Multilevel Governance Guidelines on
Integrated Climate Action Coordination in Lao PDR

GUIDELINES ON LEGAL FRAMEWORKS, POLICIES AND TREATIES

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Guidelines on Legal Frameworks, Policies and Treaties

United Nations Human Settlements Programme
P.O. Box 30030, Nairobi 00100, Kenya
E-mail: infohabitat@unhabitat.org
www.unhabitat.org

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Abbreviations and Acronyms

CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
ETF	Enhanced Transparency Framework
GHG	Greenhouse gas
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LDCs	Least Developed Countries
MPGs	Modalities, procedures and guidelines
MRV	Measuring, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Action
NAPA	National Adaptation Programme of Action
NDCs	Nationally Determined Contributions
NSEDP	National Socio-Economic Development Plan
SDGs	Sustainable Development Goals
UNFCCC	United Nations Framework Convention for Climate Change

1. Introduction to the Guidelines

This is one of a set of four guidelines explaining multilevel governance processes related to climate change as they affect Laos. The Department of Climate Change (DCC) of the Ministry of Natural Resources and Environment (MONRE) is the focal point for climate change in Laos. DCC staff are active in global affairs and they drive the mainstreaming of climate change action within the country. At a sub-national level, the climate change mandate is carried by the Provincial Office of Natural Resources and Environment (PONRE) and the District Office of Natural Resources and Environment (DONRE) in each province and district. As the focal point at their level for climate change-related governance processes and systems, it is important that the institutional knowledge in these offices is strengthened to enable staff to fulfil their role in implementing legislation, policies and plans, thereby ensuring that Laos has a cohesive multilevel climate change response. The purpose of these guidelines is to strengthen the technical and institutional knowledge of PONRE and DONRE staff. The guidelines focus on:

1. Measurement, reporting and verification (MRV);
2. Legal frameworks, policies and treaties;
3. Governance – climate coordination enhancement; and
4. Financing tools and mechanisms

The objectives of this guideline are to enhance the knowledge within the natural resources and environment sector in the areas of:

- The international agreements to which Laos is a party and the ensuing commitments;
- The Lao legal and policy framework that relates to climate change;
- Socio-economic development policies in which climate change is embedded.

2. Introduction to international climate change treaties

Since the 1950s, climatic changes have been observed throughout the world. These changes include a warming of the atmosphere and oceans, a decrease in the volume of snow and ice, and rising sea levels. At the same time, extreme weather events such as droughts, floods, windstorms, tropical cyclones and extreme temperatures have been reported to increase in frequency. Some extreme weather events have resulted in landslides, wildfires, health epidemics and insect infestations. From 1970-2012, 1.94 million deaths and US$ 2.4 trillion of economic losses occurred globally as a result of these extreme events (Golnaraghi, 2014).

As a result of the intensifying climatic changes, several scientific entities were established to monitor climate change and its impacts. These included the Intergovernmental Panel on Climate Change (IPCC) of which Lao PDR is a member. The IPCC was created in 1988 to "provide policymakers with regular scientific assessments on climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation options" (The Intergovernmental Panel on Climate Change , 2020).

Initially, the climate change focus was on science, with the aim of determining what was happening to the climate and the reasons for these changes. Considering climate change is a naturally occurring phenomenon, anthropogenic or human-induced climate change was given particular attention Human activity has significantly affected the climate since the industrial revolution, which indicated periods of massive release of greenhouse gases into the atmosphere as a result of economic and industrial production.

As the dependence on fossil fuels has grown in both industrialised nations and developing countries, the extent to which carbon has been released has exceeded the earth's capacity to remove it from

the atmosphere, resulting in high concentrations of GHG that has been driving global warming. As shown in Figure 1, the two ways in which carbon is removed from the atmosphere are through photosynthesis in plants, and in the oceans. When plants take in carbon through photosynthesis, the carbon is stored in the plant and remains as the plant becomes fossilised. There is, therefore, carbon in both wood, and also in fossil fuels such as oil, gas, petrol and coal. This stored carbon is what is released back into the atmosphere when the fuel is burned.

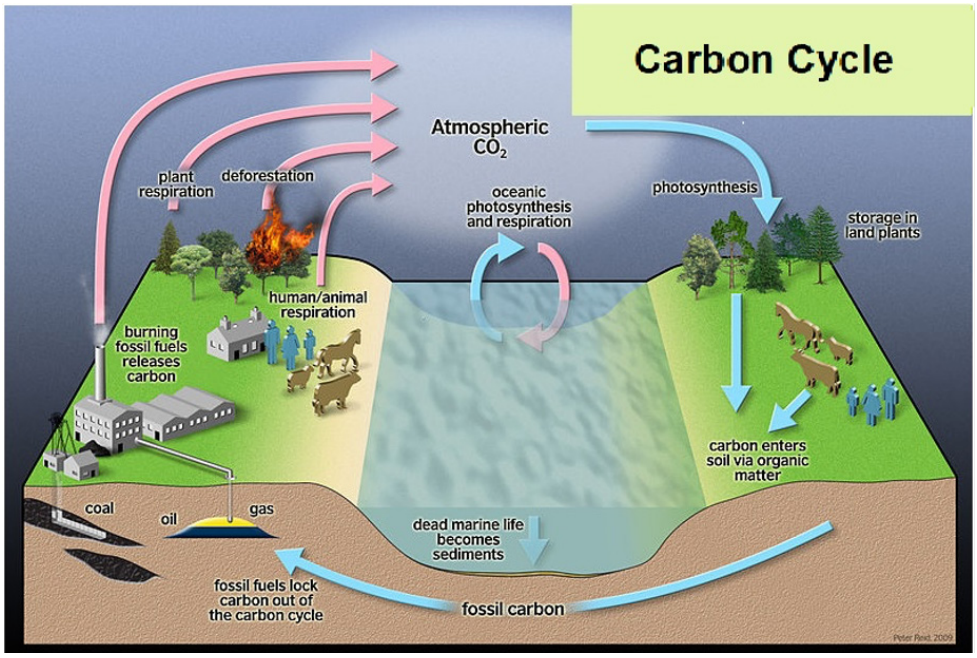

Figure 1. The carbon cycle

Source: Scottish Centre for Carbon Storage. Retrieved from https://commons.wikimedia.org/wiki/Category:Carbon_cycle#/media/File:Carbon-cycle-full.jpg

Carbon is only one of a number of greenhouse gases (GHGs). The term greenhouse gas comes from the gases' role in trapping the sun's heat and keeping the earth warm. This is similar to the role of the greenhouses which people build in colder climates (see Figure 2 for an example). The greenhouse, or glasshouse, traps the sun's heat and provides a warm environment in which to grow plants when it is not warm enough for them to grow outside. The increase of carbon and other greenhouse gases in the atmosphere has changed the balance of the climate system. Since there is a higher concentration of greenhouse gases, more of the sun's heat is trapped and the temperature rises accordingly. This has an effect on other parts of the climate system and leads to the extreme weather events which have been observed.

While scientists have observed events in the past, a more complex task is to predict what will happen in the future. The IPCC examines current research and releases reports containing up to date data and conclusions about climate change. In the light of the concerns with the climate, a concerted effort from nations around the world to take action and respond to the changes was imminent, leading to the formation of the. United Nations Framework Convention on Climate Change.

Figure 2. Greenhouse or glasshouse

Source: Joi Ito. Downloaded from https://commons.wikimedia.org/wiki/File:Strawberry_greenhouse.jpg

3. United Nations Framework Convention on Climate Change

In 1990 the release of the IPCC's first major Assessment Report, - a publication that takes stock of the global climate status, coincided with a World Climate Conference. Both called for a global climate treaty and in response the UNFCCC was created. The UNFCCC was presented at the Earth Summit in Rio in 1992, and it entered into force in 1994.

UNFCCC processes include an annual meeting of the Conference of the Parties (COP), the highest body of the Convention. The Parties are the 197 countries that have ratified the Convention. Laos did so on 4 January 1995. Within the COP, each Party is entitled to one vote. In 1995, Laos sent two representatives to the first COP in Berlin and Lao representatives have attended every subsequent COP.

The aim of the UNFCCC is to prevent dangerous human interference with the climate system. This was to be achieved by stabilising the concentration of GHGs in the atmosphere, while at the same time allowing the continuation of sustainable economic development. The two ways of achieving the Convention's objective of stabilising greenhouse gases involve, firstly, decreasing their emissions and secondly, removing them from the atmosphere.

Greenhouse gas (GHG): any gas in the atmosphere that traps the sun's heat by absorbing infrared radiation

3.1. Principles

A central feature of the Convention is its concern with equity. The first principle of the Convention states that

> The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof. (United Nations, 1992, Article 3, Para.1).

This principle recognises that already present changes in the climate were the result of activities in developed countries. Therefore, since these countries had caused the problem, they had a responsibility to take the lead in addressing emissions. For the purposes of allocating responsibilities, parties to the Convention were divided into three different groups, as shown in Table 1.

Source: any process or activity which releases a greenhouse gas into the atmosphere

Reservoir: a component of the climate system where a greenhouse gas is stored

Sink: any process, activity or mechanism which removes a greenhouse gas from the atmosphere

Each of the three groups of countries has different obligations under the Convention. A number of non-Annex I countries were singled out as having specific needs and concerns. All parties were required to give consideration to these countries and some decisions were made to support them in implementing the Convention.

The second principle of the Convention requires that the needs and circumstances of developing countries are given full consideration. The third principle requires Parties to take measures to "anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects" (United Nations, 1992, Article 3, para. 3). The fourth principle affirms Parties' right to sustainable development and advocates the integration of climate-related measures into national development programmes. The fifth and final principle advocates "a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change" (United Nations, 1992, Article 3, para. 5)

Category	Definition
Annex I	Developed countries and some countries with economies in transition
Annex II	Only the developed countries from Annex I
Non-Annex I	Developing countries including those with special needs, some of which are: Developing countries including those with special needs, some of which are: Least Developed Countries (LDCs) Small island countries Countries with arid and semi-arid areas, forested areas and areas liable to forest decay Countries with areas prone to natural disasters Countries with areas liable to drought and desertification Landlocked and transit countries

Table 1: Three groups of Parties to the UNFCCC

The idea of common but differentiated responsibilities has implications for Laos' obligations and rights under the Convention. As a non-Annex 1 party, there is limited expectations from the global community for Laos to play a leading role in reducing emissions. Furthermore, Annex II parties were required to contribute financially to the cost of developing countries' national inventories of emissions and removals. They were also expected to ensure the transfer of technology and finance to enable implementation of the Convention by developing countries.

Common but differentiated responsibilities recognises that parties vary both in their levels of responsibility for causing climate change and in their capacities to cope with it.

In contrast to Annex I and II countries, the Convention deems that "economic and social development and poverty eradication are the first and overriding priorities of the developing country parties" (United Nations, 1992, Article 4, para. 7). Laos is eligible for the benefits offered to LDCs. In addition, geographical features such as susceptibility to severe floods and droughts, and the lack of access to the sea put Laos in the category of vulnerable countries which are eligible for finance and aid from climate change funds.

3.2. Commitments under the UNFCCC

As the foundational climate change convention, the initial UNFCCC laid down a number of commitments which have been refined and updated through subsequent decisions. The original requirements include the development by each Party of a national level inventory of GHG emissions by sources and removals by sinks. A stated aim is to return Annex I countries to 1990 levels of greenhouse gas emissions (United Nations, 1992, Article 4, para. 2 (b)). In order to achieve this, parties were required to utilise the best scientific knowledge to produce detailed policies and data on emissions by sources and removals by sinks. Other commitments include:

- A consideration of climate change in social, economic and environmental policies and actions;
- A contribution to research to understand the causes, effects, magnitude and timing of climate change and the consequences of various response strategies;
- The promotion of education, training and public awareness related to climate change;
- The communication to the UNFCCC of detailed information regarding policies and other measures;
- The provision by developed countries of finance to meet the reporting costs of developing countries, and to meet the cost of technology transfer in order for developing countries to meet their obligations;
- Financial support from developed countries to particularly vulnerable developing countries

on order to meet their adaptation costs;

- Support from developed countries to develop capacity and technologies in developing countries to enable them to meet their obligations under the Convention.

3.3. The Kyoto Protocol

The first COP, in 1995, recognised that the UNFCCC needed strengthening in order to bring about the desired lowering of emissions and enhancing of sinks and reservoirs. The outcome of this recognition was the Kyoto Protocol. The Kyoto Protocol does not require new commitments from non-Annex 1 countries but it fixes internationally binding limits to emissions from Annex 1 countries. Furthermore, it introduced innovative market-based mechanisms enabling countries to stay within their limits. Commitments to reduce emissions were made for the period 2008 – 2012. Once commitments for this first period were settled, much of the debate over the Kyoto Protocol concerned the fixing of new targets for a second commitment period and the question of how to move beyond the first commitment period.

Mitigation: a measure to reduce GHG emissions or to enhance GHG removals by sinks

Adaptation: responding to the changes brought about as a result of climate change

Laos ratified the Kyoto Protocol on February 6, 2003 and it came into force on February 16, 2005.

3.4. UNFCCC Developments over Time

The UNFCCC and the annual COPs have generated numerous mechanisms, entities and practices in order to achieve the aims of the Convention. Following the adoption of the Kyoto Protocol, the COPs focussed on refinements and the development of mechanisms for its implementation. A major consideration was the common but differentiated responsibilities and respective capabilities of countries. This led to emphases on areas such as financial mechanisms, technology transfer and capacity building. The initial capacity building focus was designed to facilitate the first national communication from developing countries. Preparation for the implementation of the Kyoto Protocol culminated in the Marrakesh Accords, adopted in 2001.

Figure 3. Delegation of Lao PDR at COP 23 in 2012, headed by H.E Mrs. Bounkham VORACHIT, Vice Minister of Natural Resources and Environment (left) and H.E Mr. Sithong CHITHNHOTHINH, Ambassador of the Lao PDR to Germany (right).

Source: https://www.la.undp.org/content/lao_pdr/en/home/presscenter/articles/2017/12/12/what-does-the-international-climate-conference-cop-23-mean-for-l.html

While an increasing number of technical processes were put in place to achieve the aim of the UNFCCC, the political commitment to them lagged behind and the expected leadership from developed countries fell short. This is manifested by the seven years that it took the required number of countries to commit to the Kyoto Protocol to enable it to enter into force.

At the same time as frustration over negotiations and the lack of commitment was growing, developing countries were drawing attention to the lack of resources at their discretion to fulfil their commitments to the UNFCCC, including the submission of communications. This concern resulted in an increased focus on capacity building and funding mechanisms.

3.4.1. 2007 Bali Action Plan

Whereas the initial focus had been on mitigation, increasing evidence of climate change and the realisation that adverse effects would be experienced no matter what mitigation actions were taken, led to a growing focus on adaptation. This was built into the 2007 Bali Action Plan, negotiated at the 2007 COP, which called for "enhanced action on adaptation" (United Nations, 2007, p. 4). To improve mitigation, the Bali Action Plan introduced the concept of Nationally Appropriate Mitigation Actions (NAMAs). NAMAs are to be carried out in the context of sustainable development and with technology, financing and capacity-building support. Laos received support to prepare a NAMA on Rural Development through Electrification with Renewable Energies. The NAMA aimed to establish mini grids to support the provision of electricity access to more than 90 per cent of households in Lao PDR by 2020. The Bali Action Plan also introduced the concept of Measuring, Reporting and Verification (MRV), which is explained in a separate guideline document.

A NAMA is "*any action that reduces emissions in developing countries and is prepared under the umbrella of a national governmental initiative. They can be policies directed at transformational change within an economic sector, or actions across sectors for a broader national focus*" (United Nations Framework Convention on Climate Change, 2020)

3.5. The Paris Agreement

Frustration built over succeeding COPs due to the lack of political commitment to the Convention's targets and the inability to reach any fulfilling agreement moving forward. At this point, the effects of climate change became more obvious, and it was proving difficult to lower GHG emissions. The breakthrough to this impasse came on December 12, 2015 at COP 21, with the adoption of the Paris Agreement. The Paris Agreement entered into force on November 4, 2016, and as of August 2020 has been ratified by 189 parties. Laos signed the agreement on April 22, 2016 and was one of the earlier countries to ratify it, doing so on September 7, 2016.

The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) is the annual meeting of the parties to the Paris Agreement in the same way that the COP is the annual meeting of the Parties to the UNFCCC. The CMA is held at the same time as the COP.

3.5.1. Aim and content of the Paris Agreement

The Paris Agreement has an ambitious and specific aim. A key idea in the Agreement is that climate responses will be strengthened over time. Core goals are:

- Keeping global temperature rise in the 21st century below 2° Celsius above pre-industrial levels and to pursue efforts to keep the temperature increase to 1.5 °C above pre-industrial levels[1];
- Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development;

"Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development" (UNFCCC, 2015, Article 2).

Further articles in the Paris Agreement text set out how the goals will be achieved, including the following.

All Parties will determine and communicate progressively ambitious goals (See Section 3.5.4);

1 To put this into context, the IPCC estimates that in 2017 the average global temperature had risen about 1° Celsius since the pre-industrial era. If the temperature continues to rise at the current rate, it is predicted that the increase will reach 1.5° Celsius by about 2040 (Allen et al., 2018).

- Parties aim for global GHG emissions to peak as soon as possible with emissions by sources balancing removals by sinks in the second half of the 21st century;
- Parties should take action to conserve and enhance sinks, such as forests, and reservoirs of greenhouse gases;
- A Party may choose to enter into voluntary cooperation with another Party;
- A global adaptation goal was established of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development. Parties are to communicate their adaptive measures and goals;
- The Warsaw International Mechanism for Loss and Damage, which had been established in 2013, sought to address loss and damage caused by climate change impacts in particularly vulnerable developing countries. This is to be accomplished through enhanced knowledge, coordination and support, including finance, technology and capacity-building;
- Developed countries are to provide financial support to developing countries for both mitigation and adaptation purposes. Financial support is to be communicated biennially;
- Technology development and transfer is to be strengthened;
- All Parties should cooperate to enhance the capacity of developing country Parties to take effective adaptation and mitigation actions;
- Parties shall cooperate in taking measures to enhance climate change education, training and public awareness;
- An enhanced transparency framework was established. (See Guidelines on MRV);
- Starting in 2023 and every five years thereafter, a global stocktake will be conducted, consisting of an assessment of progress towards achieving the purpose of the Agreement and its long-term goals.

3.5.2. Common but differentiated responsibilities

The Paris Agreement set a precedent as it was the first decision wherein all Parties had the same responsibilities, as opposed to the previous differentiation between Annex I and non-Annex I countries.

While COP 21 agreed what should be in the Paris Agreement, it was left to COP 24 to specify details of how the Agreement would be implemented, in what is known as the Katowice Climate Package. The package lays out the operational procedures for the Agreement, including the Modalities, Procedures and Guidelines (MPGs) for the incoming Enhanced Transparency Framework (ETF). Built into the framework is the idea of flexibility for developing countries that need it in light of their capacities. Whereas under previous decisions the same expectations were made of all the countries in a category (Annex I or non-Annex I), the new framework under the Paris Agreement allows for developing countries to decide if they need to apply flexibility in implementing the ETF. Flexibility can be applied in aspects including the scope, frequency and level of detail of reporting (UNFCCC, 2020). Therefore, a developing country which has not received the support needed to develop its capacity to the extent required to fulfil the requirements at the highest level can elect to fulfil the requirements at the level its capacity allows.

3.5.3. Long term strategies

In order to achieve the targets set by the Paris Agreement, it is critical for countries to transition to a low carbon economy as a step to becoming a zero-carbon economy. A low carbon economy is one based on energy sources with low GHG emissions. Switching to a low carbon economy involves a deep-rooted transformation involving new technologies, increased efficiency of existing technologies, and institutional and financial innovations. The challenge is to transition to a low carbon economy while achieving economic development goals and increasing resilience to climate change.

While many countries have set emission reduction targets, developing roadmaps that indicate specific steps and milestones to meet these targets is crucial. In order to set forth the means

of reaching national climate goals, the Paris Agreement invites countries to submit, by 2020, a mid-century, long-term, low greenhouse gas emission development strategy. The strategy is not obligatory. It is seen as a vision which will inform a country's NDCs and to which short term planning and investment can be aligned (Duarte). The process of developing a long-term goal involves broad stakeholder consultation and helps to identify both challenges and opportunities in low carbon development. The core of a long-term strategy is an emission reduction goal for the year 2050. This is the central part of the strategy which is aligned with national and sub-national development plans, sectoral planning and policy making in general.

3.5.4. Nationally Determined Contributions

A central component of the Paris Agreement is the Nationally Determined Contributions (NDC) which present a country's climate mitigation and adaptation actions. To meet the Paris Agreement's objective, all countries need to play a part in reducing their net GHG emissions. To do this, each country makes an independent decision as to the target level of their net emission reduction and commits to taking measures to meet their target. The target level is communicated as the country's NDC, along with the communication of adaptation goals and measures, and other required information.

Because of the Paris Agreement's concern with equity, a country's domestic circumstances and capabilities are taken into account in the determination of their climate goals. Climate actions are to be undertaken in a manner which does not detract countries from achieving sustainable development and poverty eradication.

NDCs are required to be submitted in 2020 and every five years thereafter, since the first NDCs apply to the period from 2020 onwards. However, the NDC process began before the Paris Agreement was adopted. In 2013, countries were invited to submit an Intended Nationally Determined Contribution (INDC). Upon a country's ratification of the Paris Agreement, its INDC became a commitment and was thereafter an NDC. Each subsequent NDC should aim to bring a country's net GHG emissions to a lower level than in the previous NDC. The NDCs are part of a five-yearly cycle as shown in Figure 4.

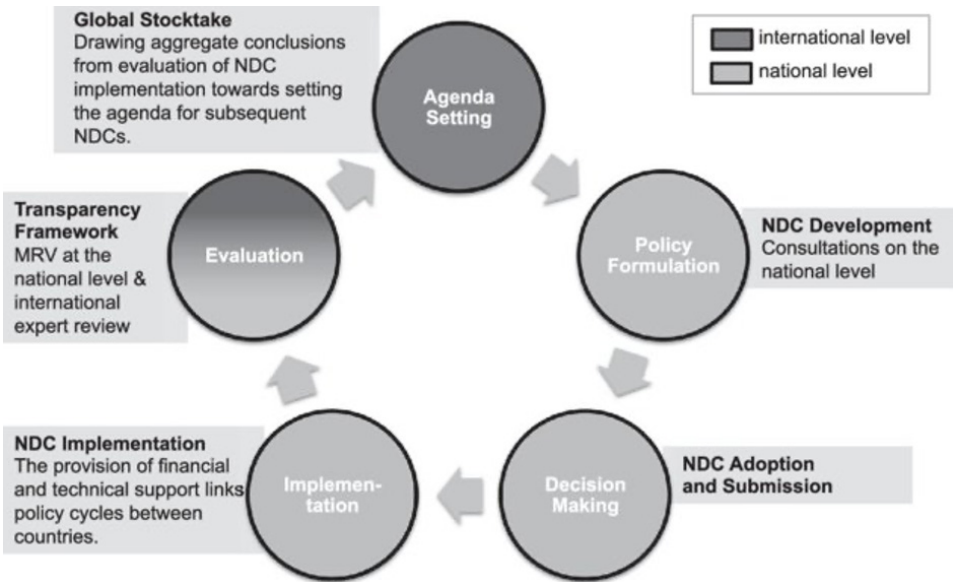

Figure 4. NDC policy cycle

Source: (Hermwille et al., 2019). Creative Commons Licence CC BY-NC-ND 4.0

Once a round of NDCs has been submitted to the UNFCCC, a global stocktake is undertaken in which an analysis is made of the current situation globally. Feedback from the global stocktake then informs countries in their formulation of their next NDC.

Analysis of submitted NDCs has found that even if all countries achieved their target emission reductions, the global collective NDC ambitions would need to triple to keep temperature rise below 2° Celsius, or to increase five times to keep temperature rise below 1.5° Celsius. This means all Parties to the Paris Agreement would have to ramp up their emission reduction targets, increase their climate resilience, and accelerate climate actions altogether to have a higher chance of achieving climate stability.

Lao Nationally Determined Contributions

Laos submitted its INDC to the UNFCCC in October 2015. While the INDC did not contain measurable targets for emission reductions, it did contain a number of planned actions for both mitigation and adaptation. Mitigation objectives are shown in Table 2. The objectives that have been selected are those which are seen to tackle major causes of future emission increases, as well as delivering development co-benefits (Government of Lao PDR, 2015).

Sector	Objective	Target year
Forestry	Increase total forest cover to 70% of land area	2020
Renewable energy	To increase the share of renewable energy to meet 30% of energy consumption[2]	2025
	To increase the share of biofuels to meet 10% of the demand for transport fuels	2025
Large-scale hydroelectricity	2.3GW will be added to increase total hydropower electricity production to approximately 5.5GW	2020
Rural electrification	Make electricity available to 90% of rural households	2020
Transport	Implement NAMAs to provide buses and develop the road network in order to cut down the vehicle kilometres travelled	
Climate change	Implement climate change action plans	

Table 2. NDC mitigation objectives by sector

Table 3 shows the adaptation measures listed in the INDC. The INDC was prepared through an extensive consultation process and drew from the NSEDP, sectoral strategies and climate change plans.

Sector	Focus of Projects and Programmes
Agriculture	Promote Climate Resilience in Farming Systems and Agriculture Infrastructure
	Promote Appropriate Technologies for Climate Change Adaptation
Forestry and Land Use Change	Promote Climate Resilience in Forestry Production and Forest Ecosystems
	Promote Technical Capacity in the Forestry Sector for Managing Forest for Climate Change Adaptation
Water Resources	Strengthening Water Resource Information Systems for Climate Change Adaption
	Managing Watersheds and Wetlands for Climate Change Resilience
	Increasing Water Resource Infrastructure Resilience to Climate Change
	Promotion of Climate Change Capacity in the Water Resource Sector
Transport and Urban Development	Increasing the Resilience of Urban Development and Infrastructure to Climate Change

2 Large scale technologies with installed capacity of at least 15MW are not included in this target

Public Health	Increasing the Resilience of Public Health Infrastructure and Water Supply System to Climate Change
	Improving Public Health Services for Climate Change Adaptation and Coping with Climate Change Induced Impacts

Table 3. INDC Adaptation measures

The NDC was updated with enhanced ambitions in 2020. The updated version has targets for emission reductions based on three scenarios, as shown in Figure 5. The scenarios are taken from a base year of 2000, which was the year on which the second GHG inventory was based. The baseline scenario is that which is calculated to occur if there were no mitigation measures put into place from the year 2000 onwards.

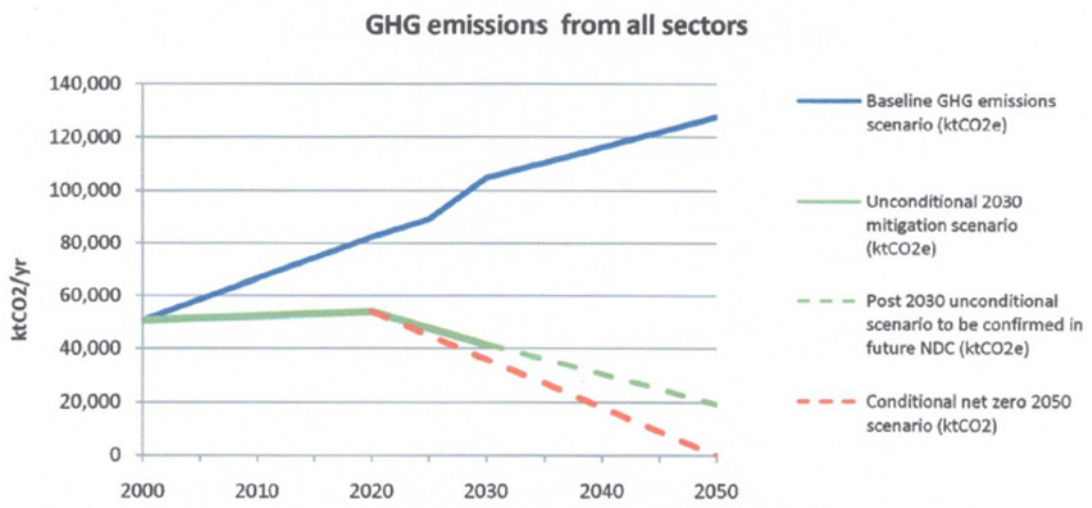

Figure 5. National GHG emission scenarios

Source: Lao PDR 2020 NDC draft

The unconditional and conditional scenarios show an estimated level of emissions for 2020, showing that the steep upward trajectory has already been altered. Estimated 2020 emissions are 34% below the baseline scenario. The unconditional scenario is that which is estimated with existing resources and levels of support from developing countries. Projected emissions in 2030 are 57% below the baseline scenario, but there is still a net emission of GHGs in the year 2050. Enhanced mitigation measures include an extra 13GW of installed hydropower capacity, a new bus rapid transit system in Vientiane Capital and a new national railway line.

The conditional scenario shows how which Laos can commit with increased financial support from developing countries and shows a net zero emission by the year 2050. Additional mitigation targets include 30% electric vehicles for 2-wheelers and passenger cars; a 10% reduction in final energy consumption; 50,000 hectares of lowland rice cultivation with adjusted water management practices; and a municipal solid waste project processing 500 tons of waste per day. This scenario is conditional on the receipt of US$4,762 million to finance the extra measures.

The updated NDC does not change the priority adaptation objectives, but rather the emphasis is on their continuing implementation. A target year of 2025 has been set for the development of an adaptation strategy and action plan in the agriculture, forestry and land use change, water resources, and transport and urban development sectors.

4. Climate Change in International Agreements

While climate change is the main focus of the UNFCCC and its associated agreements, it has also been mainstreamed into other development agreements and plans. The current overarching development agenda in the UN system is the 2030 Agenda for Sustainable Development.

4.1. Agenda 2030

A key component of the 2030 Agenda is the Sustainable Development Goals (SDGs). These 17 goals were adopted by UN members in 2015, and cover economic, social and environmental development. The Agenda acknowledges the interconnectedness of the goals as goals overlap and reinforce one another. For example, SDG 7 is to "ensure access to affordable, reliable, sustainable and modern energy for all". This contributes to attaining SDG 13 which is to "take urgent action to combat climate change and its impacts There is a realisation in the Agenda of a strong relationship between climate change and sustainable development

5. Climate Change Planning in Laos

Since 2009, the Government of Laos has been developing a legal and policy framework to respond to climate change. Climate change policy is aligned with multilateral environmental agreements which Laos has signed, and also with national development planning. In terms of climate change adaptation, policy is closely linked to disaster management planning, and there have, at times, been institutional linkages between the two. Figure 6 shows, in chronological order, key pieces of legislation and policy on climate change. Some of the documents are specifically focussed on one or both of climate change adaptation and climate change mitigation. Others, written in red, are key components of national development strategy and have climate change mainstreamed into their planning. Figure 6 does not include UNFCCC reports, such as National Communications and Biennial Update Reports, which are explained in the guidelines on MRV.

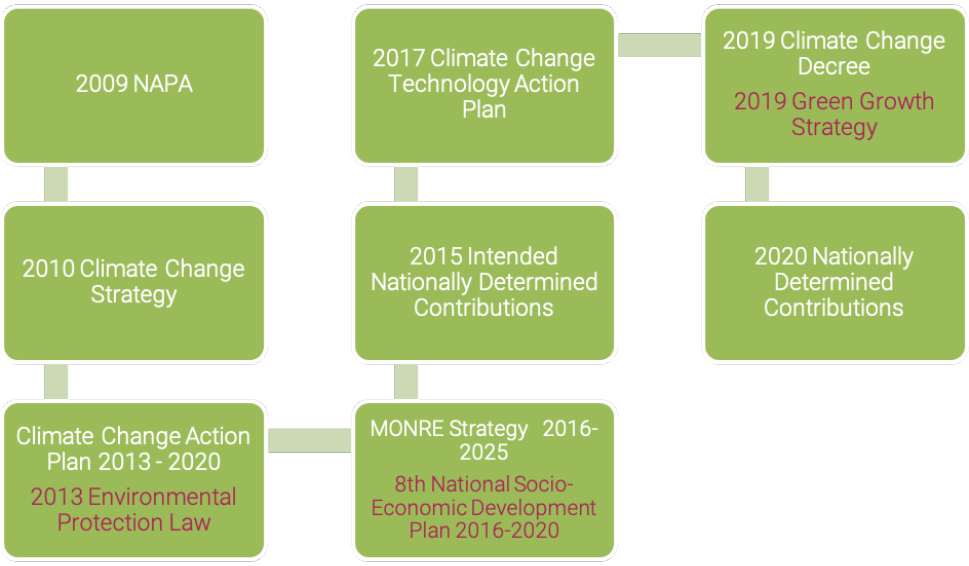

Figure 6. Lao Climate Change Planning

5.1. National Adaptation Programme of Action to Climate Change 2009

The first climate change plan was the 2009 National Adaptation Programme of Action (NAPA). In the early days of the UNFCCC, the emphasis for developed countries was on adaptation, while developed countries were required to take the lead and act on mitigating climate change. In line with this principle, LDCs were required to produce a NAPA. The Lao NAPA was commenced in 2004 and submitted in 2009.

The principal objective of the NAPA was to "develop a country-driven program to address immediate and urgent needs related to current and projected adverse effects of climate change in key sectors" (Government of Lao PDR, 2009, p. 8). The Lao NAPA includes a comprehensive collation of climate change data which was available at the time, and which was relevant to Laos. It identifies the main climate-induced hazards as floods and droughts. These combine with a high level of vulnerability due to a heavy dependence on subsistence agriculture. The hazards and vulnerability result in risks to the Lao population, particularly to the rural poor. At the time the NAPA was written, floods and droughts had already caused heavy losses both to the national economy, as well as disease outbreaks and damage to infrastructure. The document also identifies the four sectors mostly affected by climate change namely agriculture, forestry, water resources and public health. There are 45 project proposals presented in the four sectors, categorised into first or second priority. The criteria for prioritising adaptation activities were:

1. Activities must deal with a variety of degrees of severity of impacts from climate change;
2. Contribute to poverty reduction;
3. Linkages with other Multilateral Environmental Agreements;
4. High value for economy and society (Government of Lao PDR, 2009, p. 44).

Common emphases in the adaptation activities were capacity building, knowledge acquisition, awareness raising and technical aspects concerned with such objectives as improving seed varieties or developing systems for watershed protection

5.2. The Strategy on Climate Change of the Lao PDR 2010

A national climate change strategy was released in 2010 to guide future planning in both adaptation and mitigation. At the time, there was still very limited data about climate change in Laos, and many assumptions and projections were based on regional data or anecdotal observations. The climate change strategy took the approach of "mainstreaming climate change in the 7th NSEDP [National Socio-Economic Development Plan] and build[ing] climate resilience in critical sectors of economic development and poverty reduction, involving its people in partnership with the international community" (Government of Lao PDR, 2010, p. 8).

The following climate change vision encapsulates the Government's holistic, integrated approach to climate change and reinforces the strong links with development aims.

> *To secure a future where the Lao PDR is capable of mitigating and adapting to changing climatic conditions in a way that promotes sustainable economic development, reduces poverty, protects public health and safety, enhances the quality of Lao PDR's natural environment, and advances the quality of life for all Lao people*
>
> (Government of Lao PDR, 2010, p. 8)

At the time the Strategy was written, mitigation was becoming more of a focus for developing countries. The Government's commitment to mitigation is shown in the statement that, "the Government of Lao PDR aims to reinforce its vision for sustainable development by promoting actions that are responsive to a low-carbon growth and development model" (Government of Lao PDR, 2010, p. 5).

The goals of the strategy are to:

1. Reinforce Sustainable Development Goals of the Lao PDR, including measures to achieve low-carbon economic growth;
2. Increase resilience of key sectors of the national economy and natural resources to climate change and its impacts;
3. Enhance cooperation, strong alliances and partnerships with national stakeholders and international partners to implement the national development goals;
4. Improve public awareness and understanding of various stakeholders about climate change, vulnerabilities and impacts, GHG emission sources and their relative contributions, and of how climate change will impact the country's economy, in order to increase stakeholder willingness to take actions (Government of Lao PDR, 2010, pp. 8-9).

The guiding principles of the strategy are:

1. Climate Change Mainstreaming as Core Element;
2. International Partnerships;
3. Capacity Building as a Pressing Priority;
4. Integrated Solutions and Co-Benefits;
5. Innovative Financial Instruments;
6. Awareness, Education and Community Participation Leading the Way (Government of Lao PDR, 2010, pp. 9-10).

The strategy laid out key adaptation and mitigation options in seven sectors, covering a range of areas including policy, financial, institutional, capacity building, technical, research, knowledge dissemination and management practices.

5.3. Climate Change Action Plan 2013-2020

Based on the Climate Change Strategy, the Climate Change Action Plan was developed with the purpose of "identify[ing] the goals, key initiatives, proposed projects and activities as well as leading or responsible agencies" (Government of Lao PDR, 2013, pp. 1-2). It was expected to help stakeholders from the national to the local level in implementation, monitoring and reporting in a coordinated manner.

To the vision and guiding principles which were introduced in the strategy, the action plan added four key initiatives:

1. Strengthening institutional and human resource capacities on climate change;
2. Enhancement of adaptive capability for coping with climate change;
3. Climate change mitigation through the reduction of greenhouse gas emission;
4. Strengthening education and raising public awareness on climate change (Government of Lao PDR, 2013, pp. 3-4).

Whereas actions had previously been ordered by sector, the action plan ordered actions by the key initiatives, at the same time designating the ministry which was responsible for them. Table 4 indicates the focus of projects in the action plan.

Key Initiative 1: Strengthening Institutions, Legislations, Human Resource Capacity and Finance on Climate Change
Establish and Strengthen Technical Capacity for Planning and Implementing Climate Change Activities
National Management and Coordination on Climate Change
Climate Change Strategy and Action Plan
Raising Public Awareness on Climate Change
Strengthen Climate Change Finance
Key Initiative 2: Climate Change Adaptation
Promote Climate Resilience in Farming Systems
Promote Climate Resilience in Fisheries
Promote Climate Resilience in Rural Infrastructure
Promote Climate Resilience in Rural Economies
Promote Technical Capacity in the Agriculture Sector
Promote Appropriate Technologies for Climate Change Adaptation (in the Agriculture sector)
Promote Appropriate Land Use for Agricultural Purposes
Promote Climate Resilience in Forestry Production and Forest Ecosystems
Promote Climate Forest Resilience in Local Economies
Promote Technical Capacity in the Forestry Sector
Strengthening Water Resource Information Systems for Climate Change
Flood Management
Drought Management
Managing Watersheds and Wetlands for Climate Change Resilience
Increasing Water Resource Infrastructure Resilience to Climate Change
Promotion of Climate Change Capacity in the Water Resource Sector
Increasing the Resilience of Energy and Transportation Infrastructure
Increasing the Resilience of the Industrial Sector to Climate Change
Increasing the Resilience of Urban Development to Climate Change
Increasing the Resilience of Rural Water Supply Systems to Climate Change
Improving Public Health Services for Climate Change Adaptation
Key Initiative 3: Climate Change Mitigation through Reduction of Greenhouse Gas Emission
Control of Agriculture Carbon Emissions
Strengthen Forest Management Systems
Implement Climate Positive Forest Technology
Promote Clean Energy for Climate Change Mitigation
Strengthen Industrial Technology for Reduced Carbon Emissions
Promote Carbon Management through Urban Development
Key Initiative 4: Strengthening Education and Public Awareness Raising on Climate Change
Include Climate Change in Educational Curricula
Promote Awareness on Climate Change

Table 4. Focus of projects in Climate Change Action Plan

5.4. Climate Change Decree

A Decree on Climate Change came into effect in September 2019. The decree defines principles, regulations and measures relating to climate change adaptation and mitigation. Key principles are the mainstreaming of climate change management into visions, strategies, plans and programmes; effectiveness and efficiency in adaptation and mitigation measures; systematic and timely provision of data; the involvement of all stakeholders in climate change activities; and harmonisation with international agreements.

The Decree sets out the rights and duties of relevant ministries and gives MONRE the mandate to manage climate change activities and to coordinate with relevant ministries, organisations and local authorities. A key task is the management of data and information. MONRE has the responsibility of developing a data and information system through which relevant sectors report to the natural resources and environment sector and MONRE reports to the Government and fulfils international reporting obligations.

Adaptation obligations include assessing and mapping vulnerability. To aid climate change mitigation, the natural resources and environment sector is tasked with developing policies, strategies and plans to increase carbon sinks and to reduce GHG emissions. Regarding finance, the Decree sets out the sources of funds for the Climate Change Fund and the criteria for using the funds.

5.5. Lao PDR Development Planning

Development planning is aligned with an overarching Vision for 2030. The Vision begins with the idea that, "Lao PDR is ranked as a developing country with upper-middle income and with innovative, green and sustainable economic growth" (Government of Lao PDR, 2016, p. 86). A Ten-year Socio-economic Development Strategy (2016–2025) consists of seven strategies for realising the vision. The first strategy is on "quality, inclusive, stable, sustainable and green economic growth" (Government of Lao PDR, 2016, p. 86). These core components of Lao development planning show that sustainable and green growth is a fundamental aim for Laos. Sustainable development is based on three pillars which are economic, social and environmental. It is often defined as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, para. 27). The idea of sustainable development evolved in order to bring justice, inclusivity and environmental protection into development. Throughout the world, much of economic development in the past had been fuelled by natural resources. This kind of development harmed the environment and has been a major cause of climate change. The Lao policy framework shows a strong alignment with sustainable development.

5.5.1. The 8th Five-Year National Socio-Economic Development Plan

Climate change related actions have been incorporated into the 8th NSEDP which is the key development plan from 2016-2020. The third of three outcomes is focussed on the environment and includes principles of sustainability and green growth, and readiness to cope with the effects of climate change. Output 2 of Outcome 3 is concerned specifically with climate change. The direction of this output is to, "Ensure public involvement to minimize GHG emissions, increase and enhance the ability to adapt and prepare for climate change by integrating climate change and risks mitigation into strategic and operational plans of the sectors concerned" (Government of Lao PDR, 2016, p. 142). There are a range of activities and projects prioritised which cover both adaptation and mitigation and include policy development, capacity-building, institutional enhancement and planning.

5.6. Green Growth Strategy

A strategy has been adopted to support sustainable development and guide green growth in Laos. While not exclusively climate change related, the links between green growth and climate change are so strong that the strategy has a relevant part to play in climate actions. One of the many definitions of green growth is "an approach to economic growth that is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services" (Government of Lao PDR, 2018, pp. 16-17). There is therefore a strong focus on climate change mitigation through the reduction in GHG emissions. The green growth strategy aims to mainstream green growth into national, sectoral and local planning to transform Laos' long term development pathway and move economic growth away from a dependence on the exploitation of natural resources, in particular, mining, forestry and water resources. The strategy has an accompanying draft plan.

5.7. Ongoing climate change planning

Response to climate change is evolving as we learn more about its causes, extent and impacts. The Paris Agreement has laid a framework for increasingly ambitious actions. This will require continuing commitment and planning from a wide range of stakeholders. There is a need for increased financial support so that all countries are able to build the capacity required and take action to attain the targets set in their NDCs. The ETF will bring increased transparency and enable global stocktakes to ascertain the level of success of the global community in keeping global temperature rise to 2° Celsius or preferably 1.5° Celsius. Current analysis shows that collectively we need to increase our ambition as well as ensure that all planned actions are implemented.

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Prepared by UN-Habitat Lao PDR

3rd Floor, UN House, Lang Xang Avenue
P.O. Box 345, Vientiane, Lao PDR
Tel: +856 (0) 21 267 777

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