

Biodiversity Conservation in Lao PDR



Champasack University

Dr. Phonesavanh Thepphasoulinthone¹, Mr. Bounthavy Vongkhamchanh²
Vice-President of Champasack University¹, Lecturer²

Introduction

Lao PDR is land linked country that bordering Myanmar, Cambodia, China, Thailand, and Vietnam. The area is **236,800 km²** and about **6.8 million people** live in its 18 provinces.

63 percent of population are stilled in rural areas. The country is largely mountainous, the river flows from north to south, forming the border with Thailand for more than 60 percent of its length.



Introduction

Lao PDR, a lower-middle income economy with a Gross National Income (GNI) per capita of **\$1,600** in 2014.

GDP growth averaged **7 percent** over the last decade.

The main source of income is the natural resources such as **water, minerals and forests**.

The numbers of known species of **plants are 8,286 and 1,300 of vertebrates**.

• Mammals	200
• Birds	750
• Reptiles	70
• Amphibians	40
• Fishes	250

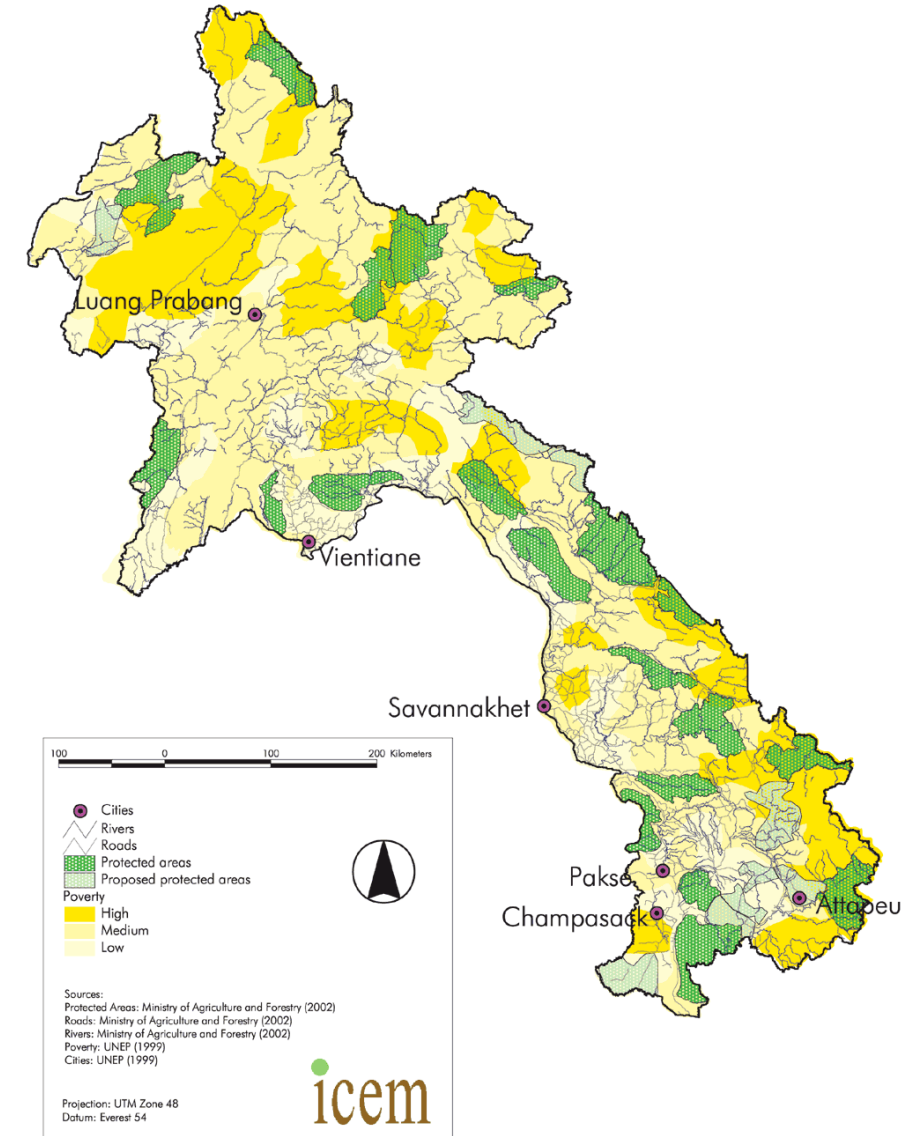


Assessment

Forest cover change

Since 1982, the average annual rate of deforestation in Laos has amounted to approximately **0.7% (76,000 ha/year)**.

Reducing the national forest cover from 49% in 1982 to 45% in 1992 and 41.5% in 2002, about **40% of the country (9,500,000 ha)** is estimated to be forest in the present.



Overview of critical issues and concerns

The forest degradation trends can be deduced from geographic differences in **timber harvesting and shifting cultivation**.

The illegal logging is conducted in all state forest categories.



shifting cultivation

local and foreign operators carry out large-scale illegal logging without any official harvesting contracts; these operators tend to target **conservation forests and protection forests**.

Main drivers of forest cover change

The forest cover changes were identified into nine drivers:

- 1 Unsustainable wood extraction from production forest**
- 2 Pioneering shifting cultivation**
- 3 Agricultural expansion**
- 4 Industrial tree plantation**
- 5 Mining**
- 6 Hydropower development**
- 7 Infrastructure development**
- 8 Fire**
- 9 Urban expansion**

Illegal logging

- The growing stock of Laos' forests has fallen by an average of **18 million m³ per year** during the past 20 years.
- Official forest clearance and timber harvesting account for only about **10 million m³ per year**.
- The remaining **8 million m³ per year not accounted for**.

Afforestation and Reforestation

Laos' Fifth (2001–2005) and Sixth (2006–2010) National Socioeconomic Development Plans included tree planting, with plantation targets of **134,000 ha by 2005** and an additional **25,000– 30,000 ha by 2010**.

According to Laos' Agricultural Development Strategy 2020, the Ministry of Agriculture and Forestry (MAF) envisages no more than **300,000 ha of company based rubber plantations nationwide**

Afforestation and Reforestation

The Forestry Strategy 2020 set a target of planting trees in 500,000 ha of severely degraded forest areas and assumed that 6 million ha of forest would regenerate naturally. More generally, the government has committed to increasing the country's forest cover to **70% by 2020**.

Lessons Learned

International collaboration

Laos is not a member of the International Timber Trade Organization. However, as a member of the Association of South-East Asian Nations (ASEAN).

Laos has participated several international meeting as well as Biodiversity conservation meeting:

- **United Nations Forum on Forests (UNFF)**
- **Strengthening Forest Law Enforcement and Governance (FLEG)**
- **Reducing Emissions from Deforestation and Forest Degradation (REDD+)**
- **European Union Forest Law Enforcement, Governance and Trade (EU FLEGT)**
- **German Agency for International Cooperation (GIZ)**

International collaboration

Laos is a membership of World Trade Organization (WTO) and the government has ratified the following major international agreements on biodiversity, wildlife and protection of the natural resources:

- **United Nations Framework Convention on Climate Change (UNFCCC) in 1995**
- **United Nations Convention on Biological Diversity (CBD) in 1996**
- **Convention on International Trade in Endangered Species (CITES) in 2004**
- **Ramsar Convention on wetlands, with two sites registered in 2010**

Policies and institutions

As for bilateral agreements, the government of Laos and the Forest Protection Department of Vietnam signed a Memorandum of Understanding dealing with law enforcement and the **prevention of illegal timber trade in 2009.**

Land and forest policy and governance in Laos have undergone major transformations during the past three decades, **three political-economic projects: Moving People from the Hills** (launched 1975), **Rationalizing Land Use** (1990) and **Turning Land into Capital** (1997).

Forest Law provides for five classes of forest.

- Protection Forest
- Conservation Forest
- Production Forest
- Regeneration Forest
- Degraded Forest

20 declared NBCAs

	<u>Size km²</u>
1. Dong Ampham	1,975
2. Dong Hua Sao	910
3. Dong Phou Vieng	1,980
4. Hin Nam Nor	865
5. Nakai Nam Theun	3,710
6. Nam Et	1,915
7. Nam Ha (East)	445
8. Nam Kading	1,740
9. Nam Phoun (Poui)	1,150
10. Nam Xam	580
11. Phou Den Din	1,310
12. Phou Hin Poun	1,580
13. Phou Khao Khouay	1,390
14. Phou Loey	1,465
15. Phou Phanang	700
16. Phou Xiang He	1,060
17. Phou Xiang Thong	995
18. Xe Bang Nouan	1,260
19. Xe Pian	2,665
20. Xe Sap	1,335
<u>Total NBCAs</u>	<u>29,030</u>

The 11 proposed NBCAs

	<u>Size km²</u>
1. Bolovens Northeast	935
2. Bolovens Southwest	620
3. Dong Khantung	1,500
4. Nakai-Nam Theun Extension	645
5. Nam Chuan	1,610
6. Nam Ha West	1,025
7. Nam Kan	775
8. Nam Theun Corridor	620
9. Phou Kathong	880
10. Phou Theung	1,130
11. Xe Kampho	780
<u>Total proposed NBCAs</u>	<u>10,520</u>

Policies and institutions

Climate change policy context

Laos ratified the United Nations Framework Convention on Climate Change (UNFCCC) in 1995 and the Kyoto Protocol in February 2003.

In 2007, a Prime Ministerial Decree was issued the regulation of Clean Development Mechanism (CDM) activities in Laos.

The decree defined the Water Resources and Environmental Agency (WREA) as the designated national authority responsible for approval of CDM projects.

Creation of Ministry of Natural Resources and Environment (MoNRE) in June 2011 and the merging of WREA into the new ministry, the CDM Executive Board was moved into MoNRE.

Conclusions

Laos has long viewed **deforestation and forest degradation** as important policy issues. However, the various regulations and land reform and planning programs created to address deforestation and forest degradation have met with little success. Recently, the government's adoption designed to boost private land investment and development, it pressured the Laos' forest resources is evident through the steady decline in national forest cover, from 49% of the country in 1982 to **40% in 2010**.

The Way Forward

Resolution of critical issues

Three main activities for controlling deforestation

- The first, at the national level focuses on **establishing a regulatory framework for carbon-sensitive mining and hydropower development.**
- The second activity, **curbing the expansion of agriculture** and tree plantations in existing forests, seeks to improve land-use planning and land allocations and leases by using information on carbon stocks and values.
- The third activity, controlling forest conversion. promotes forest protection, regeneration and restoration initiatives by **smallholders in both village and national conservation**, production and protection forests.

Acknowledgements



Thank You for Your Attention!