

ASIAN DISASTER REDUCTION CENTER

Final Report Laos PDR



Visiting Researcher

Program on date 10 January to 24 march 2024 (FY2023)

Report by: Ms Sonekham PHOMMAHAXAY

Social Welfare Department , Ministry of Labour and Social Welfare

Disclaimer

This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries. The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.

Contents

1. Introduction	
1.1 Background and significance.....	4
1.2 Specific Aims.....	4
1.3 Expected results.....	5
1.4 Scope of Study.....	5
2. Disaster management System in Lao	5
2.1 General Overview of the County.....	5
2.2 Geographical Data.....	5
2.3 Climate Change information	7
3. Disaster Risk Situation Lao PDR	8
3.1 History of natural Disaster on July 2018 floods.....	10
3.2 Disaster Risk Management Principles.....	11
4. Disaster Risk management Mechanisms	12
4.1 Role Central Disaster management Committee.....	13
4.2 Role province Disaster management Committee.....	13
4.3 Role District Disaster management Committee.....	13
4.4 Role Village Disaster management Committee.....	13
5. Infrastructure System DRR.....	14
6. Disaster Risk management plan in Japan and Laos.....	23
6.1 Disaster Risk management plan in Japan.....	23
6.2 Disaster Countermeasures Laws and Acts.....	23
6.3 Disaster management planning.....	24
6.4 Mission of the office Japan.....	25
6.5 National Conference promoting DRR.....	26
6.6 Regional Cooperation Through ADRC Center.....	27
6.7 Community Disaster management plan	28
7. Summary Learnings DRR in Lao.....	30
8. Conclusion Lessons Learned From Japan.....	31
9. References.....	34

1. Introduction

1.1 Background and significance

Laos is a country with a moderate level of disaster risk, but if compared to Developing countries with the level of risk high to ensure such full and effective implementation yet it requires joint effort at both national to local level full and effective implementation of these instruments is the key. Having all these these legal framework in place is not enough,

currently government is to work Disaster Risk Reduction into the 9th National Social-Economic Development plan and formulating the national Strategy action plan but province and District not expand to connection Social-Economic Province and District. Because Staff is have to Lack of limited capacity budget and Budget implementation, it is clear that it is still at high risk in terms of the management of potential disasters due to a lack of technical knowledge. There is still lack of tools and a low level of awareness of disaster risk. In particular, communities in high-risk areas have limited access to information for people in remote areas, infrastructure is not adequate, community leader and people do not understand the risks, and there is no plan to cope with disasters that may occur.

District and village disaster management committees are not yet strong and have no understanding of disaster risk reduction, so there is no plan to deal with disasters.

1.2 Specific Aims

The aim of the proposed research is to study the Community/District municipality Disaster Risk Reduction plan of Japan which is the key to community based disaster risk management for resilience.

1.3 Expected results

2. To inform the district and village committees of their rights and responsibilities to plan and prepare in advance to deal with potential disaster.
3. To build community's disaster preparedness and response capacity, particularly through the development of a disaster risk reduction plan.

1.4 Scope of Study

The research is Focus Strengthening Community based Disaster Risk management in Lao through the Development of District and Community level Disaster Risk Reduction Plan Lessons Learned from Japan.

2. Disaster management System in Lao

2.1 General Overview of the Country

Laos is a Landlocked Country location in Southeast Asia bordered by Burma, China, Thailand, Cambodia and Viet Nam. Most of the country is Mountainous and thickly forested, has a Land area of 236,000 sq.km and The Mekong River form a large part of the western boundary with Thailand, The Mekong river has a length of approximately 4,900 km, flowing from its source on the Tibetan Plateau in China through Myanmar, Lao PDR, Thailand, Cambodia and Viet Nam via a large delta into the sea, Mekong River length in Laos 1683 km, Laos is have Main River 7 River is Nam tha River a length 325 km, Namsong River 36 km, Nam Ngum River 354 km



,Namkaan River , Nam ou River 448 km, Nam xeBangfai River and Nam Banghiang River, have 17 provinc 148 District, Divided into three area is Northern,central and Sourhern.

2.2 Geographical Data

Laos's total population was 7.58 million in January 2023. Data shows that Laos's population increased by 105 thousand (+1.4 percent) between 2022 and 2023. 49.6 percent of Laos's population is female, while 50.4 percent of the population is male and is a multiethnic country with a long history of rural, small-village life. A semblance of national identity has only been promoted since 1975. Historically

Population of Laos (2024 and historical)

Year	Population	Yearly % Change	Yearly Change	Migrants (net)	Median Age	Fertility Rate	Density (P/Km ²)	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	Laos Global Rank
2024	7,736,681	1.35 %	102,902	-9,999	24.7	2.37	34	37.9 %	2,933,677	0.10 %	8,118,835,999	103
2023	7,633,779	1.39 %	104,304	-9,999	24.4	2.41	33	37.3 %	2,849,332	0.09 %	8,045,311,447	103
2022	7,529,475	1.41 %	104,418	-9,999	24.1	2.45	33	36.7 %	2,765,699	0.09 %	7,975,105,156	103
2020	7,319,399	1.49 %	107,346	-10,303	23.5	2.54	32	35.5 %	2,600,131	0.09 %	7,840,952,880	105
2015	6,787,419	1.43 %	92,800	-12,995	22.0	2.77	29	32.5 %	2,206,330	0.09 %	7,426,597,537	106
2010	6,323,418	1.56 %	94,090	-27,446	20.2	3.15	27	29.7 %	1,877,890	0.09 %	6,985,603,105	107
2005	5,852,970	1.51 %	84,423	-24,171	18.4	3.67	25	26.7 %	1,564,297	0.09 %	6,558,176,119	103
2000	5,430,853	1.96 %	100,684	-34,009	17.3	4.40	24	21.6 %	1,171,236	0.09 %	6,148,898,975	103
1995	4,927,432	2.69 %	122,598	-14,290	16.8	5.35	21	17.1 %	843,190	0.09 %	5,743,219,454	105
1990	4,314,443	2.89 %	114,568	-3,100	16.7	6.08	19	15.2 %	657,373	0.08 %	5,316,175,862	111
1985	3,741,604	2.56 %	88,817	-1,388	16.7	6.36	16	13.6 %	509,071	0.08 %	4,861,730,613	113
1980	3,297,519	1.82 %	56,960	-17,366	16.7	6.33	14	12.2 %	403,247	0.07 %	4,444,007,706	115
1975	3,012,720	2.40 %	67,487	-13,881	17.4	6.29	13	11.2 %	338,147	0.07 %	4,069,437,231	115
1970	2,675,283	2.37 %	59,165	0	17.5	6.31	12	9.7 %	258,749	0.07 %	3,695,390,336	117
1965	2,379,456	2.31 %	51,385	0	17.7	6.32	10	8.3 %	198,298	0.07 %	3,337,111,983	115
1960	2,122,532	2.31 %	45,829	0	18.1	6.29	9	7.9 %	168,533	0.07 %	3,019,233,434	116
1955	1,893,389	2.36 %	41,743	0	18.4	6.26	8	7.6 %	143,427	0.07 %	2,746,072,141	115

Source: Worldometer (www.Worldometers.info)

2.3 Climate Chang information

The climate of Lao PDR is defined by the tropical monsoon. The rainy season runs roughly May through November, and the dry season runs from December to April. The dry season can be divided into the cooler months of NovemberFebruary and the hot months of March and April. While the monsoon

tends to occur across the entire country all at once, rainfall varies regionally. The higher elevations of southern Laos can see 3,700 mm/year of rainfall, while the central areas of Savannakhet and Vientiane receive 1,400-1,700 mm/year, and northern areas may see 1,200 mm/year. Rainfall varies widely from year to year, and drought is common. Temperatures also vary from north to south and with elevation; the hot, dry season can see 40°C days along the Mekong, and the cool, dry season can see 5°C days in the uplands.¹⁴² Figure 5 shows the mean temperature and rainfall nationally during the course of the year

Harzard/month	Jan	Feb	mar	Apr	may	Jun	Jul	Aug	Sep	oct	Nov	Dec
Flood						Yellow	Yellow	Yellow	Yellow	Yellow		
Drought					Orange	Orange	Orange					
Earthquake	Blue	Blue	Blue						Blue	Blue	Blue	Blue
Storm			Green	Green	Green							
Fire	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow						

(Disaster Seasoning Calendar in Lao)



Flooded Areas in Sanamxay District, Attapue Province. [UN-HABITAT]

Lao PDR has suffered natural disasters such as floods, droughts, landslides and earthquakes due to climate change, which has severely affected socio-

economic development and the livelihoods of the people. Therefore, it is important to increase prevention, responsiveness and post-disaster recovery (from natural and man-made disasters), as well as disaster risk insurance, to mitigate the impacts and provide timely monitoring and warning.

3. Disaster Risk Situation in Lao PDR

Lao PDR is a landlocked country, with a number of unique geographical regions. About two-thirds of the land area is mountainous. The country has a tropical climate with two seasons. The dry season is between mid-October and mid-May and is influenced by the northeast monsoon, mainly during October to February. The coolest period of this season is November to January. The hottest period is from March to May. The rainy season is from mid-May to mid-October, when the southwest monsoon winds from the Indian Ocean and the Gulf of Thailand bring high humidity into Lao PDR. Between July and September there are heavy rainfalls, especially very frequent rainfalls in August. The average annual rainfall across the country is between 1,900 to 3,500 mm. The wet season is generally hot to extremely hot.

Due to its geographical conditions and the location of the country, Lao PDR has a high risk from natural disasters and climate change, such as floods, droughts, storms, and landslides, as well as epidemics, etc. The country still relies on natural resources and agricultural production and has limited and insufficient disaster prevention, preparedness and response capabilities, and this is partly why it remains a least developed country. Climate change is also a risk factor for Lao PDR, as more people will be affected by natural disasters. Increasing rainfall and temperatures are expected to alter the Mekong hydrological system, and flood and drought risks are expected to increase.

The National Disaster Risk Report 2010 indicated the situations of risk and vulnerable areas affected by major disasters such as floods, landslides, storms and droughts as follows:

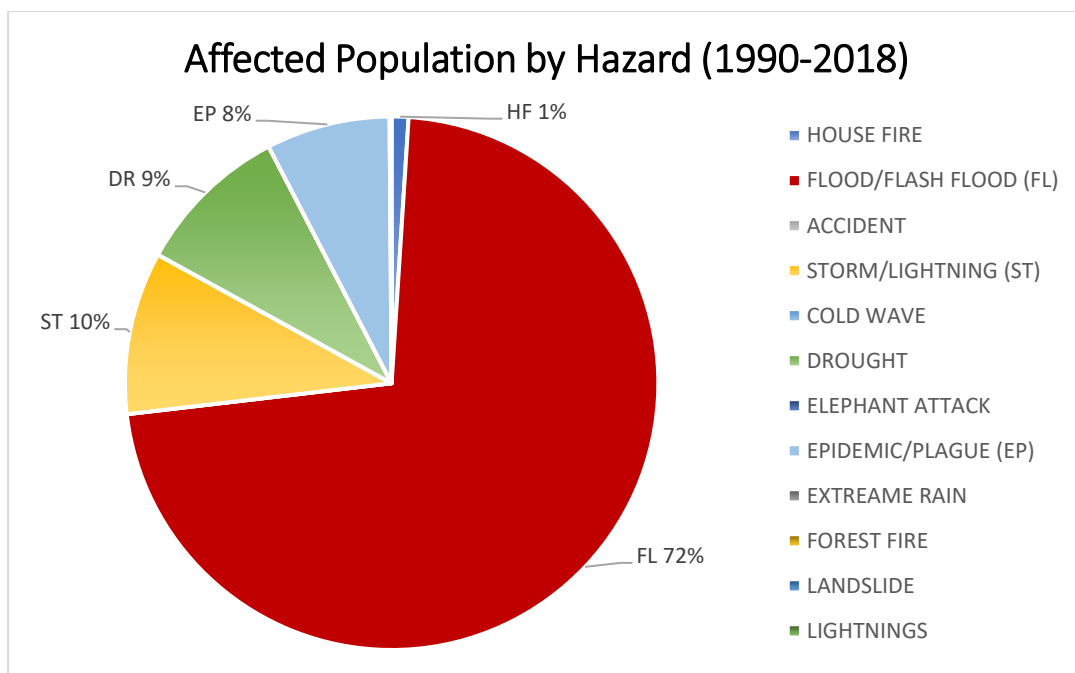
+ **Flood risk areas:** 8 rivers are risky for flooding, include: Nam Ou, Nam Ngum, Nam Ngiep, Nam Xan, Xe Bang Fai, Xe Bang Hieng, Xedon and Xe Kong

Storm risk areas: This includes typhoons or cyclones, and tropical storms, which cause strong winds and heavy rain as well as hailstorms that may cause death or injury and affect or damage property of people, residential houses, public buildings, schools, hospitals, agricultural production areas etc

Drought risk areas: Droughts mostly have direct impacts on agriculture and food security, people's livelihoods, clean water sources, and sanitation. The data analysis indicated the common drought risk areas in different provinces with moderate and severe level as follows:

- The dry season, between October and March, may occur in Oudomxay, Vientiane, Khammouane, Bolikhamxay and Savannakhet provinces;
- The rainy season, between April and September, is likely to occur in Xiengkhouang province, mainly in Xaysomboun province, the area adjacent to Bolikhamxay province, Dongheng area in Savannakhet province;
- The rainy season, between June and September, is likely to occur in Xiengkhouang, most of Houaphanh and Xaysomboun provinces, and the northern part of Bolikhamxay province, the eastern part of Savannakhet province, and the northern part of Salavane province;
- In one-year period, between April and March, drought may occur in Xiengkhouang and surrounding areas.

Lao PDR is exposed to a range of climactic, hydro, and geological phenomena that include storms, floods, landslides, droughts, strong winds, and small earthquakes. In recent years, the frequency and intensity of extreme weather events has increased with damaging floods occurring in the central and southern part of the country along the Mekong River. The main natural disaster in the Lao PDR - both in terms of frequency.



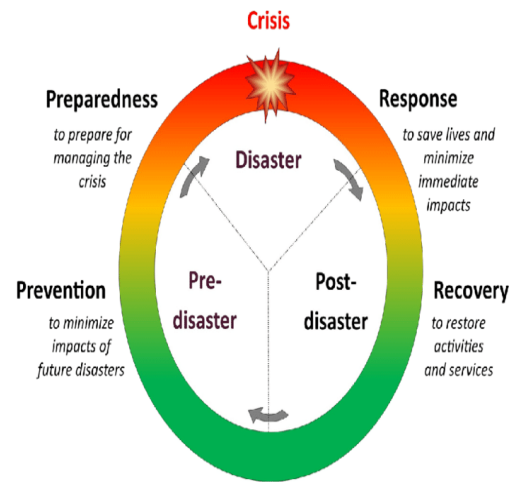
No	Disaster	Year 2023 /	Total Damage /kip
1	Flood	30	1.106.519.329.284
2	Drought	1	1.85188.500
3	Earthquake	16	0
4	Storm	6	1.371.397.000
5	Fire	21	4.786.951.000

(Data Harzard Damdge in laos 2023)

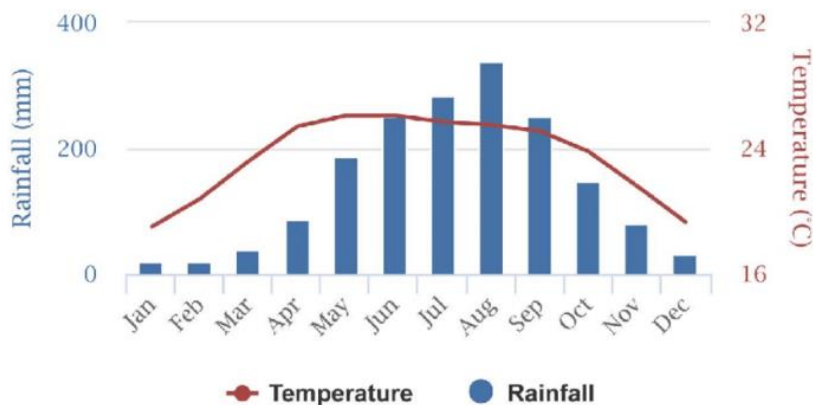
3.1 History of Natural Disaster on July 2018 – Floods

Tropical Storm Son-Tinh caused heavy rains in 13 provinces and flash floods in Sanamxay District in Attapeu Province. Heavy rainfall over several days in Attapeu resulted in dangerously high river and dam levels. An incident at the Xe Pian-Xe Nam Noy hydropower dam, still under construction in Attapeu, resulted in flash flooding on 23 July. As illustrated in Figure 10168, eight villages were affected in Lao PDR: Ban Mai, Ban Hin Lath, Ban Tha Sengchan, Ban Thahintai, Ban Sanong, Ban Thae, Ban Phonsaath, and Ban Nongkhae. Downstream villages in Cambodia were also devastated. The collapse of the dam affected nearly 7,000

people and displaced more than 1,000. More than 100 houses were damaged, forcing people to seek shelter in local government buildings and schools. Tropical Storm Son-Tinh brought fresh, heavy rains and hit Attapeu Province's Sanamxay District the hardest. As of 28 July, some 16,250 people had been affected by the combined floods; 19 people are known to have died and more than 7,300 displaced people were living in temporary shelters. Roads, bridges, schools, and agricultural land were damaged or destroyed. The response in some areas was cut off to all approaches except by boat or helicopter



Laos dam collapse



2..3 Disaster Risk Management System in Lao

3.2 Disaster Risk Management Principles

Disaster Risk Management Cycle is a theory of disaster risk management for dealing with disaster that is difficult to predict the results. It is a unique and non-linear therefore must be carried out in a circular manner continuously and cannot separate particular parts in each process. As a result, Disaster Risk Management is a Holistic Approach for sustainable safety from prevention and mitigation, preparedness, respond, relief, and recovery. The operation in each period of time, the disaster may have overlapping during the operation depend on the level of disaster

4. Disaster Risk management Mechanisms

In 1999, a national government structure was built to guide the disaster risk reduction and emergency response management in Laos. The government also created the National Disaster Management Committee (NDMC) which includes Directors from various ministries; the NDMC is tasked with coordinating early warning, preparedness, emergency response, and recovery activities.¹⁸⁰ The National Disaster Management Office (NDMO) was assigned as the Secretariat to the NDMC, and a focal point structure was later established to include NDMC members and units. Functioning under the Ministry of Labour and Social Welfare, the NDMO is the Secretariat to the NDMC, with further focal point structures at provincial and district levels

The Disaster Management Committees are non-standing organizations, whose role is to assist and advise, deliberate, supervise and coordinate with the sectors and local authorities concerned, to elaborate and implement disaster management activities.

The Disaster Management Committees consist of:

1. Central Disaster Management Committee;
2. Provincial Disaster Management Committees;
3. District Disaster Management Committees;

4. Village Disaster Management Committees.

4.1 Role Central Disaster Management Committee

The Central Disaster Management Committee abbreviated as “CDMC” shall be appointed by the Prime Minister based on a proposal made by the Minister of Labor and Social Welfare. Its role is to support the implementation of policies, strategies, measures, laws, regulations, plans, programs, and projects related to disaster management, for which the Department of Social Welfare, under the Ministry of Labor and Social Welfare, is the Secretariat. The Central Disaster Management Committee

4.2 Role Provincial Disaster Management Committee

The Provincial Disaster Management Committee abbreviated as “PDMC” shall be appointed by the relevant Provincial Governor or the Mayor of Vientiane Capital, based on a proposal made by the Director of Labor and Social Welfare Department. Its role is to support the implementation of policies, strategies, measures, laws, regulations, plans, programs, and projects related to disaster management, for which the Social Welfare Division, Provincial Labor and Social Welfare Department, is the Secretariat.

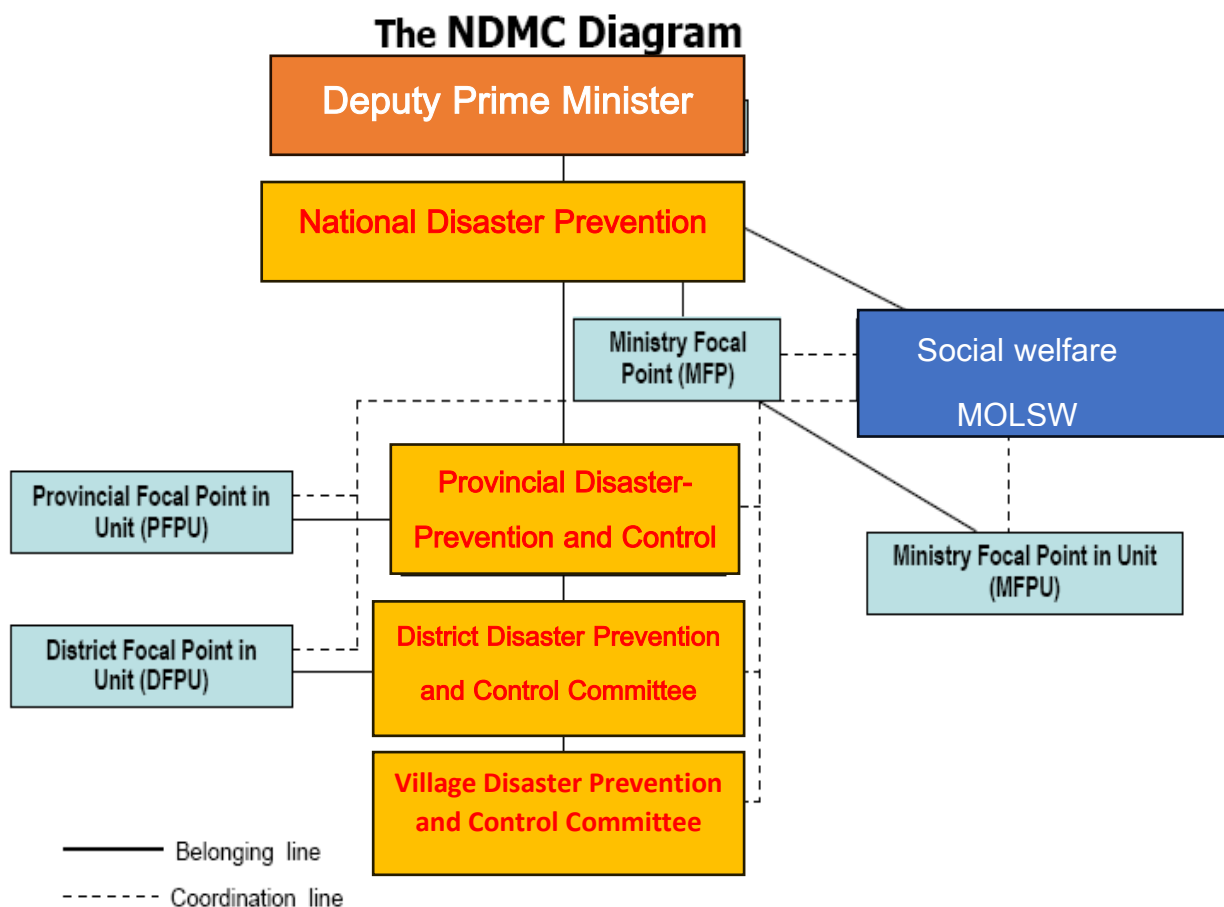
4.3 Role District Disaster Management Committee

The District Disaster Management Committee abbreviated as “DDMC” is appointed by the District Governor, or Head of Prefecture or City Mayor, based on a proposal made by the Head of the District Labor and Social Welfare Office. Its role is to lead the implementation of policies, strategies, measures, laws, regulations, plans, programs, and projects related to disaster management activities, for which the Social Welfare Unit, District Labor and Social Welfare Office, is the Secretariat.

4.4 Role Village Disaster Management Committee

The Village Disaster Management Committee abbreviated as “VDMC” is assigned by the Village Head, whose role is to lead disaster management activities at village level, to be a focal point for coordinating with relevant stakeholders and to provide

assistance to the District Disaster Management Committee, for which the Social and Cultural Unit is the Secretariat.



(Disaster Risk Management Mechanisms)

5. Infrastructure System Disaster Risk Reduction

Education Sector

Through the development of specific disaster risk reduction curriculum, the Government of Lao PDR has been building the resilience of the education sector in part from the National Disaster Management Office, the National Research Institute for Education Sciences, and the Ministry of Education and Sports. This initiative includes the development of disaster risk reduction manuals and disaster risk reduction training for teachers and education officials. Save the Children, in cooperation with the Ministry of Education and Sports, developed Disaster Risk

Reduction Handbooks for grades 3 to 6. In coordination Provincial with Education Department, the handbooks primarily addressed school disaster risk reduction and emergency management. The ASEAN Safe Schools Initiative (ASSI) is another initiative in the country which builds on existing school safety initiatives and uses information and communication technology for comprehensive school safety. The project, led by Save the Children in Lao PDR, developed a Comprehensive School Safety Assessment Suite that comprises a self-assessment tool and the Visual Inspection for Safety Upgrading Strategy (VISUS) tool. This tool was piloted in 50 schools

Communications Early Warning Systems

The Department of Meteorology and Hydrology (DMH), under the Lao Ministry of Natural Resources and Environment (MONRE), is responsible for monitoring, forecasting, and early warning of hydrological and meteorological hazards. Early warning and disaster information is disseminated to the public in two ways. The warning is passed from the National Disaster Management Committee (NDMC) 'down the line' to their representatives at the provincial, district, and village level. Early warning information is then broadcast on village speaker systems to alert the public, and through speakers on the back of a truck driven throughout the vulnerable area. The second method to deliver information is through the media by television and radio; however, content delivery is often unplanned and inconsistent due to limited funding.

According to the new 2019 Disaster Management Law, early warnings are made by various district, provincial, and central levels. The warning shall refer to information on forecasting, monitoring and prediction for the concerned sectors. In cases where there has been notification and declaration of a possible disaster affecting more than one village, the relevant District Governor, Head of Municipality, or City Mayor shall issue a warning and declaration of the surveillance area based

on a proposal made by the District Disaster Management Committee. When there has been notification and declaration of a possible disaster affecting more than one district, the Provincial Governor or Mayor of Vientiane Capital, shall issue a warning and declaration of the surveillance areas based on a proposal made by the Provincial Disaster Management Committee. In addition, when there has been notification and declaration of a possible disaster affecting more than one province, the Government shall issue a warning and declaration of the surveillance areas based on a proposal made by the Central Disaster Management Committee

Airports

Laos has 14 airports and 39 smaller airstrips; however, not all are currently operational. Wattay International Airport located in Vientiane is the main airport. Other important but minor airports include Luang Prabang, Pakse, Savannakhet, Oudomxai and Luang Namtha as shown in Table 3. 224 There are limited operations in Attapeu, Saravan, Samnue, and Xayaboury. Wattay International Airport is the main international gateway, while Luang Prabang and Pakse accepts regional traffic and provide customs, immigration, and quarantine services. Savannakhet is a significant provincial airport. Wattay International Airport and the two regional airports (Luang Prabang International and Pakse International) cover international traffic and associated services. International airlines include Air Asia, Bangkok Airways, China Eastern Airlines, Lao Airlines, Thai Airways, and Vietnam Airlines and they provide international services. Direct connections are also available to Bangkok, Chiang Mai, and Hanoi from Luang Prabang, and to Bangkok and Siem Reap from Pakse. Lao Airlines operates domestic flights with regular daily services and to three remote provinces— Houaphan, Phongsali, and Xayaboury. Domestic and international services are provided primarily for tourist traffic. Additional flights are made in the rainy season to selected locations,

Roads Traveling

Laos is generally safe with the exception of some areas in the North. Vehicles may not be equipped with lights, and animals stray on to the roads; both can cause accidents. The number of road accidents in Laos has risen in recent years along with increased numbers of motor vehicles including motorbikes. 227 Significant improvements have been made to the main National Road 13, which runs the length of the country, linking China with Vientiane, Savannakhet, the Cambodian capital of Phnom Penh, and Vietnam's Ho Chi Minh City.228 Road transport accounts for more than 80% of total freight transport. The road network in Lao PDR is approximately 46,000 km. Of these roads, only 28% are paved and more than 60% of the total national roads are classified to be in poor condition. This can be exacerbated during the rainy season leaving most of the provincial and district roads inaccessible.229 The costs of extending, upgrading, and maintaining the roads are very high, and the Lao government continues to depend upon the support of its development partners including World Bank, Asia Development Bank, SIDA, Japan/JICA, OPEC, IFAD, KFW, UNCDF, and the EU to implement rehabilitation projects in the transport sector.

Railways

Construction has begun on a rail link from China to Vientiane, Laos. The railway is part of China's \$1.3 trillion Belt and Road Initiative that looks to establish a vast network of investment and infrastructure spanning Asia, Europe, and Africa. China sees Laos as a vital link as a direct neighbor with access to the critical Mekong River. The China-Laos railway is part of a line that will eventually extend from Kunming, in China's Yunnan province, south to Singapore. The Chinese government will pay 70% of the approximate \$6 billion cost for the China-Laos railway, with Laos financing 30% with loans from Chinese financial institutions

Water ways

The Mekong River is the most important inland navigable mode of transport in Laos. Transport through the mountainous areas of the country is not feasible nor economic and so the Mekong River has been an important conduit for people and goods between the many towns located along its banks. Small boats are used for fishing and trade. The River is also becoming an important link in international trade routes, connecting the six Mekong countries (Laos, China, Myanmar, Thailand, Cambodia, and Vietnam) to each other, and to the rest of the world. The seasonal variations in water level directly affect trade in River sections and can often decrease by more than 50%. The Department of Waterways is responsible for policy, planning, and managing all inland waterways in the country. Including port and Starting education early is very important to educational outcomes, yet enrolment in Early Childhood Education (ECE) remains low in the country. Recent efforts have been made to combat this such as making ECE free of charge under the 2015 Education Law and the establishment of an ECE department under MoES

Communications

The Ministry of Public Work and Transport (formerly the Ministry of Communications, Transport, Post and Construction) is responsible for the management of postal services and telecommunications, among other responsibilities.²⁴⁴ In 1989, Laos joined the AsiaPacific Telecommunity, an intergovernmental organization that aims to foster the development of telecommunication services and information infrastructure throughout the region, particularly in less developed areas

Telephones

In Laos, the rate of fixed-telephone subscriptions was 20.99 per 100 inhabitants at the end of 2018, compared to the world average of 12.49 per 100 inhabitants. Laos surpassed the global average in fixed-telephone subscription rates

in 2015. Lao PDR's mobile-cellular subscription rate was 51.86 per 100 inhabitants in 2018, which compared to the global rate of 103.95 per 100 that year.²⁴⁷

Internet Access

The rate of fixed (wired)-broadband subscriptions in Laos was 0.64 per 100 inhabitants in 2018, compared to the global rate of 14.12 per 100 that year. A reported 24.46% of households in Laos have internet access, still low compared the world rate of 55.18% of households with internet in 2018.²⁴⁸ Many of these statistics are provided to the International Telecommunication Union by state governments, and they differ from numbers compiled by other organizations. Reporters sans Frontières (RSF, Reporters Without Borders) states that Laos has only about 500,000 Internet users, or approximately 10% of the population. The use of online news and information platforms is impacted by a 2014 decree that states Internet users must identify themselves by their names registered with the authorities, and that Internet users can be jailed for criticizing the government. A blogger who tried to inform others about post-flooding conditions in southern Laos was sentenced to five years in prison in December 2019. Despite these constraints, Laotians are increasingly using the Internet and social media, and there is even a slowly emerging blogosphere.²⁴⁹ Data was not available for Laos showing core indicators of telecommunications access or disaggregation by gender. In the Asia-Pacific region as a whole, 41.3% of females used the internet while 54.6% of males did. The gender gap among internet users has actually increased in developing countries, which is reflected in the Asia-Pacific region where the internet-user gender gap grew from 17.4% in 2013 to 24.4% in 2019

Social Welfare Department, Secretariat DMCC Relief and Emergency Response

At the time of a disaster occurring, the Disaster Management Committee and local authorities at the relevant level respond accordingly by providing emergency relief as well as collaborate with local authorities, and the whole of society, to

search for, rescue, and evacuate affected people to the safe places or resettlement areas. In case of a severe disaster occurring, the Central Disaster Management Committee shall coordinate with local authorities to establish an Emergency Command Center at central and local levels where the disaster is occurring, to arrange temporary shelter, warehousing, medical assistance, and timely delivery and thorough distribution of emergency relief materials. The Emergency Command Center would then take the lead in supervising and overseeing all support according to the 2019 Disaster Law

In addition, the implementation of emergency assistance, the Social welfare Department , Secretariat of the National Disaster Management Committee, has also encouraged provinces and cities to create disaster risk reduction strategies at the provincial level. Currently, 6 provinces have completed the promotion, and 11 provinces have not yet implemented it due to lack of budget and many restrictions. For the district level, there are 148 districts in the country, and there is an action plan to reduce disaster risk in 11 districts And each year organized to celebrate the International Disaster Risk Reduction Day so that the society is aware and understand about the disaster risk that caused a lot of damage and Developed a training manual to integrate disaster risk reduction in each sector, a disaster preparedness preparation manual

5.3.1 Laws and Regulations

The National Disaster Risk Strategic Plan (2003-2020) has served as the principal legal mechanism for disaster risk management practices in Laos. Prime Minister Decree on the Establishment of NDPCC, No. 75/PM, 28 Feb 2018 and have the Vision 2030 and Ten-Year Development Strategy (2016-2020) and Currently to developing national Action plan Disaster Risk Reduction which is on the basic of global and national framework such as Sustainable Development Goals, Sendai Framework for Disaster Risk Reduction 2015 – 2030, Paris

Agreement, and The National Economic and Social Development Plan 9th. In addition, there are other relevant law/regulation/notification/directive from other ministries to combine for Disaster Risk Management .

Year	Policy	Implementation Agency /office	scope	purpose
1999	the Prime Minister's Decree No 158 (1999)	National Disaster Management Committee (NDMC	national	To create a comprehensive disaster management institution with authority reaching from the national level to villages, with set goals up to 2020
2011	Prime Minister's Decree No. 373 (2011)	Prime Minister's Decree No. 373 (2011)	national	Re-establishing the National Disaster Prevention and Control Committee (NDPCC) and NDRMP to serve as a foundation for multi-sectoral DRM in the country.
2003-2020	Periodical Strategic Plan on Disaster Risk Management (2003-2005/ 2005-2010/ 2010-2020	National Disaster Management Office	National, Provinces, Districts	Articulates a DRM strategy, direction and priority actions based on lessons learned in the past.
2010	Strategy on Climate Change of the Lao PDR (2010)	The Government of Lao PDR, relevant Sectors	National, Provinces, Districts	Outlines the objectives and direction for addressing climate change in Lao PDR across sectors, in consideration of SDGs and CCA
2013	Prime	Department of	national	Establishes the Department of Disaster

	Minister's Decree 220 (2013)	Disaster Management and Climate change (DDMCC)		Management and Climate Change under the ministry of Natural Resources and Environment.
2013	Inter-Agency Contingency Plan (IACP) (2013/2014)	National Disaster Management Office	National	Supporting the government in guaranteeing effective and timely emergency response by defining roles and providing guidelines for coordination.
2019	The Law on Disaster Management (2019)	The law was passed by the parliament in the National Assembly	National, Provinces, Districts	This law outlines the principles, regulations and measures related to disaster management including regional and international linkages, and national social and economic development towards sustainable development.
2021	National Strategy DRR 2021-2030	The NSDRR was passed by the parliament in the National Assembly	National, Provinces, Districts	This NSDRR will be implemented in compliance with policies, the constitution, laws, strategies, NSEDPs to cover all types of disasters , to ensure the participation of all social sectors and coordination between ministries, agencies, organizations and local authorities DRR .
0	Action plan NSDRR	NDMO	National	Going on
2021	Degree Disaster management Fund	NDMO	National, Provinces, Districts	To use the disaster management fund to raise funds and accumulate funds from home and abroad to provide funding for emergency assistance, repair the necessary infrastructure, search, and rescue to make the lives of people who have suffered a disaster return to normal or better.

(Disaster Risk Management Policies Framework in Lao)

Sine 2021 government endorsement National Strategy for DRR 2021-2030 the Vision DRR by 2030 will be strong in disaster management, able to reduce the damage and loss from disasters to the society, economy and environment, and able to integrate DRR in National Socio-Economic Development Plans and sectoral plans in each period and have to 7 Strategy, 42 Objective as following:

1. Strategy 1: Develop and strengthen the disaster prevention system, disaster risk reduction, disaster preparedness and response
2. Strategy 2: Strengthen disaster response and emergency assistance.
3. Strategy 3: Develop and strengthen post-disaster recovery.
4. Strategy 4: Strengthen sectoral coordination on disaster risk reduction, emergency response and recovery
5. Strategy 5: Enhance national and local DRR education and training
6. Strategy 6: Promote participation and stakeholder engagement and inclusion
7. Strategy 7. Budget and disaster risk financing

6. Disaster Risk management plan in Japan and Laos

6.1 Disaster management plan in Japan

6.1.1 Disaster countermeasures Laws and Acts

Japan's legislation for disaster management system, including the Disaster Countermeasures Basic Act, addresses all of the disaster phases of prevention, mitigation and preparedness, emergency response as well as recovery and reconstruction with roles and responsibilities among the national and local governments clearly defined, it is stipulated that the relevant entities of the public and private sectors are to cooperate in implementing various disaster countermeasures countermeasures

The Disaster Countermeasures Basic Act has constantly been reviewed and amended since its first enactment, and with lessons learned from the Great East Japan Earthquake, provisions were added including enhancement of the measures

concerning support activities mutually done by local governments in 2012 and the measures for ensuring smooth and safe evacuation of residents and improving protection of affected people in 2013. In 2014, provisions were added for strengthening measures against unattended cars in order to promptly clear them from the roads for emergency vehicles

災害対策基本法の概要

Outline of the Disaster Countermeasures Basic Act

- 1 防災に関する理念・責務の明確化** Clearer definition of the philosophy and the responsibilities for disaster management

 - 災害対策の基本理念「減災」の考え方等、災害対策の基本明確化 Basic idea of disaster countermeasures: Clarification of basic policies including the concept of disaster reduction
 - 国、都道府県、市町村、指定公共機関等の責務 ー防災に関する計画理念の作成・実施、相互協力等 Responsibilities of the government, prefectures, municipalities, and designated public institutions: Formulation and implementation of the philosophy and plan for disaster management, mutual cooperation
 - 住民等の責務 ー自らの災害への備え、生活必需品の備蓄、自発的な防災活動への参加等 Responsibilities of residents: Self-preparedness for disaster, stockpiling of basic necessities, voluntary participation in disaster preparedness activities
- 2 防災に関する組織ー総合的防災行政の整備・推進ー**
Organization: Development and promotion of comprehensive disaster management administration

 - 国:中央防災会議、非常（緊急）災害対策本部
National government: Central Disaster Management Council, major (extreme) disaster management headquarters
 - 都道府県・市町村:地方防災会議、災害対策本部
Prefectural and municipal governments: Local disaster management headquarters
- 3 防災計画ー計画的防災対策の整備・推進ー**
Planning system: Development and promotion of systematic disaster management measures

 - 中央防災会議:防災基本計画 Central Disaster Management Council: Disaster Management Basic Plan
 - 指定行政機関・指定公共機関:防災業務計画 Designated local government organizations and public institutions: Disaster management operation plan
 - 都道府県・市町村:地域防災計画 Prefectures and municipalities: Local disaster management plan
 - 市町村の居住者等:地区防災計画 Residents: Community disaster management plan
- 4 災害対策の推進** Promotion of Disaster Countermeasures

 - 災害予防、災害応急対策、災害復旧という段階ごとに、各実施責任主体の果たすべき役割や権限を規定
Definition of the roles and responsibilities to be performed by each actor in each stage of prevention, preparedness, response and recovery
 - 市町村長による一義的な災害応急対策（避難指示等）の実施、大規模災害時における都道府県・指定行政機関による応急措置の代行
Primary disaster response procedures including evacuation order by the head of municipalities taking over emergency measures by prefectures or designated administrations in case of the large-scale disaster
- 5 被災者保護対策** Protection of affected people and their livelihood

 - 要支援者名簿の事前作成 Prior preparation of the lists of the people requiring assistance in the case of disaster
 - 災害時における、避難所、避難施設に係る基準の明確化 Clarification of the standards for evacuation centers and facilities in the case of disaster
 - 罹災証明書、被災者台帳の作成を通じた被災者支援策の拡充 Improvement and expansion of protection measures for affected people through preparation of the certificates and the list of affected people
 - 広域避難・物資輸送の枠組の法定化 Stipulation of the framework for wide-scale evacuation and goods transportation
- 6 財政金融措置** Financial measures

 - 法の実施に係る費用は実施責任者負担 Implementation of laws are funded by each responsible party
 - 激甚な災害に関する、国による財政上の措置 Financial measures for extreme disasters by the government
- 7 災害緊急事態** State of Disaster Emergency

 - 災害緊急事態の布告 →政府の方針（対処基本方針）の閣議決定 Declaration of disaster emergency state →Cabinet decision of government's policy (basic policy for countermeasures)
 - 緊急措置（生活必需物資の配給等の制限、金銭債務の支払猶予、海外からの支援受入れに係る緊急政令の制定、特定非常災害法の自動発動）
Emergency measures (restriction on distribution of basic necessities, moratorium on financial obligation, urgent enactment of Cabinet Order related to acceptance of international support, automatic enforcement of the Act on Special Measures concerning Preservation of Rights and Interests of Victims of Specified Disaster)

6.2 Disaster management Planing

1. Basic Disaster management plan: This plan is the highest-level and constitutes the basis for disaster management activities prepared by the

national Disaster management council based on the Disaster Countermeasures Basic Act

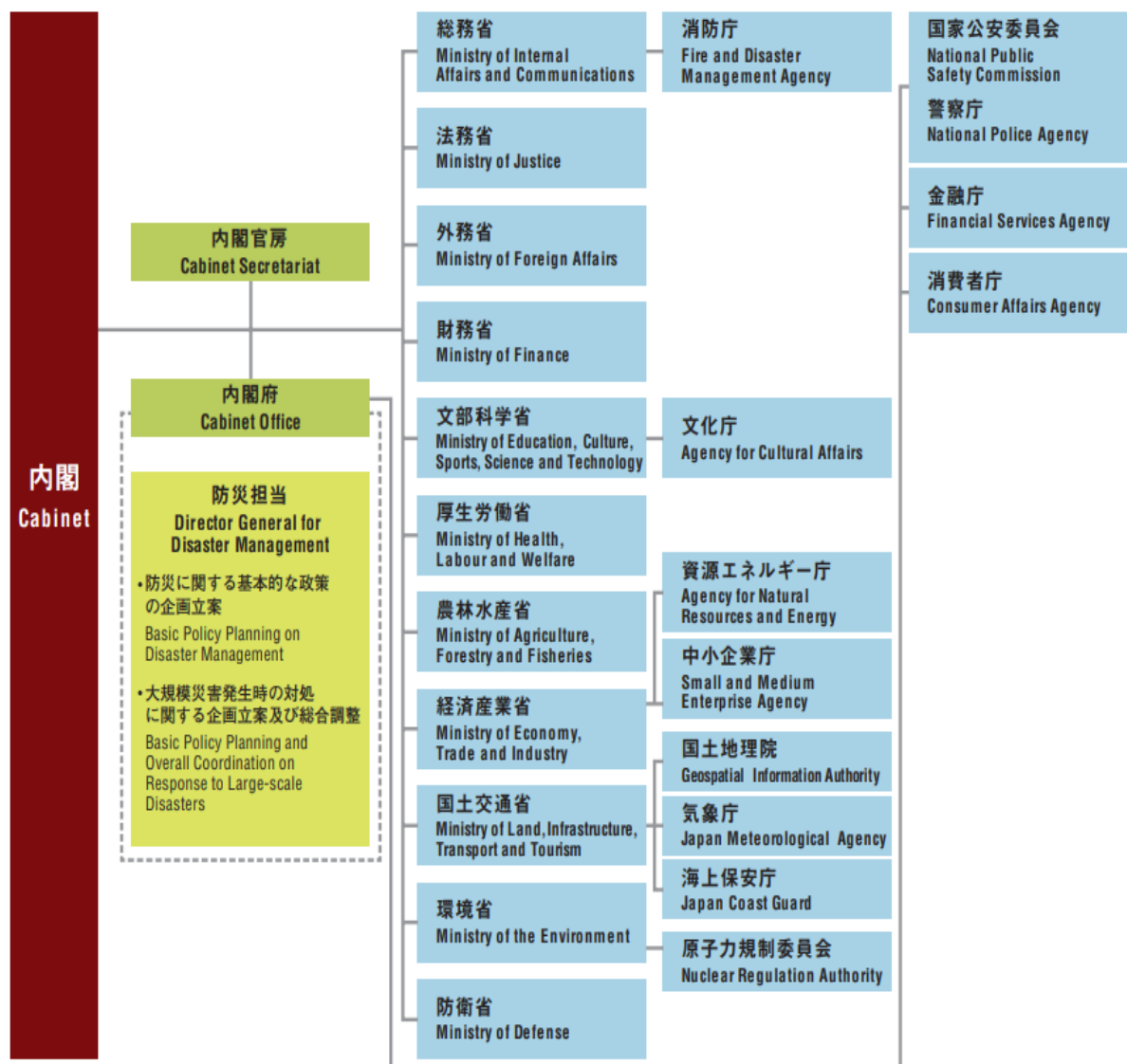
2. Disaster management Operation plan: This a plan made by each designated government organization and designated public corporation based on the basic Disaster management plan
3. Local Disaster management plan: This is plan made by each Prefectural and municipal Disaster Management council, Subject to local circumstance and Based on the basic Disaster management plan
4. Community Disaster management plan: This is disaster management activities plan at the Community level which is established by residents and businesses jointly on a voluntary basis

6.3 Mission of the Cabinet Office Japan

Along with a series of reforms of the central government system in 2001, the post of Minister of State for Disaster Management was newly established to integrate and coordinate disaster risk reduction policies and measures of ministries and agencies. In the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Management is mandated to undertake the planning of basic disaster management policies and response to large-scale disasters, as well as conduct overall coordination. To prepare for disasters, the Central Disaster Management Council with the Prime Minister as the Chief and all Cabinet members decides the national government's disaster management measures. Such decisions are carried out by respective ministries and agencies, accordingly. In the event of a large-scale disaster, the Cabinet Office is engaged in collection and dissemination of accurate information, reporting to the Prime Minister, establishment of the emergency activities

system including the Government’s Disaster Management Headquarters, overall wide area coordination concerning disaster response measures

内閣府及び関係省庁 Cabinet Office and Related Ministries and Agencies



※この図は防災に関する省庁の関係を概念的に表現したものである。 This chart conceptually represents the relationship of ministries and agencies related to disaster management.
 ※東日本大震災からの復興については、復興庁が担当している。 The reconstruction from the Great East Japan Earthquake is lead and managed by the Reconstruction Agency.

3.1.5 National Conference on Promoting Disaster Risk Reduction

National Council for Promoting Disaster Risk Reduction and National Conference on Promoting Disaster Risk Reduction The “National Council for Promoting Disaster Risk Reduction consists of experts from various fields such as six local administrative associations, the business community, the educational community, and the medical and welfare sectors. It was established in 2015 and

has been promoting public relations in cooperation with the National Disaster Management Council so that various sectors are able to exchange information and opinions each other and collaborate according to circumstance for the purpose of raising public awareness of disaster risk reduction.

lessons of the Great East Japan Earthquake and disaster risk reduction." For instance, they discussed several different efforts of the "Tsunami Memorial Hall" (disaster risk reduction learning center for children who will lead the next generation), (networking of facilities to pass on lessons) and Disaster Memorial Museum and It was confirmed that increasing the disaster resilience of the country as a whole was important through not only "public support" by the government(s), but also "self-help;" each citizen gains preparedness against disaster with the awareness that they must protect their own lives, and "mutual support;" communities, schools, businesses and volunteers help each other.

6.5 Regional Cooperation Through Asian Disaster Reduction Center (ADRC)

The Asian Disaster Reduction Center (ADRC) was founded by agreement among Asian countries in Kobe, Hyogo Prefecture in July 1998, based on a proposal from Japan to promote multilateral cooperation on disaster reduction in Asia. The Center currently consists of 31 member countries and 5 advisor countries,

The Sendai framework for DRR includes as goals increasing the number of Countries with national and local DRR Strategies and enhancing international cooperation to developing countries through adequate and sustainable support to complement their national action for implementation of the present Framework and The ADRC takes the leading role in promoting SFDRR in Asia with its pillars of Activities to Share Disaster related information to train personnel of the member nation to bolster Disaster in local communities

Specific programs include the provision of outstanding case studies through the ADRC to diliver and sharing of diaster information using Stellite data ,invitation of Reseachs from member counties ,hosting of comprehensive disaster management Seminars to encourage participant of local communities

6.7 Community Disaster management plan

The aftermath of the Great East Japan Earthquake ,the limitation of the government 's activities and the importance of mutual-help in collaboration municipalities apparent . Consquently ,the cabinet Office a amended the Disaster Countermeasures Basis Law in Jun 2013 and Community Disaster management plan and a plan for Disaster management activities by businesses and resident of loca communities .from the perspective of Social capital ,disaster management activities based on the CDMP will lead to local community paticipation in town planing, even during rhe preliniminary reconsonction phase



7.Summary Learnings DRR in Lao

Lao PDR is a land-locked high-risk flood country; being hit by large-scale disasters that took place every year over the past 3 years since 2018. The most severe floods and drought impacts are always experienced by Lao PDR’s most vulnerable populations, who depend on subsistence agriculture and natural

resources for their livelihoods and food security. The Government expressed serious concern over continued impacts and frequency of large-scale flood and storms as well as the economic devastation that came with the COVID-19 pandemic, which severely undermine ongoing efforts to graduate from Least Developed Country (LDC) status in 2026.

Budget shortfalls due to economic crisis hinder investment in disaster risk reduction for resilience and national preparedness efforts. Lao PDR still lacks multi-hazard early warning systems that can predict several types of disasters. With limited capabilities and inadequate tools to provide emergency relief and recovery services, the country lacks preparedness to protect the lives and livelihoods of people, particularly those are on the frontlines of climate change.

Despite the immense challenges, the Government of Lao PDR delivered vital assistance to save lives of the people and implemented the reform actions. National Disaster Management Committee with the Department of Social Welfare as the Secretariate significantly contributes to the transformation of the disaster sector under the Disaster Management Law, both for the design and implementation of the National Strategy for Disaster Risk Reduction (2021 – 2030), Disaster Management Fund (2021) and the organization of committees at all levels.

Lao PDR has made important progress towards achieving results under Priority 2 ‘Strengthening disaster risk governance to manage disaster risk’ and under Priority 4 ‘Enhancing disaster preparedness for effective response and to Build Back Better to recovery, rehabilitation and reconstruction’. However, it is not fully meeting the targets. The results under Priority 1 ‘Understanding disaster risk’ are mixed and data were insufficient. Since 2020, resilience-building activities (Priority 3 ‘Investing in disaster risk reduction for resilience’) were often interrupted to respond to acute needs due to lack of funding and Since disaster management and climate change were increasingly mainstreamed into the 7th, 8th and 9th National Social Economic Development Plans (NSEDPs) and concerned sectoral development plans under the framework of Sustainable Development and Poverty Alleviation, many DRR functions were specified and are being integrated within and

across broader national entities collaborating with the disaster risk reduction agenda to make them more relevant and effective.

The implementation of five strategies of the National Strategy allowed National Disaster Management Committee to work more with other ministries and International Development Partners (IDPs) to build disaster resilience among communities and to promote resource mobilization and advance preparedness and response plans to reflect risks of disasters, with a focus on vulnerable groups, particularly children, pregnant women and elderly-headed families. Subsequently, common non-structural measures were found include assessment, and some information resources as well as public awareness raising programmes that now outreach to diverse communities to build the foundations for graduating from LDC status. Local governments gradually engage in need assessment as a means to improve DRR efficiencies.

National Disaster Management Committee is working to improve coordination mechanisms and policy tools; for example, seeking out the use of the military facilities and capacities and working in partnership with different international organizations, other countries, particularly ASEAN countries, and the private sector to develop capacities in community-based disaster risk reduction.

The National Strategy clearly defined the conduction of Mid Term Global Review of Sendai Framework (2015 – 2030) as one of key actions. The midterm review set priorities, based on the identified needs of different sectors and stakeholders for the coming 7 years (2023 – 2030), to expand disaster risk reduction efforts through the continued support of development partners. Findings from the midterm review will contribute to the development of strategy of the NSEDP No. 10 and To build a pathway to become a more resilient upper middle – income country, with a less vulnerable country to disaster and strong human assets, the Government is willing to work more with a constructive engagement of International Development Partners to deliver specific and targeted assistance and bring efficiencies to response operations and the implementation of Sendai

Framework for disaster risk reduction to protect lives and property and, more importantly, to lift thousands of families out of extreme poverty.

8. Conclusions Lessons learned from Japan

- Japan is a country that is highly prone to natural disasters such as earthquakes, tsunamis, typhoons, floods, and landslides. The country's high-risk profile makes it necessary to have a well-defined disaster management system in place. It has developed a comprehensive disaster management system that includes disaster prevention, preparedness, response, and recovery.
- Basic Disaster Management Plan, Community Disaster Management Plans, and Business Continuity Plans form the core of Japan's disaster management planning aimed at the functioning of the systems in the aftermath of a disaster
- The emergency response mechanism in Japan involves wide area support and coordination between the national and local governments. Response agencies like the Fire Service Organizations, National Police Agency, Japan Self Defense Forces, Japan Coast Guards, Disaster Medical Assistance Teams, and BOKOMIs (the community volunteers) play a crucial role in emergency response
- Japan invested in readiness for response (e.g., mitigation, forecasting, EWS, and drills), large scale disasters like the Great East Japan Earthquake proved that those efforts were not enough, as shown in the magnitude of damage and loss of lives and properties brought about by large-scale disasters.
- Human resource development activities like DRR drills and exercises help in building resilience and preparedness among the citizens. The system caters for support during evacuation and emergency shelters and other provisions to ensure the safety and well-being of the affected population.
- The government has issued detailed Laws regulation and legislation , emphasizing that all communities must comply with the legislation that has been issued and developed in detail

- Disaster management in Japan will focus on systematic joint planning in which all Activities , government ,companies ,communities and individuals must to Understand disaster risk.
- The lesson of Japan is to focus on preparedness and mitigation to prevent is important to more damage even though the government has to invest a large amount of budget spend to much for disaster prevention
- The coordination mechanism system between the center, province, district and community has been aware of their roles and responsibilities in detail to prepare to deal with disasters. Each park has a detailed plan to manage each type of disaster
- The system of preparing supplies and consumables will also be prepared in event of a disaster emergency that can be used promptly
- Emphasis on awareness campaigns the participation of the community, Schools and individuals as the key to building strength to be prepared to deal with all kinds of disaster
- Various companies to have developed modern tools for disaster prevention
- The construction of the building must be built according to the standards to support the Earthquake that may occur because Japan is a country with a high risk Earthquake
- The government To give important to learning from experience to improve planning to prepare for Disaster that may ,such as the government has created a center to learn about the dangers of disaster and have caused enormous damage to infrastructure ,economy and culture
- Government of Japan to attention to cooperation with international organization in the implementation of the SFDRR framework and with ADRC as the implementer to bring the member countries to learn and understand more about DRR

- Japan has an ever evolving, comprehensive and well-organized disaster management system reflecting the country's experience in dealing with natural disasters and showing a high level of preparedness for response in the event of a disaster

In addition, learning from experience of Japan is also a very good way that local assist in develop local DRR plan, for example, Okozu watershed and diversion channel which reduce risk from Flood damage. The process and lesson learn will strengthen local DRR plan is more practical, efficieneffective with knowledge and experience

(Whole View of O



Diversion Channel)

9. References

- Climate change country report in Laos PDR 2023 (from UN-HABITAT) LAO PDR COUNTRY OFFICE Avi Sarkar Regional Advisor – South-East Asia, UBS, Head of Office Lao PDR, UN-Habitat EMAIL avi.sarkar@un.org
- referred www.worddometers.info for Demographic Data
- referred PDNA Lao PDR report 2018
- referred National Strategy for Disaster Risk Reduction 2021-2030 Laos PDR
- Disaster management in Japan