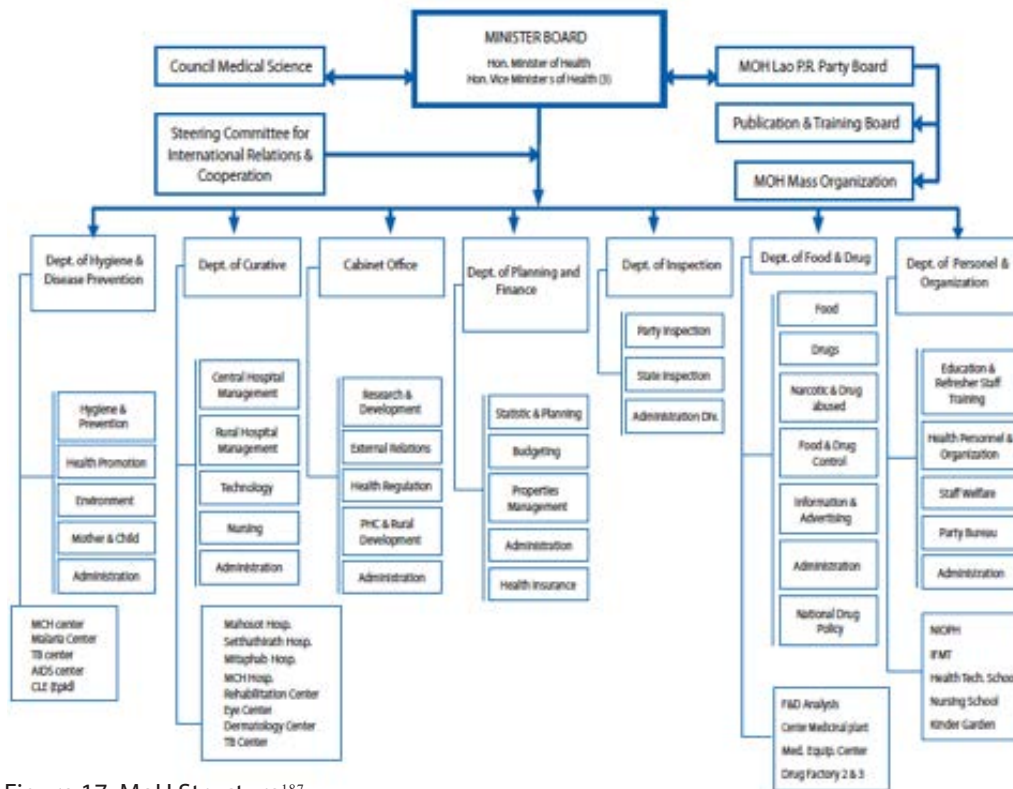


Figure 17: MoH Structure<sup>187</sup>

Responsibilities are divided between NCCDC, NEIDCO and NCLE along with provincial level authorities. Many stakeholders say Laos has improved its preparedness for communicable disease outbreaks, coordination mechanisms and information sharing systems are structured, organized and communication chains are identifiable.

The public health system in Laos is main system for health care services and private health is growing as the alternative. There are no private hospitals, but there are around 1865 private pharmacies and 254 private clinics, mainly in urban areas. The state health system is not utilized to its capacity. The government has reached over five thousand villages to assist in increasing access. The administrative health system is broken down as follows:<sup>190</sup>

- **Central:** Ministry, College of Health Technology and Reference, Specialized Centers
  - a. Manages all MoH activities and coordinate multi-sector programs such as HIV/AIDS and Avian Influenza.
- **Provincial:** Provincial Health Offices, Provincial and Regional Hospitals, Auxiliary Nursing Schools
  - b. Plans, implements, supervise and

monitor Primary Health Care (PHC) programs in the province.

- **District:** District Health Offices, District Hospitals
  - c. Operated by a district health committee that oversees the delivery of health services with the district along with overseeing village health programs
- **Village:** Health Centers

The 2012 Hyogo Framework for Action progress report stated that Laos should improve and upgrade gradually the quality of health service to the same level as ASEAN by improving their health system or repair the quality of health service in the country. The progress report also recommended upgrades to examination and diagnosis quality to increase treatment and health promotion effectiveness and efficiency with the improvement of all levels of the medical staff. Hospital organization structures should be re-organized and departments and roles should be clearly defined by implementing academic teaching by using the Medical Teaching Unit (MTU).<sup>192</sup>

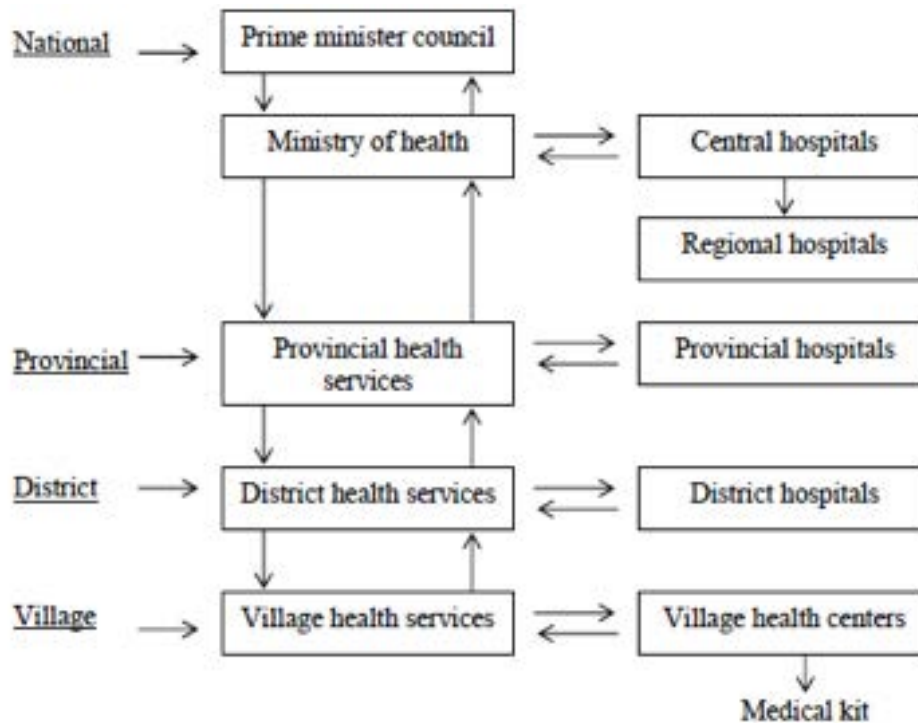


Figure 18: The structure of health organization and health management in the Lao PDR<sup>191</sup>

In the past few years, health activities related to emergency risk management have been conducted in Laos. In 2011, the latest hospital preparedness for emergency and disaster assessment was conducted in one central hospital, four provincial hospitals, and seven district hospitals. This assessment showed that most of the hospitals met some of the structural indicators. All of the provincial hospitals have issues with emergency management; logistics system management; safety and security systems; communication and information systems; planning for emergency and disasters; human resource development (exercise and simulation); and monitoring and evaluation (M&E). The WHO reported a need to implement the recently finalized National Emergency Preparedness Plan and conduct training in health emergency management.<sup>193</sup>

## Hospitals

The hospitals in Lao PDR fall under the responsibility of the Ministry of Health. In the event of a disaster, the MoH has updated information on hospitals and health facilities situated in hazard-prone areas. This information is essential in providing responders the nearest

location to transport those affected by a disaster. According to the Draft National Disaster Management Plan, the overall goal is to have hospitals ready with disaster preparedness plans to handle no-notice emergencies.

Laotian hospitals are subject to shortages of medical equipment. Medical facilities outside of the capital city of Vientiane are minimal and insufficient in remote areas of the country. In cases of emergency or need of a specialist, people are advised to travel across the border to Thailand to seek treatment.<sup>194</sup> Hospitals located in Vientiane are Mahosot, Sethathirath, and Mother and Child Hospitals. The trauma hospital is Metapap Hospital (Friendship Hospital).<sup>195</sup> International Clinic Setthathirath Hospital (ICSH) is the first private hospital in Laos that has cooperation from both the public and private sector. ICSH has both Lao and foreign doctors providing medical services.<sup>196</sup> There is at least one military hospital located in each province. This assumption is based on the findings from the WHO that 30 percent of all health services currently provided by military hospitals are to the civilian population, especially at the provincial level.<sup>197</sup>

Schools and hospitals are located in areas that are safe against floods and are identified as shelters in the event of a disaster. Local officials

have the knowledge of health care during disaster including health care for communities.<sup>198</sup> The Ministry of Education is in control of the schools, but mainly responsible for every level of education.

The system of health services begins at the village level where there is no health center, just a drug health kit. The chain slowly moves up until it reaches the top level of the central hospitals. Each level in the system is responsible for providing health services, supervising,

coordinating and referring patients in an orderly manner. Primary Health Care in each province will vary depending on the technical capacity of health personnel and the size of the population. A referral system is in place to refer patients to a higher level facility if needed where they will have access to appropriate treatment and diagnostic capabilities. Below is a list of responsibilities at each level:<sup>199</sup>

Health Facility	Responsibilities
Central Hospital	<ul style="list-style-type: none"> <li>• Provides tertiary curative care</li> <li>• Most sophisticated hospital in the country, contains modern equipment and supplies</li> <li>• Third level in the referral system</li> <li>• Training center for allied health students and professional medical personnel at all levels</li> <li>• Scientific research and a resource for technical assistance for every hospital in the country</li> </ul>
Regional Hospital	<ul style="list-style-type: none"> <li>• Provides curative health care service at the provincial level in the representative province of the region</li> <li>• Responsibility to provide health care for the entire population in the region</li> <li>• Second level in the referral system</li> <li>• Center for health development and Primary Health Care activities for all provinces in that region</li> <li>• Responsible for monitoring and conducting training for health personnel at all levels in order to assure better access and higher quality services</li> </ul>
Provincial Hospital	<ul style="list-style-type: none"> <li>• Provides treatment and rehabilitation services for patients with all varieties of illness</li> <li>• Second level in the referral system</li> <li>• Responsible for training all categories of professional health staff; supervising and assisting with technical aspects of health service delivery; and to provide opportunities for practical training according to the real needs and requirements of health facilities at lower levels of the provincial health service network.</li> </ul>
District Health Service District Hospital	<ul style="list-style-type: none"> <li>• Fundamental element of the health sector network at the district level</li> <li>• Provides health care services, disease prevention, health promotion, diagnosis and treatment of the most common diseases</li> <li>• First level in the referral system</li> <li>• Local training site on health care and Primary Health Care activities in the district area</li> </ul>
Health Center	<ul style="list-style-type: none"> <li>• Trained medical staff provide health care service for a village or for a group of villages</li> <li>• Provides primary health care services including prevention, health promotion, diagnosis, and treatment of basic diseases</li> <li>• Provide systematic monitoring and supervision of VHVs and TBAs at the village level</li> </ul>

Table 3: Lao Health Facilities and Associated Responsibilities

The MoH has mandated the following roles and functions of a Hospital:

- Provide consultation, treatment and health promotion according to accepted technical standards for the entire population and all ethnic groups.
- Provide preventive health services, health education, and health promotion.
- Conduct practical and technical training for allied health students and all categories of professional health staff
- Conduct scientific research and testing to strengthen the health service.
- Supervise and provide technical assistance to health facilities at all lower levels under its responsibility.<sup>200</sup>

Facility	Number	Characteristics
Public Sector		
Community Level Village Drug Kits	5,000	Essential services
Outreach Services	-	Immunizations, health promotion for nutrition
Health Centers	894	Community and outreach services
District Hospitals	130	Health promotion, disease prevention, diagnosis and treatment
Provincial Hospitals	12	Treatment and rehabilitation services
Regional Hospitals	4	Curative health care services
Central Hospitals	4	Tertiary services
Special Treatment Centers	3	Dermatology, ophthalmology, rehabilitation
Private Sector		
Clinics	222	Mainly urban areas.
Pharmacies	1993	Mainly urban areas.
Hospitals	0	No private hospitals.

Table 4: Health Service Delivery in Lao PDR<sup>201</sup>

## Health Access

International investments to Laos’ health sector have been rising and now cover roughly 75 percent of public funding. The health sector promotes primary healthcare activities such as clean water supply, immunization, polio eradication, reproductive health, breast feeding, iodine supplements, vitamin A, AIDS, and STD projects. The Lao government has worked hard to develop health guidelines to assure access to health care, specifically for woman, children, and ethnic populations in remote rural areas. Basic healthcare service coverage is not available in many remote areas where the ethnic population resides.<sup>202</sup>

There are financial barriers to health access.

Geographical isolation and poverty are factors leading to limited health care access. 70 percent of the population lives on less than US\$0.40 a day. Risk-pooling and prepayment have been introduced through social security for the formal sector and health insurance for the public sector. A road map for universal coverage has been developed and implemented in 2011. However, expansion of coverage will require subsidies to the poor, meaning there is a need for more contribution from the Government and partners. The Government of Laos’ goal is to have universal health coverage by 2020, but the Government will need to show a greater commitment to health to reach that goal.<sup>203</sup> The distribution of health workers has left several primary health care facilities understaffed and unable to provide basic services.

The main network for health care service remains the public system, and health facility locations are shown on the map in Figure 19.<sup>204</sup> In 2010, there were a total of 4,426 hospital beds. The MoH has a goal to strengthen the ability of the health care system by providing access to available, appropriate, affordable and good quality essential health services that are responsive to people’s needs and expectations, especially for people who don’t have access. The Lao government sees prevention and treatment as key objectives.<sup>205</sup> There is an apparent shortage of healthcare workers, the situation is already problematic by the uneven distribution of staff among different types of health facility and the shortage of non-medical staff to implement essential administrative and support tasks. The World Health Organization reported that “central hospitals have high ratios of high- and mid-level medical staff compared with other types of facility. In central hospitals the ratio of high- and mid-level medical staff per bed is 0.9, which could be considered good if there were not a very high doctor-to-nurse ratio (0.63 at central hospitals), which raises concerns that inefficiency in hospitals may have structural origins.”<sup>206</sup>

The Law on Health Care (2005) states that all citizens regardless of sex, age, ethnic origin, race, religion or socio-economic condition has the rights to receive healthcare services and requires the delivery of healthcare in an equitable manner. However, out of pocket payments are charged in private and public facilities and makeup about 63 percent of health expenditures. Private facilities are located mainly in urban areas. State provided public health is under-utilized especially in the central areas, but utilization is now starting to increase. The public health system has three divisions:<sup>207</sup>

- Healthcare,
- Prevention, Promotion and Disease Control,
- Health Management and Administration

The public sector provides most of the health services in Laos through government owned and operated health centers and district, provincial, and central hospitals. The government has made all issues related to maternal and child health a priority area in policy and strategy development due to these services not reaching the remote areas which need these services the most. Hospitals are mandated to give priority to

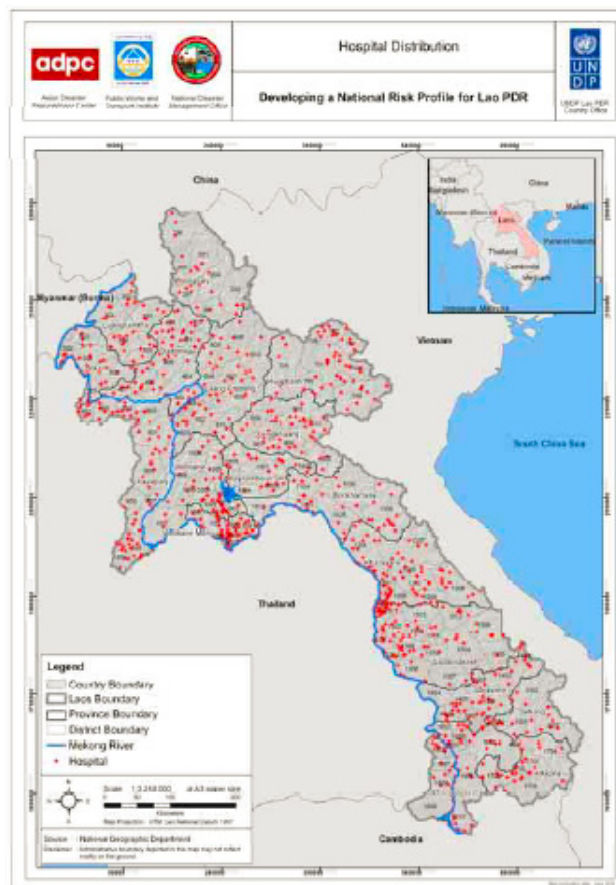


Figure 19: Laos Hospital Locations

maternal, neonatal, and pediatric wards. They are to provide emergency obstetric and neonatal care (basic or comprehensive); provide emergency, triage assessment and treatment of children; manage sick children using standard treatment guidelines; ensure adequate hospital policies; material resources, drugs and commodities for care of mothers and children; give priority to staff training for care of mothers and children, ensure supervision, and monitoring and evaluation. However, there are weaknesses where hospitals due to fully comply with these mandates.<sup>208</sup>

Traditional medicine delivery is carried at three levels in Laos:

- National,
- Provincial, and
- Local/Community

Traditional medicine providers play an essential role in primary healthcare. The user fees system has generated a state where

providers over-prescribe, and weak regulations mean that drugs are often charged at cost plus 40 percent instead of plus 25 percent. As a result, expenditure on drugs accounted for 36.2 percent of out-of-pocket expenditure on health by household. Since 2009, the implementation of the ministerial decree No.594 to integrate logistic systems into one system to complement the national drug supply system with the decree on drug management, quality drugs are more accessible. The MOH issues an essential medicine list. Drug kits are distributed to all villages located two hours away from a pharmacy. In 2010, there were about 5,700 drug kits distributed throughout the country. The Law on Drugs and

Medical Products (2000) covers traditional and herbal medicine products. Traditional and herbal products are sold in pharmacies or other outlets as non-prescription self-medication or over-the-counter.

There are an estimated 5,000 pharmacies nationwide, and some of them sell imported and local traditional medicine products. Traditional medicine usage is officially supported and strongly promoted in Laos. This continues the cultural tradition, but also reflects the acknowledgment that traditional medicine has a role in addressing the difficulty of access to, and cost of, modern medicines.<sup>209</sup> Below is a listing of different facilities providing traditional medicine.

Facility	Number	Characteristics
Community Traditional Medicine Practitioners	18,226	Every village has one or two practitioners Estimated 3,370,002 patient visits to date Cost per visit = 100,150Kip (US\$12)
Provincial Traditional Medicine Units	-	Mostly pharmacists and healers
Provincial Traditional Medicine Stations	7	Mostly pharmacists and healers Stations provide acupuncture and sauna Capacity to produce products (e.g. capsules)
Institute of Traditional Medicine	1	Treatment with herbal remedies, acupuncture, and massage
Private Traditional Medicine Healers	-	Provide treatment at the local community level

Table 5: Traditional Medicine Services in Laos<sup>210</sup>

The National Blood Center is managed by the Lao People’s Democratic Republic Red Cross. There is much work to still be done at the hospital level to meet national and network requirement for blood transfusion safety.<sup>211</sup> The WHO says providing safe blood and adequate blood should be a vital part of every country’s national health care policy and infrastructure. The WHO recommends that all activities related to blood collection, testing, processing, storage and distribution be coordinated at the national level through a blood policy.<sup>212</sup>

The US Embassy in Vientiane and US Pacific Command (USPACOM) have collaborated to ensure the safety of blood over the past few years. The blood safety project will not just assist staff, but will help promote the importance of blood safety and encourage the public to donate their

blood. A blood safety workshop for military and civilian medical practitioners was held where they learned advanced medical procedures for blood testing and handling, ensuring the safe use of blood and blood products during medical procedures.<sup>213</sup> Hospitals in Laos require 70 to 80 bags of blood each day; the demand is exceeding the supply. It is estimated that only one percent of the population donates blood. The project has built a Red Cross Blood Center in Luang Prabang and plans are in the works to build one in Savannakhet.<sup>214</sup>

### Laboratories

Laos currently has two Bio-security Level (BSL)-2 laboratories located in the capital city



of Vientiane - one at NCLE and the other at the Pasteur Institute. The military does not have any laboratories due to funding, they send all sample to the NCLE lab for testing. In 2010, the WHO and CDC provided NCLE a new Bio-security Level (BSL)-2 laboratory with a real-time polymerase chain reaction (PCR).<sup>215</sup> The new equipment improved the ability of the lab to conduct a greater amount of tests quickly, it also gave NCLE the capability to detect and type influenza viruses while it continues to use conventional PCR for other respiratory viruses. The NCLE also developed an inventory database to track the availability of reagents as a mitigation measure since there are no distributors of reagents in Laos, resulting in long waiting periods as supplies are brought in from other countries.

## Training for Health Professionals

The MoH organizes health management training courses for provincial and district level health officials. They also oversee the University of Health Sciences and in collaboration with the National University of Laos, offer degrees in Public Health and Health Service Management. Many health managers are studying for a Master's Degree in Public Health. In 2007, the Asian Development Bank (ADB) reported that almost all provincial health offers have this degree. Due to lack in coordination between partners providing the funding, trainings for the health workforce remain a challenge.<sup>216</sup>

In 2009, Laos started conducting a Field Epidemiology Training (FET) course. They also offer additional trainings to build staff capacity and further professional development. Civil-military coordination in training is occurring. In 2011, 21 out of 42 trainees on Lao EWARN were military, but military participation in other courses was limited due to a lack of funding.<sup>217</sup> Laos remains dependent on funding and technical assistance from international organizations and bilateral contributions, the largest challenge Laos faces is limiting domestic budgeting for disease surveillance programs.

In 2011, the Hospital Preparedness in Emergencies (HOPE) training was started, in which doctors and medical administration personnel learned new skills to save lives when disasters hit. The participants developed capabilities in planning for disaster preparedness in hospitals, understanding the building and equipment safety in disasters, managing mass

casualties, coordinating with emergency services and authorities, and effectively communicating for public health.

HOPE will be brought to provinces of Laos through the training of healthcare personnel, both administrative and medical, to prepare healthcare facilities and personnel to respond effectively to community emergencies involving large numbers of casualties. These will aide hospitals and healthcare facilities to prepare to manage casualties from such devastating floods and other disasters or emergencies. They in turn will be enabled to design faculty-specific plans to increase their ability to respond to emergencies and continue functioning to provide critical medical care. The MoH has endorsed HOPE in Laos. The Director of the Department of Hygiene and Prevention (DOHP), Ministry of Health, said: "I am delighted to see HOPE becoming established in Laos to support our disaster prevention efforts in our hospitals and clinics. We see increasing natural disasters in Laos due to climate change so we must be prepared."<sup>218</sup>





# LAO PDR

## Disaster Management Partners in Laos

Lao PDR Disaster Management Reference Handbook 2014

# Disaster Management Partners in Laos

## U.S. Agencies

### United States Department of Defense (US DoD)

#### In-Country Background

A wide variety of DoD organizations have built strategic partnerships with Laos via disaster management efforts. Such engagements include joint humanitarian assistance operations in which U.S. and Laotian military and civilian personnel cooperate on a variety of levels.

Most often, these efforts focus on the provision of medical services, education outreach, and medical infrastructure development.<sup>219</sup>

#### Recent Activity

Recently, projects have been conducted by organizations such as the Center for Excellence in Disaster Management and Humanitarian Assistance (CFE-DMHA), United States Army, Pacific (USARPAC), Pacific Air Force (PACAF), Asia-Pacific Center for Security Studies (APCSS), and the United States Pacific Command (USPACOM) Surgeon’s Office. Below is a list of projects that were completed by US DoD organizations since 2011.

- CFE-DMHA
  - National PI Planning Workshops
  - Bilateral Defense Discussions Laos
- USARPAC
  - Medical First Responder Course
  - Bilateral Medical Outreach Conferences
- PACAF
  - PACIFIC ANGEL
  - Lao Disease Surveillance Project
- APCSS
  - Comprehensive Health and Security Project
- USPACOM J07
  - Blood Product Safety Workshop

During these engagements, U.S. DoD personnel work alongside medical professionals and government officials such as the Ministry of Health and Public Health Department.<sup>220</sup>

### United States Agency for International Development (USAID)

#### In-Country Background

In 1975, the USAID program was terminated due to demonstrations and harassment of Americans.<sup>221</sup> In 2011, USAID returned to Laos after a 35 year absence.

USAID oversees a large portfolio of programs in Laos.<sup>222</sup> Projects primarily focus on health and medicine, environmental protection and conservation, and economic development.

Since and leading up to USAID’s return to Laos, a total of roughly US\$8.8M was spent on health, economic development, and a variety of other programs.<sup>223</sup>

Table 6: USAID Spending in Laos 2009-2013<sup>224</sup>

Year	Democracy, Human Rights, & Governance	Health	Education & Social Services	Economic Development	Humanitarian Assistance	Program Management	Total
2013	\$0	\$100,000	\$0	\$1,200,000	\$300,000	\$100,000	\$1,700,000
2012	\$0	\$900,000	\$0	\$1,500,000	\$0	\$100,000	\$2,500,000
2011	\$0	\$1,100,000	\$0	\$500,000	\$0	\$100,000	\$1,700,000
2010	\$0	\$1,100,000	\$0	\$700,000	\$0	\$100,000	\$1,900,000
2009	\$227,200	\$741,500	\$0	\$31,500	\$0	\$8,500	\$1,008,700
Totals	\$227,200	\$3,941,500	\$0	\$3,931,500	\$300,000	\$408,500	\$8,808,700

## Recent Activity<sup>225</sup>

A few examples of USAID projects are outlined below:

Recent health and medicine programs aim to:

- Monitor and prevent avian flu and other emerging pandemic threats;
- Prevent and control transmission of HIV/AIDS and other sexually transmitted infections; and
- Control the spread of malaria, tuberculosis, and Dengue Fever.
- Recent environmental protection and conservation programs aim to:
  - Support responsible timber trade and sustainable forest management;
  - Protect endangered species and reduce the illegal wildlife trade; and
  - Help communities along the Mekong River adapt to climate change.
- Recent economic development programs aim to:
  - Provide technical assistance and training to the Government of Laos to implement reforms in order to accede to the World Trade Organization, implement the Lao PDR-US Bilateral Trade Agreement, and collaborate with other ASEAN nations;
  - Support the development of an ASEAN single window for trade.

## International Community

### European Commission (EuropeAID)

#### In-Country Background

The primary objectives of EU development cooperation with Laos are poverty reduction and achievement of the Millennium Development Goals (MDGs). The EU has maintained a developmental presence in Lao PDR since 2007.<sup>226</sup>

## Recent Activity

The EU's development initiatives aim to benefit the vulnerable ethnic minority populations of the northern uplands. Projects are currently aimed at addressing poverty and gender inequality issues in forty-seven districts. In these areas, the government is providing poverty reduction funds under a broad rural development policy of "stabilization" of settlement.

In addition to poverty reduction, the EU is also assisting the eradication of slash-and-burn agriculture, the elimination of poppy cultivation, and the enhancement of services such as education, healthcare and water and sanitation.<sup>227</sup>

### The European Commission Humanitarian Aid and Civil Protection Department (ECHO)

#### In-Country Background

The European Commission's Humanitarian Aid and Civil Protection department, ECHO, has been supporting specific Disaster Risk Reduction (DRR) projects in Lao PDR to help communities better prepare for natural disasters. Echo has granted over US\$22.0M for emergency relief operations in Laos since 1998.<sup>228</sup>

#### Recent Activity

ECHO's efforts in Lao PDR are aimed to mitigate poverty, outbreaks of tropical diseases, and vulnerability to natural disasters.<sup>229</sup>

### Australia Agency for international development (AusAID)

#### In-Country Background

Australia has provided aid and has participated in development cooperation engagements in Laos for over 60 years. Australia has invested over US\$150.0M in Laos over the past several years.

#### Recent Activity

AusAID has been assisting with the extremely

large unexploded ordnance (UXO) problem in Laos. About 50 percent of potential agricultural land in Laos is contaminated by cluster munitions. UXO caused about 90 casualties in 2011. It is estimated that clearance of priority areas will be extremely expensive and, at present clearance rates, take more than 100 years to complete.<sup>230</sup> Australia has also assisted NGOs and the Laotian government with the clearance of unexploded ordnance from hundreds of hectares of land, and continues to support UXO clearance, risk education, and survivor rehabilitation.<sup>231</sup>

In 2011, Laos was hit by several tropical storms, which affected 12 of Laos' 17 provinces. It is estimated that 2,000 villages, 82,000 households and around 500,000 people were affected by the flooding. Australia contributed US\$1.0M through various NGOs to fund various flood relief and reconstruction projects.<sup>232</sup>

**Other Donors**

**In-Country Background**

The top 10 ODA donors in Laos include Japan, Thailand, Australia, Germany, Korea, France, Sweden, Switzerland, Luxembourg, and the United States. The following table includes the average annual assistance contribution over the past 5 years.

Country	ODA Investment
Japan	US\$96.0M
Thailand	US\$43.0M
Australia	US\$41.0M
Germany	US\$26.0M
Korea	US\$25.0M
France	US\$23.0M
Sweden	US\$15.0M
Switzerland	US\$15.0M
Luxembourg	US\$14.0M
United States	US\$7.0M

Table 7: Average Annual Donor Assistance Over the Past 5 Years<sup>233</sup>

**Recent Activity**

The majority of this ODA is funneled into several common categories.

Category	ODA Investment
Economic Infrastructure and Services	25.5 percent
Education	12.6 percent
Health and Population	10.5 percent
Humanitarian Aid	2.7 percent
Multisector/Cross-Cutting	11.7 percent
Other Social Sectors	16.1 percent
Production Sectors	14.8 percent
Program Assistance	4.5 percent
Other Social Sectors	1.5 percent

Table 8: ODA Category Investments<sup>234</sup>

**United Nations (UN)**

**In-Country Background**

The United Nations Country Team (UNCT) in Laos is comprised of the UN specialized agencies, funds and programmes working in the country. The UNCT supports the pursuit of the Millennium Development Goals and the Lao PDR's national development goals through sustainable and equitable socioeconomic development.<sup>235</sup>

The United Nations efforts in Laos emphasize three areas: equitable and sustainable development, humanitarian response, and effective development cooperation.

**Recent Activity**

The United Nations Development Assistance Framework (UNDAF) Action Plan is the strategic programme framework for the United Nations in the Lao PDR. The UNDAF Action Plan is closely tied to both the Millennium Development Goals and Government's 7th National Socio-Economic Development Plan (NSEDP). The NSEDP emphasizes the Lao government's aim to graduate the Laos from the ranks of the Least Developed Countries by 2020 while ensuring sustainable and equitable development.<sup>236</sup>

In order to enhance preparedness and reduce the impact of natural disasters in Laos, the United Nations and the National Disaster Management Office (NDMO) have created Inter Agency Contingency Plan (IACP). The plan

is designed to ensure an effective, timely and coordinated response to mitigate the impact of natural disasters on Lao communities. The role of the UN during a humanitarian response is to manage the implementation of the international humanitarian response, to coordinate information flow, and to disseminate situation reports and communicate important current disaster information.<sup>237</sup>

The United Nations also aims to enhance the effectiveness of development cooperation by increasing harmonization, coordination, transparency and accountability through various mechanisms. Such efforts include the Round Table Process and One UN, which help to evenly facilitate dialogue on key development issues like aid effectiveness and strategic planning.<sup>238</sup>

## World Food Programme (WFP)

### In-Country Background

WFP is looked to as a lead agency for emergency response in Lao PDR. WFP Lao PDR has created a set of priorities that are outlined in their Country Strategy Plan for 2011-2015.

- Priority 1: reduce wasting rates to 4 percent for the country as a whole by 2015
- Priority 2: reduce the prevalence of stunting to 34 percent by 2015
- Priority 3: prevalence of anemia decreased to 30 percent for children under five by 2015<sup>239</sup>

WFP also provides direct support to humanitarian crises by providing food to communities affected by disaster.

### Recent Activity

WFP's vision for Lao PDR is that it be a country that is free from malnutrition. Specifically, WFP assists the Government of Laos in an effort to prevent and reduce wasting (acute malnutrition that causes severe weight loss in children under five), stunting (chronic malnutrition caused by a lack of nutrition during a child's first 1000 days of life), and micronutrient deficiencies (a lack of proper nutrition in children and adults).

In an effort to fight wasting, WFP focuses on providing emergency food rations in emergencies caused by natural disasters. WFP assumes the

lead on supplementary feeding and helps build government capacity to respond to emergencies. In order to address stunting, WFP is taking a "lifecycle" approach targeting children during their first 1000 days of life. To improve the nutritional status of women and small children, WFP delivers specialized nutrition products to pregnant and lactating women and children aged 6-23 months. WFP also encourages women to attend health centers before, during and after delivery; and provides nutrition education at the village level.

WFP also works alongside the Lao Government to offer nutritious snacks and key messaging in more than 1,500 primary schools. WFP also supports food-insecure households and communities by creating assets that improve nutrition, education, and increase food security.<sup>240</sup>

## World Health Organization (WHO)

### In-Country Background

WHO has maintained a presence in Laos for over 50 years, and is working closely with the Ministry of Health's (MOH) Seventh 5-Year National Health Sector Development Plan (2011-2015). The plan, called the NHSDP, has many goals, such as:

- create basic material and technological health infrastructure, including sustainable health financing, in order to bring the country out of the Least Developed Country status by 2020;
- expand and strengthen the health system in order to meet the needs of the people, especially the poor and vulnerable; and
- contribute to eradicating poverty to improve the Lao people's quality of life, aiming to achieve the five health-related MDGs.<sup>241</sup>

Additional collaboration efforts aim to strengthen the national health system and ensure access to essential health care, especially the poor, disadvantaged, and those in rural or remote areas.<sup>242</sup>

### Recent Activity

Key areas for cooperation include disease surveillance and response, immunizations and vaccines, child and adolescent health, non -

communicable diseases, injury prevention, mental health, and environmental health.<sup>243</sup> The WHO has structured goals outlined for 2012-2015. The four main goals are outlined below:

- Increase access to primary health care and reduce health inequities by strengthening the health system and improving aid effectiveness (i.e. improve the national health policy, strategy and planning processes, including aid effectiveness in support to the implementation of the NHSDP for 2011- 2015 )
- Contribute to the achievement of the health related Millennium Development Goals (MDG) (continue to control HIV/AIDS, Tuberculosis, and Malaria, help reduce environmental risks to health)
- Prevent and control infectious diseases and public health events (strengthen key partner capacity)
- Address health risk factors to reduce non-communicable diseases, mental illness and injuries (support non-communicable disease control, support those affected by accidents, violence, or UXO)<sup>244</sup>

**United Nations International children’s emergency fund (UNICEF)**

**In-Country Background**

UNICEF supports the Lao government in a variety of sectors including health, water and sanitation, education, child protection, HIV/AIDS, and communication.

**Recent Activity**

In the health sector, UNICEF provides support to the country’s immunization program through training, vaccines, and delivery. UNICEF also supports efforts to enhance the nutritional status of the Lao people through vitamin and mineral supplementation projects.

UNICEF works alongside government agencies construct water pipes and facilities in rural areas, and is supporting the development of national water quality standards, water quality surveillance systems, and hygiene awareness programs.

In order to support MDG goals, UNICEF is working closely with the Lao Government to

enhance basic education by helping to create a child-friendly school environment and improved teacher training,

In the area of child protection, UNICEF is focused on reducing dangers to children at risk of abuse, child trafficking, drugs, and children affected by UXO. UNICEF is supporting a life-skills program that will help vulnerable youth, and has already reached tens of thousands of villagers.

UNICEF is also working to mitigate the effects of HIV/AIDS by offering support for self-help groups that provide social and economic support for those affected by HIV/AIDS, and providing anti-retroviral drugs to HIV positive pregnant women.

UNICEF also works to enhance communication by supporting the training of children in radio reporting, script writing, and producing, and is assisting in the production and distribution communications education materials. UNICEF also assists workshops and field reporting on issues like child health, HIV/AIDS, and child trafficking.

**Regional Institutions**

**Association of Southeast Asian Nations (ASEAN)**

**In-Country Background**

The ASEAN Agreement on Disaster Management and Emergency Response (AADMER) was signed by ASEAN member countries in Vientiane in 2005. Lao PDR has been a member of ASEAN since 1997, and submitted an Instrument of Acceptance to the AADMER in 2007.

The AADMER aims to facilitate cooperation between the ten ASEAN member countries, as well as international partners, to improve regional capacities for disaster preparedness and response.<sup>245</sup>

**ASEAN Regional Forum**

**In-Country Background**

The ASEAN Regional Forum was constructed



to foster constructive dialogue and consultation on political and security issues of common interest and concern, and to make significant contributions to efforts towards confidence-building and preventive diplomacy in the Asia-Pacific region.<sup>246</sup>

### **Recent Activity**

Thailand and the Republic of Korea co-hosted the ASEAN Regional Forum Disaster Relief Exercise (ARF DiREx) in 2013. The exercise brought together many HA/DR actors throughout the region, including Laos, and focused on inter-agency coordination and civil-military coordination.

The exercise had a scenario of an 8.9-magnitude earthquake and typhoon. Throughout the event, the participating nations' disaster management agencies and emergency responders from civil and military institutions of ARF members exercised their coordination and disaster relief mechanisms. Participants also included key actors in disaster relief operation in the Asia and Pacific region such as the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre), the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) and the Red Cross and Red Crescent Movement.<sup>247</sup>

Laos was also a participant in the 12th ARF Inter-Sessional Meeting on Disaster Relief (ISM on DR), which was held in Padang, Indonesia on 12-13 March 2013. The meeting was comprised of a wide variety of briefings on disaster assistance and had several additional focuses. One of these focuses was to advance the priorities of the ARF Disaster Relief Work Plan 2012-2014. This plan has three primary areas which were advanced during the Inter-Sessional Meeting: Priority 1 - Promote Networking and Information Sharing to Enhance the Capacity of ARF Participants Particularly in the Areas of Risk Assessment, Monitoring, and Early Warning, Priority 2 - Promote International Cooperation and Assistance in HADR Operations, Priority 3 - Promote Interoperability and Coordination in HADR Operations.<sup>248</sup>

## **Lower Mekong Initiative (LMI)**

### **In-Country Background**

The Lower Mekong Initiative (LMI), launched in 2009, is a multinational partnership among Cambodia, Laos, Myanmar, Thailand, Vietnam, and the United States to create integrated sub-regional cooperation among the five Lower Mekong countries.

LMI members develop shared responses to trans-boundary challenges across six pillars (Agriculture and Food Security, Connectivity, Education, Energy Security, Environment and Water, and Health) and in cross-cutting areas such as gender issues.<sup>249</sup>

### **Recent Activity**

LMI is currently working on four projects throughout Laos. LMI hosted a Green Mekong forestry event designed to develop capacities of stakeholders on grassroots equity in forest management and climate change mitigation.<sup>250</sup> In September 2013 ASEAN-U.S. Technical Assistance and Training Facility (TATF) supported training for 20 Lao English and science teachers to help them learn to use information technology in the classroom.<sup>251</sup>

## **International Financial Institutions**

### **Asian Development bank (ADB)**

#### **In-Country Background**

The Asian Development Bank (ADB) has been in direct partnership with the Government of Laos since it joined ADB as a founding member in 1966. ADB has provided development assistance to Laos since 1968 and remains one of the largest multilateral financiers of the country, primarily focusing on areas of urban development, trade facilitation, HIV/AIDS, and governance and capacity development projects.<sup>252</sup>

#### **Recent Activity**

ADB has approved expenditures in excess of US\$150.0M in humanitarian assistance in

areas such as water supply and sanitation, disease control, health sector improvement, education, poverty reduction, infrastructure development, and livelihood improvement<sup>253</sup>

## **World Bank (WB)**

### **In-Country Background**

The World Bank has been involved in Laos since the 1970s and has contributed a total of over US\$250.0M in development assistance.<sup>254</sup>

### **Recent Activity**

Most development projects have dealt with poverty reduction, disaster risk management, health services improvement and system reform, livelihood and wellbeing improvement, disaster recovery, food security improvement, and disease control and preparedness.<sup>255</sup>

## Nongovernmental Organizations (NGOs)

### Overview

There are over 50 NGOs active in Laos. The vast majority of these NGOs have conducted multiple projects spanning several of sectors in a wide variety of areas throughout the country.

**Table 9: NGOs Operating in Laos (Arranged by Number of Projects)<sup>256</sup>**

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
World Vision Lao PDR (WVL)	Agriculture, Forestry & Fisheries; Community Development; Data Collection & Analysis; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Luang Prabang, Savannakhet	34
Burnet Institute (Macfarlane Burnet Institute for Medical Research and Public Health) (BI)	Data Collection & Analysis; Health Care; Human Resources Development; Income Generation & Economic Development	Bokeo, Bolikhamxay, Champasak, Khammouane, Luang Namtha, Savannakhet, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	20
World Wide Fund for Nature (WWF-Laos)	Agriculture, Forestry & Fisheries; Community Development; Data Collection & Analysis; Education; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Attapeu, Bokeo, Bolikhamxay, Champasak, Khammouane, National Level, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT	13
Save the Children International in Lao PDR (SCI)	Data Collection & Analysis; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development	Bolikhamxay, Luang Prabang, Xayaboury	9
CARE International in Lao PDR (CARE Laos)	Agriculture, Forestry & Fisheries; Community Development; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Social Development	Phongsaly, Sekong, Vientiane MCPT, Xayaboury	8
Health Poverty Action (HPA)	Agriculture, Forestry & Fisheries; Community Development; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development	Attapeu, Bolikhamxay, Champasak, Khammouane, Luang Namtha, Saravan, Savannakhet, Sekong	8

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
SNV Netherlands Development Organisation (SNV)	Agriculture, Forestry & Fisheries; Community Development; Health Care; Income Generation & Economic Development; Natural Resources & Ecology	Houaphan, Savannakhet, Vientiane, Vientiane MCPT	8
Adventist Development and Relief Agency (ADRA Lao PDR)	Agriculture, Forestry & Fisheries; Data Collection & Analysis; Education; Health Care; Human Resources Development; Natural Resources & Ecology	Luang Namtha, National Level, Xiengkhouang	6
Australian People for health education and Development Abroad (Union Aid Abroad- APHEDA Laos)	Agriculture, Forestry & Fisheries; Data Collection & Analysis; Education; Health Care; Income Generation & Economic Development	Attapeu, Khammouane, Luang Prabang, Savannakhet, Sekong, Vientiane, Vientiane MCPT	6
Comité de Coopération avec le Laos (CCL)	Agriculture, Forestry & Fisheries; Community Development; Education; Health Care; Income Generation & Economic Development; Natural Resources & Ecology	Oudomxay, Phongsaly, Vientiane MCPT	6
Swiss Red Cross (SRC)	Community Development; Data Collection & Analysis; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Social Development	Bolikhamxay, Champasak, Khammouane, Luang Prabang, Oudomxay, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT	6
Village Focus International (VFI)	Agriculture, Forestry & Fisheries; Community Development; Data Collection & Analysis; Education; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Bolikhamxay, Champasak, Houaphan, Khammouane, Saravan, Sekong, Vientiane, Vientiane MCPT, Xiengkhouang	6
Croix-Rouge Francaise (CRF)	Agriculture, Forestry & Fisheries; Data Collection & Analysis; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Khammouane, National Level, Vientiane MCPT, Xayaboury	5

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
<b>Handicap International (HI)</b>	Community Development; Data Collection & Analysis; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Social Development	Champasak, Savannakhet, Vientiane, Vientiane MCPT	5
<b>Norwegian Church Aid (NCA)</b>	Agriculture, Forestry & Fisheries; Community Development; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Attapeu, Bokeo, Champasak, Luang Namtha, Luang Prabang, Savannakhet, Sekong	5
<b>World education in the Lao PDR (WEL)</b>	Data Collection & Analysis; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Social Development	Attapeu, Champasak, Houaphan, Khammouane, Luang Prabang, Saravan, Savannakhet, Sekong, Xiengkhouang	5
<b>GRET - Professionals for Fair Development (GRET)</b>	Agriculture, Forestry & Fisheries; Community Development; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Bolikhamxay, Houaphan, Khammouane, Savannakhet, Vientiane, Vientiane MCPT, Xayaboury	4
<b>HELVETAS Swiss Inter-cooperation (HELVETAS Laos)</b>	Agriculture, Forestry & Fisheries; Education; Human Resources Development; Social Development	Attapeu, Bokeo, Bolikhamxay, Champasak, Houaphan, Khammouane, Luang Namtha, Luang Prabang, National Level, Oudomxay, Phongsaly, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	4
<b>Plan International Laos (Plan Laos)</b>	Education; Health Care; Natural Resources & Ecology; Social Development	Bokeo, National Level	4
<b>Service Fraternel d'Entraide (SFE)</b>	Agriculture, Forestry & Fisheries; Community Development; Health Care	Attapeu, Savannakhet, Sekong	4

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
Welthungerhilfe / German Agro Action (WHH/GAA)	Agriculture, Forestry & Fisheries; Community Development; Emergency and Humanitarian Relief; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Bokeo, Savannakhet	4
Church World Service (CWS)	Education; Human Resources Development	Luang Prabang, Oudomxay, Phongsaly	3
Good Neighbors International (GNI)	Community Development; Education; Emergency and Humanitarian Relief; health Care	Vientiane, Xiengkhouang	3
Japan International Volunteer Center (JVC)	Agriculture, Forestry & Fisheries; Community Development; Human Resources Development; Natural Resources & Ecology	Khammouane, Savannakhet, Vientiane	3
Pestalozzi Children's Foundation (PCF)	Education	Luang Prabang, Vientiane, Vientiane MCPT	3
Population Services International/Laos (PSI/Laos)	Health Care	Attapeu, Bokeo, Bolikhamxay, Champasak, Houaphan, Khammouane, Luang Namtha, Luang Prabang, Oudomxay, Phongsaly, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	3
Power International (Power)	Community Development; Data Collection & Analysis; Education; Health Care; Human Resources Development; Income Generation & Economic Development; Social Development	Champasak, Luang Prabang, Oudomxay, Saravan, Sekong, Xayaboury	3
Aide et Action (AEA)	Education; Health Care	Champasak, Oudomxay, Vientiane, Vientiane MCPT	2
Association for Aid and Relief, Japan (AAR)	Health Care	Saravan, Vientiane MCPT, Xiengkhouang	2
BasicNeeds (BN)	Community Development; Data Collection & Analysis; Education; Health Care; Human Resources Development; Social Development	Bolikhamxay, Vientiane MCPT	2

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
Cooperation Internationale pour le Developpement et la Solidarite (CIDSE-Laos)	Agriculture, Forestry & Fisheries; Natural Resources & Ecology	Khammouane, National Level	2
CUSO-VSO Lao (CUSO-VSO)	Agriculture, Forestry & Fisheries; Community Development; Data Collection & Analysis; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Champasak, National Level, Saravan, Sekong, Vientiane MCPT	2
International Cooperation NGO IV-Japan (IV-Japan)	Education	Vientiane MCPT, Xiengkhouang	2
Shanti Volunteer Association (SVA)	Community Development; Education	Bolikhamxay, Champasak, Luang Prabang, Oudomxay, Saravan, Savannakhet, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	2
Triangle Generation Humanitaire (TGH)	Agriculture, Forestry & Fisheries; Emergency and Humanitarian Relief; Human Resources Development; Natural Resources & Ecology	Khammouane	2
World Concern in Lao PDR (World Concern)	Education	Sekong	2
World Renew (World Renew)	Agriculture, Forestry & Fisheries; Community Development; Education; Emergency and humanitarian Relief; Health Care; Human Resources Development; Natural Resources & Ecology	Phongsaly, Xiengkhouang	2
Action with Lao Children (ALC)	Education; Health Care; Human Resources Development; Social Development	Attapeu, Bokeo, Bolikhamxay, Champasak, Houaphan, Khammouane, Luang Namtha, Luang Prabang, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	1

NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
Agir pour les Femmes en Situation Precaire   Acting for Women in Distressing Circumstances (AFESIP)	Community Development; Education; Emergency and Humanitarian Relief; Human Resources Development; Income Generation & Economic Development; Social Development	Attapeu, Bokeo, Bolikhamxay, Champasak, Houaphan, Khammouane, Luang Namtha, Luang Prabang, National Level, Oudomxay, Phongsaly, Saravan, Savannakhet, Sekong, Vientiane, Vientiane MCPT, Xayaboury, Xiengkhouang	1
Caritas Luxembourg in Lao PDR (Caritas)	Agriculture, Forestry & Fisheries; Community Development; Education; Emergency and Humanitarian Relief; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Xiengkhouang	1
Catholic Relief Service-Lao PDR (CRS)	Education; Health Care; Social Development	Bolikhamxay, Vientiane, Vientiane MCPT	1
Cesvi Cooperazione e Sviluppo (Cesvi)	Health Care	Attapeu, Saravan, Sekong	1
Christian Outreach for Relief and Development (CORD)	Human Resources Development	Vientiane MCPT	1
Community Learning International (CLI)	Agriculture, Forestry & Fisheries; Community Development; Education; Health Care; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Luang Prabang	1
Danish Red Cross (DRC)	Community Development; Education; Health Care; Human Resources Development	Houaphan, Phongsaly, Xiengkhouang	1
Family health International (FHI)	Health Care	Champasak, Luang Prabang, Savannakhet, Vientiane MCPT	1
Global Association for People and the Environment (GAPE)	Agriculture, Forestry & Fisheries; Community Development; Data Collection & Analysis; Education; Health Care; Human Resources Development; Natural Resources & Ecology; Social Development	Champasak	1



NGO Name	Active in Sectors	Active in Provinces	Total # of Projects
Great Peace in Lao P.D.R (GREAT PEACE)	Education; Emergency and Humanitarian Relief; Social Development	Vientiane MCPT	1
Health Care and Hope Alliance (HHA)	Health Care	Xiengkhouang	1
Health Frontiers (HF)	Health Care	National Level	1
Médecins du Monde (MdM)	Data Collection & Analysis; Health Care	Champasak	1
Mennonite Central Committee (Laos) (MCC)	Agriculture, Forestry & Fisheries; Community Development; Education; Health Care; Human Resources Development; Natural Resources & Ecology	Xiengkhouang	1
Mines Advisory Group (MAG)		Khammouane, Xiengkhouang	1
Norwegian People's Aid (NPA)	Emergency and Humanitarian Relief	Attapeu, Saravan, Sekong	1
Oxfam (Oxfam)	Agriculture, Forestry & Fisheries; Community Development; Emergency and Humanitarian Relief; Human Resources Development; Income Generation & Economic Development; Natural Resources & Ecology; Social Development	Bokeo, Bolikhamxay, Houaphan, Khammouane, Phongsaly, Saravan, Savannakhet, Vientiane, Vientiane MCPT, Xiengkhouang	1
Room to Read Laos (RtR)	Education	Bolikhamxay, Oudomxay, Phongsaly, Saravan, Savannakhet, Vientiane, Xayaboury	1





# LAO PDR Conclusion

Lao PDR Disaster Management Reference Handbook 2014

# Conclusion

The CFE-DMHA Laos Country Book revealed a number of significant findings in Lao PDR's disaster management systems, authorities, capabilities, and vulnerabilities. These findings have been outlined in each of the sections of the report, but a summarization of key findings is captured here in the conclusion for quick reference. This country reference book is an important step in developing a common understanding of the disaster management context in Laos and to identify Laos's strengths and vulnerabilities for future disaster responses and capability-building engagements.

## Finding #1:

Lao PDR has made significant progress in developing legal and policy plans and guidance for disaster management, but implementation of the plans is slow.

The national government of Lao PDR has made great strides in the legal and policy guidelines and authorities for disaster management. The Laos Government has produced plans for natural disaster preparedness and response, tying in the national, provincial, district, and community levels. Laos's plans have accounted for interagency coordination and have outlined the roles and responsibilities of each relevant ministry.

The plans and governmental decrees establishing lines of authority and protocols have increased in number and improved in quality over recent years, they present occasionally confusing scenarios caused by conflicting guidance and language. Finding the whole picture requires piecing together various documents and understanding the line of succession and which guidance supersedes others. Donors and partner organizations may have difficulty in understanding the complete system, or they may act on outdated information because they do not realize a newer law, plan, or decree has provided changes.

While the policies and plans have been written, revised, and updated, the implementation of those plans has been slower due primarily to resource constraints. Laos is

dependent on donor support to provide funding for certain key disaster management positions. Program requirements have been identified, but the funding is not available to address known gaps.

## Finding #2:

Lao PDR has substantial traditional and indigenous methods of disaster preparedness and response, which could be impacted by development projects.

As the Government of Laos has created plans and policies to improve disaster management, the population of Laos, especially in remote rural and highland areas, has continued to use traditional mechanisms for disaster preparedness and response. The geographic isolation and relative lack of government access and infrastructure in remote locations has led villages to depend on themselves and they have close-knit family and community structures that provide support in times of need. Most natural disasters in Laos are weather-driven and are related to the monsoon seasons, so populations have learned to predict and manage crops and supplies to minimize seasonal impacts. Traditional medicine is still prevalent in Laos and is one of the main methods of treatment. There may be more high-tech approaches to disaster preparedness and response, but the traditional methods are tried and tested, and they have proven effective for most disasters Laotians will face.

Traditional and indigenous disaster management mechanisms are relatively low-cost, easy to implement, use local knowledge and materials, and provide a degree of self-reliance and resilience to rural populations. As Laos continues its economic and infrastructure development, some of these traditional methods could become obsolete or ineffective due to changes in the environment. Disaster risks and mitigations should be considered in development programs to ensure that communities are not made more vulnerable by development activities that are intended to help them. Development shifts away from traditional disaster management methods are part of a cultural change for the populations involved, and should be undertaken in ways that promote community outreach, involvement, and education throughout the process so people understand how to prepare themselves and what to do in case of a disaster.

**Finding #3:**

Disaster impacts to agriculture have follow-on effects to Laos's food security, livelihoods, and economy.

Laos's primary industry and source of jobs is agriculture. Over 80 percent of employment in Laos is in the agricultural sector. Many Laotians are dependent on subsistence farming for their food. Malnutrition is an endemic condition in Laos. These factors combine to make agriculture a critical sector in Laos's economy as well as its food security, but that same sector is highly vulnerable to Laos's most prevalent disasters of floods and drought, and its periodic rodent infestations that devour crops and food stocks.

**Finding #4:**

Laos is experiencing an urbanization trend that presents opportunities and vulnerabilities.

Laos is urbanizing at 5 percent annually, and that trend is projected to continue as people move to cities looking for education and work. Urbanization has positive aspects for Laos as new industries increase the diversity of livelihoods in the country. Economic growth will lead to additional revenue that can help address the resource shortfalls impacting the implementation of disaster management plans.

While migrations to cities present some opportunities, there are chances for increased vulnerabilities as a result of urban expansion. If the urban growth rate rises too quickly, maintaining and improving the quality of public services will pose a challenge. Shortages of water are occurring in key urban centers due to a lack of funds and production capacity. Rapid growth presents the potential to build on marginal land with substandard materials or construction techniques, which makes the establishment and enforcement of building codes and standards all the more important.





# LAO PDR Appendices

Lao PDR Disaster Management Reference Handbook 2014

# Appendices

## Disaster Statistics

**Table 10: Statistical Disaster Information for Lao PDR from 2003 to 2013**

Date	Location	Type	Sub Type	Name	Killed	Total Affected
Jun 2011	Xiengkhuang, Vientiane	Flood	General Flood		14	37,000
Feb – Mar 2007	National	Epidemic	Viral Infectious Diseases	Avian Influenza H5N1	2	
Aug – Oct 2011	Savannakhet, Kammouane	Flood	Flash Flood		34	430,000
Aug 2009	Sebangfai, Non-gbok, Mahax	Flood	General Flood		10	
Oct 2009	Attapeu, Sekong, Savannak	Storm	Tropical cyclone	Tropical storm ‘Ondoy’ (Ketsana)	16	128,887
Aug 2008	Luangprabang, Luangnamtha	Flood	General Flood		6	204,190

## Disaster Management Laws and Guidelines

**Decree No. 192/PM of 2005 on the Compensation and Resettlement of the Development Project:** Decree 192 defines principles, rules, and measures that mitigate adverse social impacts and to compensate damages that result from development projects. The decree helps ensure that people improve or maintain their pre-project incomes and living standards, and are not worse off than they would have been without the project.<sup>257</sup>

**Decree No. 71/PM of 1998 on the Administration of NGOs:** This Decree establishes the primary legal instruments regulating the registration and operation of INGOs in Lao PDR. To operate as a legal entity in Laos, Decree No. 71/PM states that an INGO must be recognized as a juridical entity within their originating country; have clear by-laws; have sound financial status; and be recognized by the international community.<sup>258</sup>

**Prime Minister’s Decree No. 49:** Foreign investors who invest in infrastructure projects in Lao PDR and wish to acquire land use right from the government’s allocated land shall submit their application with the appropriate documentation. Foreign investors are not permitted to acquire land use right that is not allocated by the Lao government<sup>259</sup>

**Prime Minister’s Decree No. 158 (1999):** Decree No. 158 created the National, Provincial and District Disaster Management Committees (DMCs) and provided the basis for the development of a disaster management policy. NDMC.<sup>260</sup>

**Prime Minister’s Decree No. 337 on the establishment of National Committee on Communicable Disease Control (NCCDC):** This decree was established in December 2005 in the aftermath of the SARS threat and during the first Avian Influenza outbreaks in Las. Articles 2.5 and 2.8 outline the NCCDC’s responsibility and



authority in coordinating a response to a communicable disease emergency. The NCCDC also has important roles in defining and implementing measures to control, prevent, and mitigate the outbreak of communicable diseases, as well as mobilizing funding.<sup>261</sup>

**Ministry of Health Decree No. 594:** Ministerial decree No.594/MOH integrates logistic systems into one system to harmonize the national drug supply system to make quality drugs are more accessible.<sup>262</sup>

**NDMC Decree Number 97:** Decree No. 97 series of 2000 assigned the roles and responsibilities of various sectors composing the NDMC.<sup>263</sup>

**Law on Drugs and Medical Products:** The Law on Drugs and Medical Products defines principles, rules and measures relating to the management of the cultivation, growing, preservation, exploitation, production, export, import, distribution, possession and use of drugs and medical products. The law aims to ensure the supply of drugs and medical products that are of good quality, safe and appropriately priced.<sup>264</sup>

**Veterinary Law to fight avian influenza, 2008:** This law establishes a regulatory framework to strengthen veterinary services, contains provisions for greater transparency in reporting AI and other emerging diseases, and sets out disease control measures, including animal and by-product movements, bio-security and hygiene standards.<sup>265</sup>

**Environmental Protection Law, 1999:** The Environmental Protection Law specifies necessary principles, regulations and measures for managing, monitoring, restoring and protecting the environment. The law aims to protect human health and natural resources, and to ensure the country's sustainable socio-economic development.<sup>266</sup>

**ASEAN Agreement on Disaster Management and Emergency Response (AADMER):** This Agreement is expected to provide a framework for the development of operational procedures to respond collectively and expeditiously to disasters. The AADMER includes provisions for movement of relief assistance, expedited customs and immigration clearance, and other aspects of disaster relief from ASEAN member states.

**Private Sector:** Currently in Laos there is no law providing for the facilitation or regulation of foreign assistance from the private sector or from individual sources. It may be possible for the private sector actor or the individual to make an agreement with the Ministry of Foreign Affairs that would provide them with the legal facilities necessary to carry out their disaster relief activities, but there is not currently any defined procedure for doing so.<sup>267</sup>

## Department of Defense DMHA Engagements in the Past Five Years (FY 2009-2013)

The following list contains US DoD development engagements that occurred in Laos or that Laotian representatives attended from 2011 to 2013.

Agency	Title	SCG Tool	Activity Type	Start Date	End Date	Location
<b>2013</b>						
CFE	APC-MADRO	Defense and Military Contacts	Multilat Conf	10-Dec-12	14-Dec-12	Thailand
CFE	ARFDIREX_2013 IPC	Combined/Multinational Exercise	Multilat JTP Ex	14-Jan-13	16-Jan-13	Thailand
CFE	ADMM+ HADR MM EWG FTX MPC	Combined/Multinational Exercise	Multilat JTP Ex	21-Jan-13	24-Jan-13	Singapore
CFE	ARF ISM Disaster Relief Mtg	Defense and Military Contacts	Multilat Conf	11-Mar-13	12-Mar-13	Indonesia
CFE	ARFDIREX 2013 FPC	Combined/Multinational Exercise	Multilat JTP Ex	1-Apr-13	4-Apr-13	Thailand
CFE	ADMM+ HADR MM EWG FTX FPC	Combined/Multinational Exercise	Multilat JTP Ex	14-Apr-13	18-Apr-13	Brunei
CFE	ARFDIREX 2013	Combined/Multinational Exercise	Multilat JTP Ex	5-May-13	11-May-13	Thailand
MARFORPAC	ARF DIREX	Combined/Multinational Exercise	Multilat JTP Ex	7-May-13	11-May-13	Thailand
PACAF	PACIFIC ANGEL 13-3 Vietnam	Humanitarian Assistance	Med Dent Vet Eng CAP	10-Jun-13	14-Jun-13	Vietnam
CFE	ADMM+ HADR MM EWG FTX	Combined/Multinational Exercise	Multilat JTP Ex	10-Jun-13	21-Jun-13	Brunei
MARFORPAC	Brunei ADMM+ HADR/MM EX	Combined/Multinational Exercise	Bilat JTP Ex	11-Jun-13	21-Jun-13	Brunei
MARFORPAC	ARF Cross-Sectoral BIO-PreparednessWG	Defense and Military Contacts	Multilat Conf	3-Sep-13	5-Sep-13	Philippines
CFE	ASEAN and MARFORPAC Bio Workshop	Defense and Military Contacts	Multilat Conf	3-Sep-13	5-Sep-13	Philippines
<b>2012</b>						
CFE	PI SLS - Indonesia	Defense and Military Contacts	Multilat Conf	9-Oct-11	12-Oct-11	Indonesia
CFE	ADMM+ HADR Experts Working Group 2011	Defense and Military Contacts	Multilat Conf	2-Nov-11	5-Nov-11	China
CFE	Regional PI Planning WS Cambodia	Defense and Military Contacts	Multilat Conf	15-Nov-11	18-Nov-11	Cambodia
CFE	National PI Planning Workshop - Laos	Defense and Military Contacts	Bilat Conf	23-Jan-12	26-Jan-12	Laos
PACAF	Lao MMID Lab Training Workshop at AFRIMS	Combined/Multinational Education	Other Education	30-Jan-12	9-Feb-12	Thailand
CFE	MCIP 12 Staff Workshop 1	Combined/Multinational Exercises	Multilat JTP Ex	5-Feb-12	10-Feb-12	Bangladesh
USARPAC	Laos Medical First Responder Course	Combined/Multinational Training	Other Training	13-Mar-12	1-Apr-12	Laos
CFE	MCIP 12 Staff Workshop 2	Combined/Multinational Exercises	Multilat JTP Ex	16-Apr-12	21-Apr-12	Philippines
USARPAC	Laos MedsMEE/Bilateral Mil Med O...	Humanitarian Assistance	Med Dent Vet Eng CAP	18-Apr-12	22-Apr-12	Laos
PACAF	PAC ANGEL 12-2 Advanced Topics Ex-change	Combined/Multinational Education	Other Education	23-Apr-12	23-Jun-12	Laos
PACAF	13 AF PACIFIC ANGEL 12-2 Laos	Humanitarian Assistance	Med Dent Vet Eng CAP	23-Apr-12	28-Apr-12	Laos
PACAF	PAC ANGEL 12-2 ICU Nursing SMEE	Combined/Multinational Education	Other Education	24-Apr-12	25-Apr-12	Laos

Agency	Title	SCG Tool	Activity Type	Start Date	End Date	Location
PACAF	PAC ANGEL 12-2 BLSO SMEE	Combined/Multinational Education	Other Education	24-Apr-12	25-Jun-12	Laos
PACAF	PAC ANGEL 12-2 Trauma SMEE	Combined/Multinational Education	Other Education	26-Apr-12	28-Jun-12	Laos
USPACOM J07	APMMC_2012 PI & IDT Threats Workshop	Combined/Multinational Education	Other Education	7-May-12	11-May-12	Thailand
CFE	Pacific Armies Management Seminar FPC	Defense and Military Contacts	Multilat Conf	14-May-12	18-May-12	Australia
CFE	MCIP 12 Staff Workshop 3	Combined/Multinational Exercises	Multilat JTP Ex	4-Jun-12	9-Jun-12	Cambodia
CFE	Pacific Command Security Cooperation Conf	Defense and Military Contacts	Multilat JTP Ex	11-Jun-12	15-Jun-12	Thailand
APCSS	Comprehensive Health and Security	Defense and Military Contacts	SME Exch	13-Jun-12	15-Jun-12	Laos
PACAF	(13 AF) Asia Pac Mil Nursing Exchange	Defense and Military Contacts	Multilat Conf	1-Jul-12	12-Aug-12	Sri Lanka
CFE	Pacific Armies Management Seminar (PAMS)	Defense and Military Contacts	Multilat Conf	16-Jul-12	20-Jul-12	Australia
CFE	MCIP 12 Pacific Endeavor Ex	Combined/Multinational Exercises	Multilat JTP Ex	6-Aug-12	19-Aug-12	Singapore
CFE	ADMM+ HADR Experts Working Group 2012	Defense and Military Contacts	Multilat Conf	7-Aug-12	10-Aug-12	Vietnam
APCSS	Comprehensive Crisis Management 12-1	Combined Multinational Education	APCSS Academic	16-Aug-12	18-Sep-12	United States
CFE	Asia Pacific Multilat PI Planning Conf	Defense and Military Contacts	Multilat Conf	27-Aug-12	29-Aug-12	Indonesia
CFE	Optimizing Collaborative Health Response	Humanitarian Assistance	DPMA	30-Aug-12	31-Aug-12	Indonesia
CFE	MPAT Exercise Tempest Express 21	Combined/Multinational Exercises	Multilat JTP Ex	3-Sep-12	12-Sep-12	Australia
USPACOM J07	MPAT TEMPEST EXPRESS (TE) 21	Defense and Military Contacts	Multilat Conf	2-Sep-12	12-Sep-12	Australia
2011						
CFE	APC MADRO SLE - TH - 11587	Defense and Military Contacts	SLE Visit	14-Oct-10	16-Oct-10	Thailand
CFE	APC MADRO - TH - 11587	Humanitarian Assistance	Other Hum Assist	14-Oct-10	16-Oct-10	Thailand
CFE	UH Intl Conf on Disaster Management	Humanitarian Assistance	DPMA	15-Nov-10	16-Nov-10	United States
PACAF	(13 AF) Disease Surveillance Meeting	Defense and Military Contacts	Mil-to-Mil Ac	15-Nov-10	18-Nov-10	Laos
CFE	Asia-Pacific Peace Ops Conf IPC	Humanitarian Assistance	DPMA	27-Nov-10	1-Dec-10	Bangladesh
CFE	Asia Pacific Intel Chiefs Conf - StaffEx	Defense and Military Contacts	Multilat Conf	1-Dec-10	3-Dec-10	United States
APCSS	Comprehensive Crisis Management	Defense and Military Contacts	SME Exch	14-Dec-10	16-Dec-10	Indonesia
NPS	Lower Mekong Countries Dis Man Work-shop	Defense and Military Contacts	Multilat Conf	1-Jan-11	18-Sep-11	Vietnam, Cambodia
CFE	Emergency Management Asia Conf	Defense and Military Contacts	Multilat Conf	12-Jan-11	13-Jan-11	Thailand
CFE	PI Sr Leader's Symposium - 10056-PHL	Defense and Military Contacts	Multilat Conf	13-Jan-11	21-Jan-11	Philippines
CFE	PI Sr Leader's Symposium - 10056-PHL	Defense and Military Contacts	SLE Visit	13-Jan-11	21-Jan-11	Philippines
USARPAC	Laos Bilat Mil Med Outreach IPC	Defense and Military Contacts	Bilat Conf	21-Jan-11	28-Jan-11	Laos
PACAF	13 AF Laos Dz Surveillance Program	Humanitarian Assistance	Other Hum Assist	6-Feb-11	9-Feb-11	Laos
CFE	MCIP IPC	Combined/Multinational Exercises	Multilat JTP Ex	15-Feb-11	18-Feb-11	Australia

Agency	Title	SCG Tool	Activity Type	Start Date	End Date	Location
CFE	Asia Pacific Intel Chiefs Conf - SLS	Defense and Military Contacts	Multilat Conf	15-Feb-11	18-Feb-11	Japan
CFE	Asia Pacific Intel Chiefs Conf - TTX	Defense and Military Contacts	Multilat Conf	15-Feb-11	18-Feb-11	Japan
CFE	ASEAN Regional Forum DIREX	Humanitarian Assistance	DPMA	14-Mar-11	19-Mar-11	Indonesia
CFE	Natl PI planning 10053 - Laos	Defense and Military Contacts	Bilat Conf	4-Apr-11	8-Apr-11	Laos
CFE	MCIP MPC	Combined/Multinational Exercises	Multilat JTP Ex	11-Apr-11	15-Apr-11	Nepal
USARPAC	Laos MedSMEE/Bilateral Mil Med Outreach	Humanitarian Assistance	Med Dent Vet Eng CAP	18-Apr-11	22-Apr-11	Laos
CFE	Western Pacific Naval Symposium	Humanitarian Assistance	DPMA	25-Apr-11	29-Apr-11	Thailand
CFE	Asia Pacific Military Medicine Conf	Defense and Military Contacts	Multilat Conf	30-Apr-11	7-May-11	Australia
CFE	Asia-Pacific Peace Ops Conf SLS	Defense and Military Contacts	SLE Visit	16-May-11	19-May-11	Australia
CFE	Asia-Pacific Peace Ops Conf - Australia	Humanitarian Assistance	DPMA	16-May-11	19-May-11	Australia
PACAF	(13 AF) Blast Injury Symp - Air Trans	Humanitarian Assistance	Hum Mine Act	6-Jun-11	10-Jun-11	Thailand
CFE	Comprehensive Blast Injury Seminar	Humanitarian Assistance	Hum Mine Act	6-Jun-11	10-Jun-11	Thailand
CFE	APMCLS IPC Thailand	Humanitarian Assistance	DPMA	20-Jun-11	24-Jun-11	Thailand
CFE	MCIP FPC	Combined/Multinational Exercises	Multilat JTP Ex	20-Jun-11	24-Jun-11	Mongolia
CFE	NPS DM/PI Workshop IPC	Defense and Military Contacts	Multilat Conf	20-Jun-11	24-Jun-11	Thailand
APCSS	Comprehensive Crisis Management	Combined/Multinational Education	APCSS Academic	7-Jun-11	5-Aug-11	United States
CFE	Humanitarian Assist Resp Trng - HELP	Combined/Multinational Training	COE Training	11-Jul-11	13-Jul-11	United States
CFE	Health Emergencies in Large Populations	Combined/Multinational Education	COE Education	11-Jul-11	22-Jul-11	United States
CFE	Pacific Armies Chiefs Conf	Defense and Military Contacts	Multilat Conf	25-Jul-11	29-Jul-11	Singapore
PACAF	(13 AF) Pub Health SMEF - PAC ANGEL 11-1	Combined/Multinational Exercises	Other Training	1-Aug-11	30-Sep-11	Cambodia
PACAF	(13 AF) Asia Pac Mil Nursing Symposium	Defense and Military Contacts	Multilat Conf	1-Aug-11	5-Aug-11	Thailand
CFE	APMCLS FPC Thailand	Humanitarian Assistance	DPMA	2-Aug-11	4-Aug-11	Thailand
PACAF	Entomology SMEE - PACIFIC ANGEL 11-1	Combined/Multinational Exercises	Other Training	8-Aug-11	12-Aug-11	Cambodia
PACAF	(13 AF) PACIFIC ANGEL 11-1 Cambodia	Humanitarian Assistance	Med Dent Vet Eng CAP	8-Aug-11	12-Aug-11	Cambodia
PACAF	First Responder SMEE - PAC ANGEL 11-1	Combined/Multinational Exercises	Other Training	8-Aug-11	12-Aug-11	Cambodia
CFE	MCIP Pacific Endeavor 11	Combined/Multinational Exercises	Multilat JTP Ex	15-Aug-11	26-Aug-11	Singapore
USPACOM	Blood Product Safety Workshop	Combined/Multinational Education	Tech Training	15-Aug-11	21-Aug-11	Laos
USPACOM	Blood Product Safety Workshop	Combined/Multinational Education	Tech Training	22-Aug-11	26-Aug-11	Laos
CFE	APMCLS TTX Thailand	Humanitarian Assistance	DPMA	7-Sep-11	9-Sep-11	Thailand
CFE	NPS DM/PI WKS-VM-11573	Defense and Military Contacts	Multilat Conf	12-Sep-11	15-Sep-11	Vietnam

Agency	Title	SCG Tool	Activity Type	Start Date	End Date	Location
CFE	Asia Pacific Intel Chiefs Conf - Wk Grp	Defense and Military Contacts	Multilat Conf	12-Sep-11	16-Sep-11	Philippines
USPACOM J07	Disease Surveillance and Detecti... Copy	Humanitarian Assistance	Other Hum Assist	13-Sep-11	15-Sep-11	Maldives
CFE	Bilateral Defense Discussions Laos	Defense and Military Contacts	Bilat Conf	19-Sep-11	13-Sep-11	Laos
2010						
CFE	Asia-Pacific Enhance Complex Contin- gency	Humanitarian Assistance	Other Hum Assist	12-Oct-09	15-Oct-09	United States
PACAF	Laos Disease Surveillance Program	Humanitarian Assistance	Other Hum Assist	18-Jan-10	22-Jan-10	Laos
CFE	WHO Military Annex Devel Wkshp - HI (M)	Humanitarian Assistance	DPMA	24-Feb-10	25-Feb-10	United States
CFE	Sr Leaders Seminar - Laos 10043	Humanitarian Assistance	DPMA	20-Apr-10	23-Apr-10	Laos
USARPAC	Laos MEDRETE CFR OPC	Humanitarian Assistance	Med Dent Vet Eng CAP	26-Apr-10	29-Apr-10	Laos
CFE	PI Lab Trng (M) - Malaysia 9985	Humanitarian Assistance	DPMA	18-May-10	21-May-10	Malaysia
CFE	53 Laos Health Assessment	Humanitarian Assistance	DPMA	6-Jun-10	18-Jun-10	Laos
CFE	PI Revry Plng Symp 10049 Sri Lanka (M)	Humanitarian Assistance	DPMA	1-Jul-10	3-Jul-10	Sri Lanka
CFE	Regional Health Sys Strength Indonesia	Humanitarian Assistance	Other Hum Assist	26-Jul-10	28-Jul-10	Indonesia
USARPAC	Laos MEDRETE	Humanitarian Assistance	Med Dent Vet Eng CAP	4-Aug-10	10-Aug-10	Laos
PACAF	13 AF Laos Diseases Surveillance Program	Humanitarian Assistance	Other Hum Assist	16-Aug-10	19-Aug-10	Laos
CFE	83 MPAT ASEAN-UN-USAID Pandemic Influenz	Humanitarian Assistance	DPMA	16-Aug-10	20-Aug-10	Cambodia
USPACOM J7	ASEAN-UN-USAID PI TTX (MPAT & APCSS)	Humanitarian Assistance	Other Hum Assist	16-Aug-10	20-Aug-10	Indonesia
CFE	90 ASEAN Regional Forum Intercessional	Humanitarian Assistance	Other Hum Assist	2-Sep-10	3-Sep-10	Thailand
2009						
USARPAC	Laos HA Prjts 2 Hospitals & 1 School	Humanitarian Assistance	Other Hum Assist	1-Oct-08	1-Jul-09	Laos
USARPAC	Sri Lanka & Laos HAP Site Visits	Humanitarian Assistance	Other Hum Assist	1-Nov-08	22-Nov-08	Laos
USARPAC	Cambodia & Laos HAP Site Visit	Humanitarian Assistance	Other Hum Assist	10-Jan-09	30-Jan-09	Laos
USARPAC	Bangladesh, Cambodia & Laos HAP Site Visit	Humanitarian Assistance	Other Hum Assist	27-Apr-09	13-May-09	Laos
USARPAC	Laos HAP Site Visit	Humanitarian Assistance	Other Hum Assist	23-May-09	5-Jun-09	Laos

## Contact List

The following contact list is included with the intent to provide planners and deploying personnel initial contacts for disaster management-related organizations in Laos. Out of consideration for privacy concerns, this list does not contain individual contact information, but instead has email addresses and telephone numbers for offices.

Organization	Office	Email	Phone
ADB	ADB Lao PDR Resident Mission		+856 21 250444
UN Development Programme	Country Office	<a href="mailto:Info.la@undp.org">Info.la@undp.org</a>	+856 21 267 777
UNICEF	Vientiane Country Office	<a href="mailto:Vientiane@unicef.org">Vientiane@unicef.org</a>	+856 21 315200
ASEAN Regional Forum	National Disaster Management Office		+856 21 219 450
Laos Red Cross	Lao Red Cross Headquarters	<a href="mailto:info@laoredcross.org.la">info@laoredcross.org.la</a>	+856 21 216610
USAID			
WB	Country Office	<a href="mailto:worldbanklaos@worldbank.org">worldbanklaos@worldbank.org</a>	+856 21 266 200
WFP	Vientiane Country Office		+856 21 330300
WHO			
Laos Ministry of Foreign Affairs		<a href="mailto:ict@mofa.gov.la">ict@mofa.gov.la</a>	+856 21 413-148
Laos Ministry of Health		<a href="mailto:contact@moh.gov.la">contact@moh.gov.la</a>	+856 21 214-000
Laos Ministry of Information, Culture, and Tourism			+856 21 212-251
Laos Ministry of Justice			+856 21 412-054

## Force Protection/Pre-Deployment information

The following information is provided for pre-deployment planning and preparations. Visit [travel.state.gov](http://travel.state.gov) prior to deployments for further up-to-date information.

### Passport/Visa

- Passports and Visas are required for U.S. citizens. Passport must be valid for 6 months beyond stay.

### Emergency Contact Information

For U.S. Citizens, contact the U.S. Embassy in Vientiane:

- Rue Bartholonie (near Tat Dam), in Vientiane
- Telephone: (856-21) 267-000,
- Recorded Emergency Information: (856-21) 267-111;
- Duty Officer Emergency Cellular Telephone (856-20) 5550-2016;
- Embassy-wide fax number (856-21) 267-190

### Airport Fees

- Laos Transit Visa for 30 Days (On-Arrival): US\$35 (see Visa on Arrival instructions on next page)

### Currency Information

- The currency in Laos is the Kip

### Additional Information

- No vaccinations are required for visits to Laos.
- Vientiane: +856 (area code: 21)
- Laos Time Zone is GMT/UTC +7 (<http://www.timeanddate.com/worldclock/>)

## Laos Visa Procedures

### Visa on Arrival for U.S. Citizens

Official visas on arrival require at least 10 business days for processing. Visas on arrival can be granted for official business in tourist passports only in certain situations on a case-by-case basis by approval of the US Ambassador to Laos.

All requests for visas on arrival for official business require the US Embassy to submit a diplomatic note to MFA with the following information:

Full Name:

Title: (spelled out, no acronyms)

SSN:

Passport Number:

Passport Type:

Date of Passport Issue:

Place of Passport Issue:

Date of Passport Expiration:

(Note: Visas will not be granted for passports with less than 6 months validity remaining.)

Organization you represent:

Purpose of visit: Provide Training to DAO (for example)

You must also bring two passport size photos to present to the officer at the visa on arrival desk at the airport. Fill out the attached form and have it ready when you walk into the terminal. Forms are available in the terminal, but it speeds the processing up a bit if you have the form filled out.

When the MOFA approves your visa on arrival, carry a color copy of that with you. You should give that to the VOA desk officer along with your completed application and photo and they will process your VOA.

After you get the VOA in your passport, you will still need to go through the passport control desk. Just follow the other travelers or watch where they go when their VOA is approved. Passport control is where you present your arrival card (they may have handed them out on the airplane) and passport.

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## Laos Characteristics

**Official Name:** Lao People's Democratic Republic (Lao PDR)

**Government:** Communist State. Independence was proclaimed on 19 July 1949 (France)

**Language:** Lao (official), French, and English

**Geography:** Laos has an area of 236,800 sq. miles which is in comparison is the size of Utah. The Capital of Laos is Vientiane. There are 16 provinces: Attapu, Bokeo, Bolikhamxai, Champasak, Houaphan, Khammouan, Louangnamtha, Louangphrabang, Oudomxai, Phongsali, Salavan, Savannakhet, Vientiane\*, Viangchan, Xaignabouli, Xekong, and Xiangkhoang.

**People:** There are more than 6.3 million people living in Laos. The national language is Lao, although French, English, and various ethnic languages are used.

The ethnic groups comprising the Laos population are; Lao-55%, Khmou-11%, Hmong-8%, other (over 100 minor ethnic groups)-26%. There are two primary religions recognized by the Laos which include Buddhist-67%, Christian-1.5%, other and unspecified at 31.5%.

**Climate:** Tropical monsoon; rainy season (May to November); dry season (December to April)

**Military Branches:** Lao People's Armed Forces (LPAF): Lao People's Army (LPA; includes Riverine Force), Air Force (2010)

**Reference CIA World Factbook:** <https://www.cia.gov/library/publications/the-world-factbook/geos/la.html>



Three horizontal bands of red (top), blue (double width), and red with a large white disc centered in the blue band; the red bands recall the blood shed for liberation; the blue band represents the Mekong River and prosperity; the white disc symbolizes the full moon against the Mekong River, but also signifies the unity of the people of the Pathel Lao, as well as the country's bright future.

## Health Information

### Medicines/Items you may need:

- The prescription medicines you take every day. Make sure you have enough to last during your trip. Keep them in their original prescription bottles and always in your carry-on luggage.
- Medicine for diarrhea, usually over-the-counter.
- Iodine tablets and portable water filters to purify water if bottled water is not available.
- Antibacterial hand wipes or alcohol-based hand sanitizer containing at least 60% alcohol.
- To prevent insect/mosquito bites, bring:
  - Lightweight long-sleeved shirts, long pants, and a hat to wear outside, whenever possible.
  - Flying-insect spray to help clear rooms of mosquitoes.

### During Your Trip:

Many diseases, like malaria and dengue, are spread through insect bites. One of the best protections is to prevent insect bites by:

- Using insect repellent (bug spray) with 30%-50% DEET. Picaridin, available in 7% and 15% concentrations, needs more frequent application.
- Wearing long-sleeved shirts, long pants, and a hat outdoors.
- Remaining indoors in a screened or air-conditioned area during the peak biting period for malaria (dusk and dawn).

### Food and Water:

Diseases from food and water are the leading cause of illness in travelers. Follow these tips for safe eating and drinking:

- Wash your hands often with soap and water, especially before eating. If soap and water are not available, use an alcohol-based hand gel (with at least 60% alcohol).

- Drink only bottled or boiled water, or carbonated (bubbly) drinks in cans or bottles. Avoid tap water, fountain drinks, and ice cubes. If this is not possible, learn how to make water safer to drink.
- Do not eat food purchased from street vendors.
- Make sure food is fully cooked.
- Avoid dairy products, unless you know they have been pasteurized.
- Check bottles for cracked seals.

### Traveling with Medications

When medications are necessary for travel, it is important to remember the following:

- Original containers: All medications should be carried in their original containers with clear labels, so the contents are easily identified. Although many travelers like placing medications into small containers or packing them in the daily-dose containers, officials at ports of entry may require proper identification of medications.
- Prescriptions: Travelers should carry copies of all prescriptions, including their generic names.
- Physician notes: For controlled substances and injectable medications, travelers are advised to carry a note from the prescribing physician on letterhead stationery.
- Restricted medications: Travelers should be aware that certain medications are not permitted in certain countries. If there is a question about these restrictions, particularly with controlled substances, travelers are recommended to contact the embassy or consulate of the destination country.

## Acronyms and Abbreviations

Acronym	Definition
AADMER	Agreement On Disaster Management and Emergency Response
AAR	Aid and Relief, Japan
ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Center
AEA	Aide Et Action
AFESIP	Acting For Women In Distressing Circumstances
AI	Avian Influenza
ALC	Action With Lao Children
AOI	Aide Odontologique Internationale
APCSS	Asia-Pacific Center For Security Studies
ARF	ASEAN Regional Forum
ASEAN	Association of Southeast Asian Nations
AUDMP	Asian Urban Disaster Mitigation Program
AUSAID	Australia Agency for International Development
BN	Basic needs
BSL	Bio-Security Level
CCEM	Committee For Ethnic Minorities
CCL	Coopération Avec Le Laos
CDC	Center for Disease Control and Prevention
CFE-DMHA	Center For Excellence In Disaster Management and Humanitarian Assistance
CLI	Community Learning International
CORD	Christian Outreach For Relief and Development
CRF	Croix-Rouge Francaise
CUSO-VSO	CUSO-VSO Lao
CWS	Church World Service
DCA	Department of Civil Aviation
DDMC	District Disaster Management Committee
DDMCC	Department of Disaster Management and Climate Change
DDMP	District Disaster Management Plan
DLF	Department of Livestock and Fisheries
DMH	Department of Meteorology and Hydrology
DOHP	Department of Hygiene and Prevention
DOS	Department of State
DRC	Danish Red Cross
DRM	Disaster Risk Management

Acronym	Definition
DRMWG	Disaster Risk Management Working Group
DRR	Disaster Risk Reduction
EARS	Early Aberration Reporting System
ECHO	European Commission Humanitarian Aid and Civil Protection Department
EDL	Electricite Du Laos
EIA	Environmental Investigation Agency
EID	Emerging Infectious Disease
EOC	Emergency Operations Center
EWORS	Early Warning Outbreak Recognition System
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investments
FET	Field Epidemiology Training
FHI	Family Health International
GAPE	Global Association for People and the Environment
GDG	Gender and Development Group
GNI	Good Neighbors International
GNI	Gross National Income
HF	Health Frontiers
HFA	Hyogo Framework For Action
HHA	Health Care and Hope Alliance
HI	Handicap International
HOPE	Hospital Preparedness In Emergencies
HPA	Health Poverty Action
IACP	Inter-Agency Contingency Plan
IASC	Inter-Agency Standing Committee
IBS/EBS	Indicator-Based and Event-Based Surveillance
ICSH	International Clinic Setthathirath Hospital
ILI	Influenza Like Illness
ISDR	International Strategy For Disaster Reduction
JILA	Japan International Labour Association
JVC	Japan International Volunteer Center
LAA	Lao Airport Authority
LFTU	Lao Federation of Trade Unions
L-JATS	Lao-Japan Airport Terminal Services
LMI	Lower Mekong Initiative
LNAR	Lao PDR National Assessment Report
M&E	Monitoring and Evaluation
MAG	Mines Advisory Group
MBDS	Mekong Basin Disease Surveillance

Acronym	Definition
MCC	Mennonite Central Committee (Laos)
MCDA	Military and Civil Defense Assets
MDG	Millennium Development Goals
MLSW	Ministry of Labor and Social Welfare
MOFA	Ministry of Agriculture and Forestry
MOH	Ministry of Health'S
MOND	Ministry of National Defense
MRC-FEMS	Mekong River Commission Flood Emergency Management System
MTU	Medical Teaching Unit
NASRET	National Search and Rescue Team
NCA	Norwegian Church Aid
NCCDC	National Committee For Communicable Disease Control
NCLE	National Center For Laboratory and Epidemiology
NDMC	National Disaster Management Committee
NDMO	National Disaster Management Office
NDMP	National Disaster Management Plan
NDPC	National Disaster Prevention Committee
NGO	Nongovernmental Organization
NPA	Norwegian People's Aid
NSEDP	National Socio-Economic Development Plan
NSSNSD	National Surveillance System For Notifiable Selected Diseases
NT2	Nam Theun 2
NTPC	Nam Theun 2 Power Company
OCHA	Office for the Coordination of Humanitarian Affairs
OSH	Occupational Safety and Health
PACAF	Pacific (USARPAC), Pacific Air Force
PAMS	Pacific Armies Management Seminar
PCF	Pestalozzi Children's Foundation
PCR	Polymerase Chain Reaction
PDMC	Provincial Disaster Management Committee
PDMP	Provincial Disaster Management Plan
PHC	Primary Health Care
PHE	Public Health Emergency
PMO	Prime Minister'S Office
SCI	Save the Children International
SFE	Service Fraternel D'Entraide
SRC	Swiss Red Cross
SVA	Shanti Volunteer Association
TATF	Technical Assistance and Training Facility

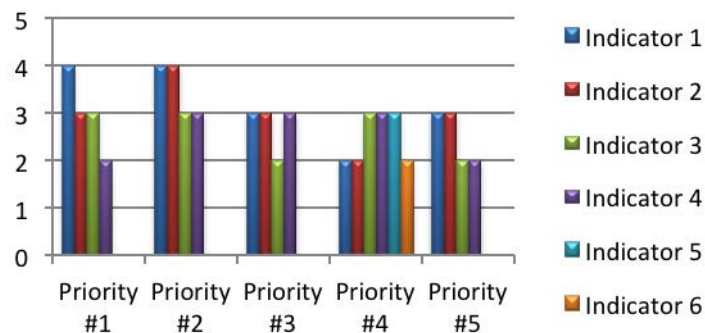
Acronym	Definition
TE	TEMPEST EXPRESS
TGH	Triangle Generation Humanitaire
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNHCR	United Nations High Commissioner For Refugees
UNICEF	United Nations International Children's Emergency Fund
UNISDR	United Nations Office For Disaster Risk Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNODC	United Nations Office On Drugs and Crime
UNOPS	United Nations Office For Project Services
USAID	United States Agency for International Development
USARPAC	United States Army, Pacific
USPACOM	United States Pacific Command
UXO	Unexploded Ordnance
VFI	Village Focus International
WB	World Bank
WFP	World Food Programme
WHH/GAA	Welthungerhilfe / German Agro Action
WHO	World Health Organization
WREA	Water Resources and Environment Agency
WVL	World Vision Lao PDR

## HFA Country Progress Report

The Hyogo Framework for Action (HFA) was adopted as a guideline to reduce vulnerabilities to natural hazards. The HFA assists the efforts of these countries to become more resilient to, and manage better the hazards that threaten their development. Below is a summarization of the interim 2011-2013 results of the HFA for Lao PDR. The full report is available at [http://www.preventionweb.net/files/29098\\_lao\\_NationalHFAProgress\\_2011-13.pdf](http://www.preventionweb.net/files/29098_lao_NationalHFAProgress_2011-13.pdf).

Overall, the level of HFA progress reported for Laos matched the regional averages for Asia-Pacific. Laos generally scored at or above the regional average on having frameworks, systems, and assessments in place. The areas where Laos scored below the regional average were in the implementation and resourcing of disaster risk reduction (DRR) programs.

**Level of Progress\* Achieved for HFA Priorities**



**Future Outlook Area 1:** *Integration of disaster risk considerations into sustainable development policies, planning and programming at all levels.*

**Challenges:** Inadequate resources; common understanding among DRR stakeholders; capacity to translate strategic plans into program and project plans.

**Future Outlook Priorities:** Strengthen implementation and integration of the strategic plan on DRR. Clarify DRR roles and responsibilities of ministries.

**Future Outlook Area 2:** *Development and strengthening of institutions, mechanisms, and capacities at all levels to build resilience to hazards.*

**Challenges:** Weak institutional arrangements; resources to implement decentralizing.

**Future Outlook Priorities:** NDMC capacity development. More national and international stakeholders to work on building resilience to disasters.

**Future Outlook Area 3:** *Incorporation of risk reduction approaches in the preparedness, response, and recovery programs during the reconstruction of affected communities.*

**Challenges:** Inadequate resources; implementation of programs; inconsistent conduct of capacity assessments.

**Future Outlook Priorities:** Translate the NDMP into implementation based on geographic features; align the NDMP with the national socio-economic development plan.

**Future Outlook Area 4:** *Post-2015 framework for DRR.*

**Lao PDR Summary of the Hyogo Framework for Action (HFA) 2005-2015**  
**Building the Resilience of Nations and Communities to Disasters**

Expected Outcome  
 The substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries.

**Strategic Goals**

The integration of disaster risk reduction into sustainable development policies and planning	The development and strengthening of institutions, mechanisms, and capacities to build resilience to hazards.	The systemic incorporation of risk reduction approaches into the implementation of emergency preparedness, response and recovery programs.
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**Priorities for Action**

	1. Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation.	2. Identify, assess and monitor disaster risks and enhance early warning.	3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels.	4. Reduce the underlying risk factors.	5. Strengthen disaster preparedness for effective response at all levels.
Laos Key Activities	<ul style="list-style-type: none"> <li>• NDMO and NDPPCC established</li> <li>• DRR integrated into national and provincial laws and plans</li> <li>• Increasing budgets for DRM</li> <li>• Improved PDPPCC and DDPPCC capacity</li> <li>• GOL set up interagency coordination mechanisms</li> </ul>	<ul style="list-style-type: none"> <li>• Conducted risk and vulnerability assessments</li> <li>• Improved information sharing on DRR</li> <li>• Developed community-based EWS</li> </ul>	<ul style="list-style-type: none"> <li>• Mainstreaming DRR in school curricula</li> <li>• Conducting after action reviews to inform DRR planning</li> <li>• GOL is conducting public awareness activities</li> </ul>	<ul style="list-style-type: none"> <li>• GOL has tied DRR to environmental, health, and economic laws and impacts</li> <li>• NGOs conducting biodiversity programs</li> </ul>	<ul style="list-style-type: none"> <li>• Instituted DRR training for health workers</li> <li>• Conducting regular disaster response drills</li> <li>• Structures do exist for coordinating with international stakeholders</li> </ul>
Laos Challenges and Constraints	<ul style="list-style-type: none"> <li>• Lack of understanding of DRR in key sectors</li> <li>• Shortfalls in policy maker capabilities and advocacy</li> <li>• Shortages in financial and human resources – especially at local levels</li> <li>• Limited NDMO financial and technical support</li> <li>• Limited outreach to civil society organizations on DRR</li> </ul>	<ul style="list-style-type: none"> <li>• Limited resources, technology and funding</li> <li>• Different information systems used</li> <li>• Poor ICT infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Limited funding and resources for implementation</li> <li>• No cost benefit analyses for assessments</li> <li>• Lack of a national public awareness strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental impact analysis is new to Laos – still need to build expertise</li> <li>• Limited resources</li> <li>• Decentralizing implementation to local levels is slow</li> </ul>	<ul style="list-style-type: none"> <li>• Limited financial and human resources</li> <li>• Gaps in disaster preparedness and contingency planning</li> <li>• Processes for requesting external assistance are time consuming</li> <li>• Weak coordination mechanisms with external stakeholders</li> </ul>



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