



Food and Agriculture  
Organization of the  
United Nations



**Hand-in-Hand**  
Initiative

Investment Forum | Rome, Italy | 18-20 October 2023



# Sustainable Investment Opportunities Lao PDR





1

**Overview**

2

**Enabling  
Environment**

3

**Hand in Hand Initiative  
and Success Stories**

4

**Sustainable Investment  
Opportunities**

# SECTION 1: OVERVIEW

# Lao PDR: Overview



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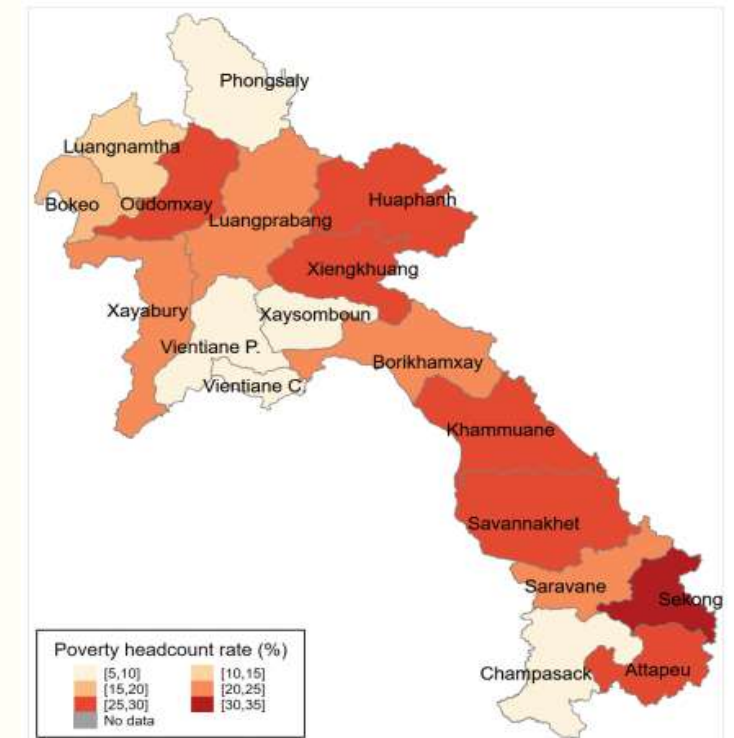
- **Country Area:** 236,800 km<sup>2</sup>
- **Population:** 7.5 million (Young population: 60%)
- **GDP:** USD 16.51 billion (2022)
- **GDP Growth Rate:** 4% (2023)
- **Cropland:** approx. 22 % of land area
- **Forest Area:** 16.6 million ha
- **Soil Type:** Acrisols (73%), Cambisols (12%), 15% (other)
- **Rainfall:** 1200-2200 mm in plains, 3000 mm in the North
- **Natural Disasters:** Floods, Droughts, Earthquakes
- **Climate:** Tropical monsoon; few extremes of temperature and weather
- **Farming Systems:**
  - smallholder subsistence agriculture,
  - smallholder semi-commercial (cash crops, livestock)
  - commercial (plantations, livestock)
- **Agriculture:** 16.6% of GDP
- **Employment:** 58% of working population in agriculture sector



# Lao PDR: Poverty and Malnutrition

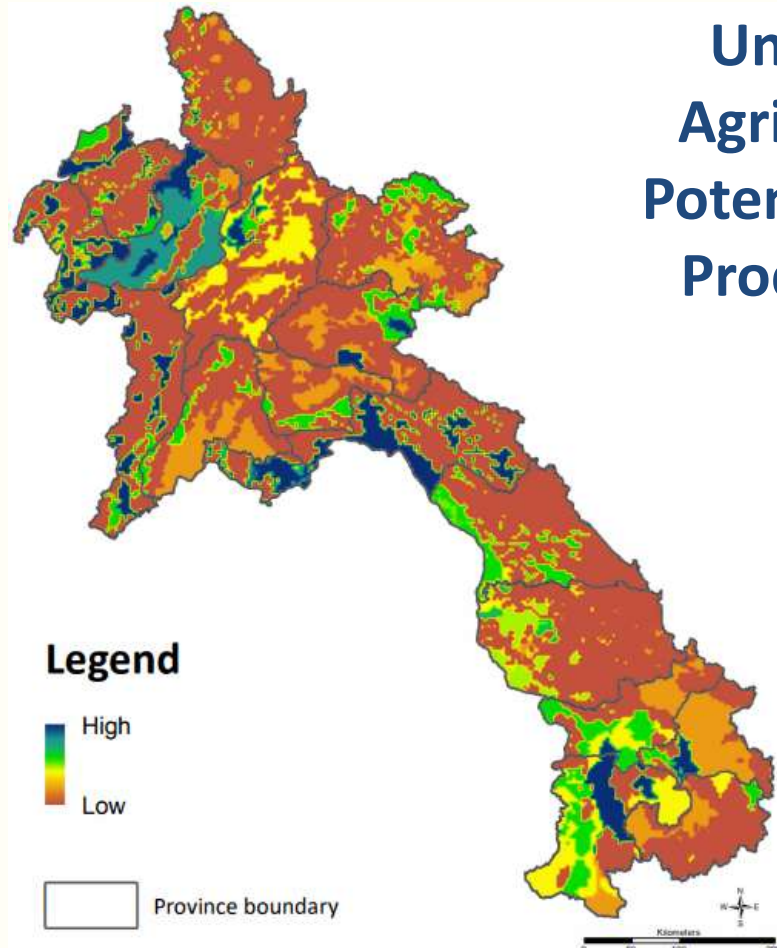
<b>Poverty Rate:</b>	<b>18.23%</b> (2023)
<b>Gini Index:</b>	<b>38.8</b> (2023)
<b>Poverty Rate - rural:</b>	<b>23.8%</b> (2019)
<b>Poverty Rate - urban:</b>	<b>7%</b> (2019)
<b>Children under 5 stunted:</b>	<b>33%</b> (2023)
<b>Children under 5 underweight:</b>	<b>21%</b> (2023)
<b>Children under 5 wasted:</b>	<b>9%</b> (2023)

Poverty by province: 2019

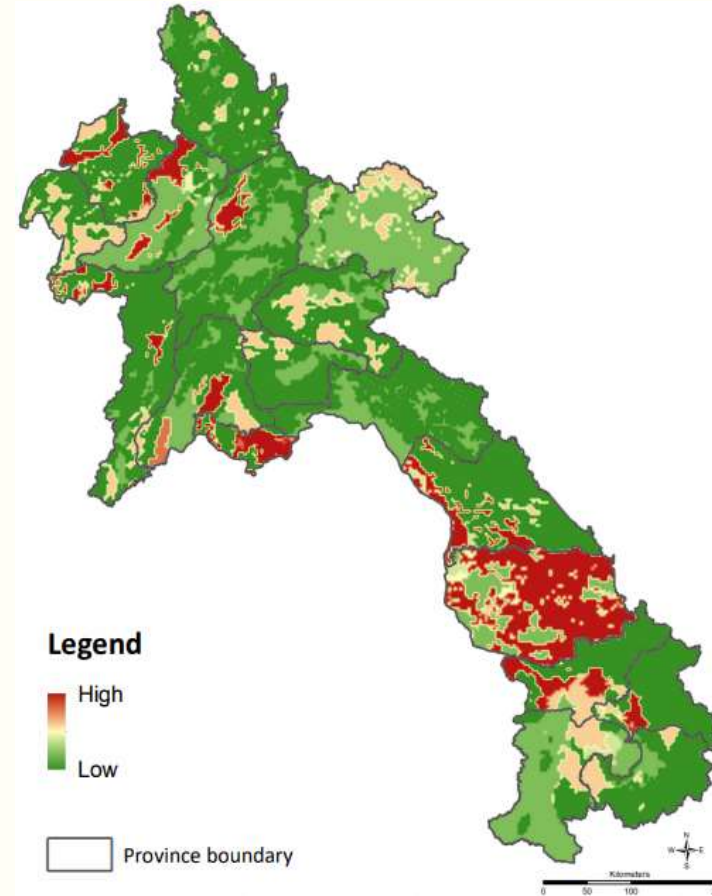


Why invest in Laos?

# Untapped Agri-Production Potential and Investments in Agri-Products Value Chains and Businesses



Untapped Agriculture Potential for Production



Untapped Potential for Value Addition Points- Post Harvest

## SECTION 2: ENABLING ENVIRONMENT

# Ease of Doing Business

Doing Business 2020

Lao PDR

Ease of Doing Business in

Lao PDR



Region	East Asia & Pacific
Income Category	Lower middle income
Population	7,061,507
City Covered	Vientiane

DB RANK



DB SCORE



## Rankings on Doing Business topics - Lao PDR



Treasury Inflation-Protected Securities-17 countries (2021)

Bilateral Investment Treaties-23 countries (2021)

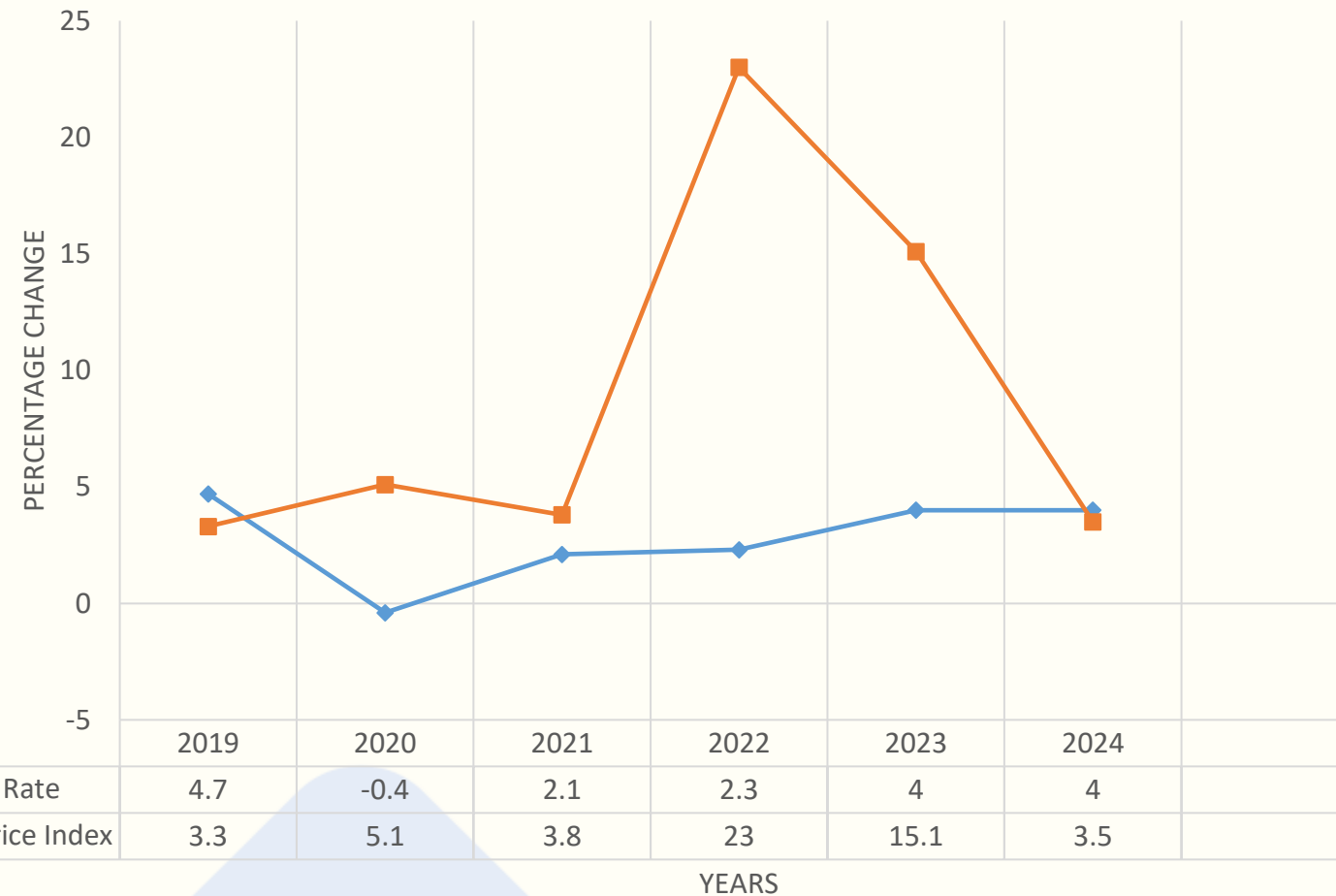


# Macro-Economic Stabilization



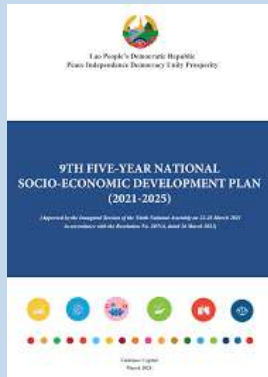
## MACRO-ECONOMIC INDICATORS

—◆— GDP Growth Rate —■— Consumer Price Index



# Development Policy & Planning Framework

## 9<sup>th</sup> National Socio-Economic Development Plan (NSEDP 2021-2025) & Green Growth Strategy



- Agriculture as driver of green & quality economic growth
- Prioritize sustainable investment in agriculture and green growth as critical and important development path for the country

## Trade Facilitation Framework T4D (trade for development) Vision



- Part of Regional Comprehensive Economic Partnership (RCEP)-ASEAN+3
- GSP status with EU, Oceania and Canada
- Tariff Free Agreements for Lao goods with 6 countries including China
- FDI USD 677.7 million - 2023

## Agriculture Development Strategy (ADS) 2025 and Vision 2030



- Prioritize investments in agriculture and projected FDI needs - estimated at **USD 20 Billion** across agriculture and forestry sector

# Key Government Incentives



## Fiscal incentives:

### **Taxation**

- No Capital Gains Tax
- Reduced Income tax
- Customs duties exemption

### **Investment Protection**

- Protection against expropriation
- Compensation against expropriation for emergency reasons
- Repatriation of assets and profits
- Access to capital

## Non-Fiscal incentives:

- Abundant and fertile land available
- Land lease facility available supported by
  - Land allocation masterplan
  - Agriculture Land Development Strategy
  - Green and Sustainable Agriculture Framework
- Affordable labour (USD 3 /day unskilled)\*

## Others

- Country of Origin Certification - 1 day
- Investment License & Business Registration - 5 days
- Work Permit & Foreign ID card
- Tax registration
- Public utilities

# Infrastructure Development

- **Special Economic Zones (SEZ)**

- 21 SEZs across the country
- Domestic and foreign investments by more than 1,000 companies with total investment value of USD 23,51 billion and USD 4,57 billion is registered capital (2016-2020)
- Multinational enterprises (MNEs) from China, Thailand, Japan, Malaysia and EU are operating in Lao PDR.

- **Energy and water resources**

- The total installed energy capacity of the 94 power plants = 11,664.14 MW
- Generation of energy per year = 58,813 GW
- Cost of energy per unit = USD 0.030 per kWh
- Sufficient water resources: surface and underground water



# Infrastructure (Logistics & Connectivity)

## Land-linked, connectivity and Logistics



**Logistics Park in main provinces**

- Logistics and Export Processing Zone



**Local and foreign Logistics companies** of international standards

**Lao China high speed railways**

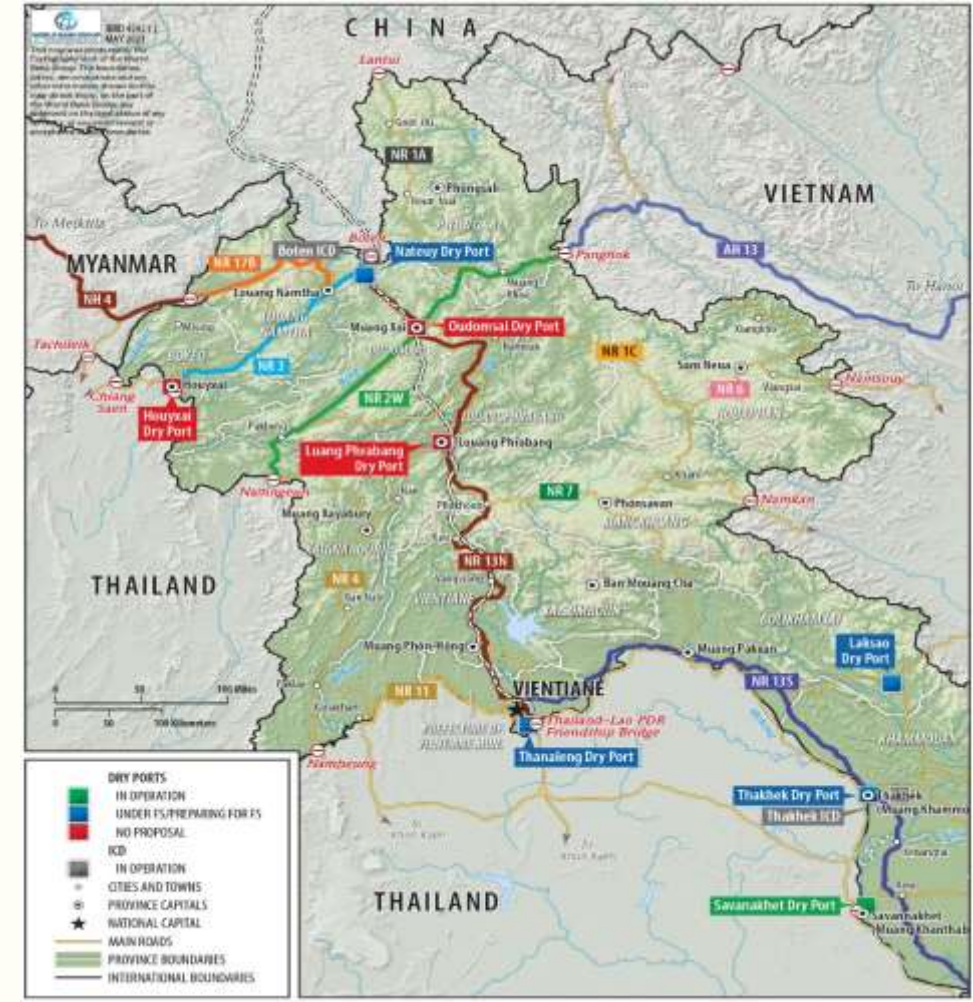
- Transport cost reduced by 32%
- 8 freight stations



**5% of GDP** - Logistics sector

### 26 Border Crossings

- Thailand – 14
- Vietnam - 7
- China - 3
- Cambodia - 2



# SECTION 3: HAND-IN-HAND INITIATIVE AND SUCCESS STORIES

# Hand in Hand Approach in Lao PDR

**Government as a Whole Approach, Investments linked to Sustainable Development Goals (SDGs) and National Planning and Budgetary Processes**

## Improve Investment Climate of Agri-Sector

Establishment of  
Sanitary and Phyto-Sanitary  
(SPS) infrastructure – critical for  
agri-trading

## Facilitate Dialogues and Partnerships

National Investment Forum in  
Sustainable Agriculture

Ministry of Agriculture and Forestry, Ministry of  
Foreign Affairs, Ministry of Planning and  
Investment, among other Organizations and Civil  
Society have been involved in the consultative  
process in developing the Business Cases.

**Business to Business and Business to  
Government Facilitation**

Success Stories



# Success Stories: Hand-In-Hand Facilitated Investments

A



Rustam Foods  
Pvt. Ltd.

Rustam Foods Pvt Ltd: Investment Agreement Signed for Establishing a Meat Processing Facility.

Secured  
Investment value:  
**USD 5 m**

B



Tsubame BHB: A Japanese Start-up in partnership with a Lao Private Sector company are at an advanced stage of negotiations with ADB for securing finances for Green Ammonium Nitrate Production.

Pipeline  
Investment  
Value: **USD 50 m**

C



AIIB: Advanced Stage of Negotiation for Investment in Irrigation Infrastructure.

Pipeline  
Investment  
Value: **USD 15 m**



## SECTION 4: SUSTAINABLE INVESTMENT OPPORTUNITIES

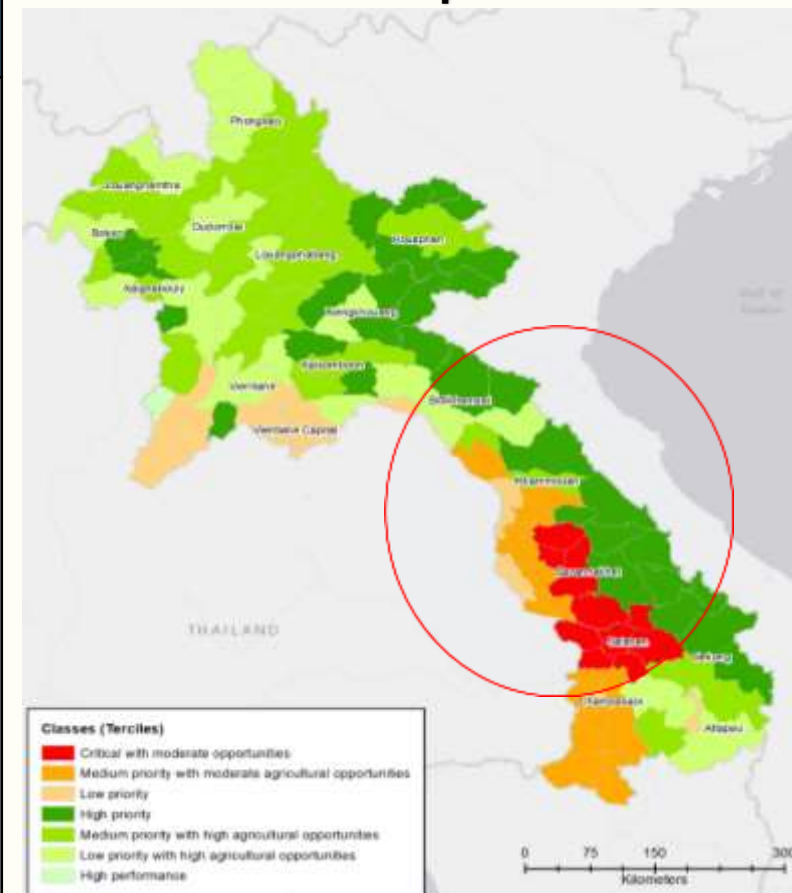
- **Agro-Forestry - Timber & Timber Products**
- **Agro-Forestry - Non-Timber Forest Product (NTFP) : Cardamom**
- **Lao Organic and Geographical Indications (GIs) Teas**

Possible  
Intercropping

# Agro-Forestry Timber & Timber Products

The Market	Supportive Policy Frameworks
<p><b>Global market:</b></p> <ul style="list-style-type: none"> <li>Global Trade Value 2023: <b>USD 748 billion</b></li> <li>Compound Annual Growth Rate (CAGR): <b>7.4%</b></li> </ul> <p><b>Regional Market</b></p> <ul style="list-style-type: none"> <li>China leading regional and global markets</li> <li>Import Value: <b>USD 21.2 billion</b> (2022)</li> </ul> <p><b>Domestic Market:</b></p> <ul style="list-style-type: none"> <li>Net Import Value (2018-22) Avg. <b>USD 67 million.</b></li> </ul> <p><b>Products:</b> <i>Plywood, charcoal, flooring, sawn wood, pulp, furniture</i></p>	<p><b>Domestic:</b></p> <ul style="list-style-type: none"> <li>Investment Promotion Law: agro-forestry on degraded and deforested land</li> <li>9th NSEDP target: restore 400,000 ha aiming at 70% of forest cover through promotion of land concession, land lease and contract farming</li> <li>Certification mechanism in place (Rules of Origin, Forest Stewardship Council, EU DR)</li> <li>Carbon credit decree</li> </ul> <p><b>Regional:</b> ASEAN, Strategic Plan of Action on Forestry (SPAF) and Forest Law Enforcement &amp; Governance (FLEG)</p> <p><b>Global:</b></p> <ul style="list-style-type: none"> <li><b>EU's Regulation of Deforestation-free Products.</b></li> <li>EU regulations on discouraging community displacement</li> </ul>

## Proposed Locations



# Agro-Forestry

## Investing in Timber & Timber Products



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Investment Description				Impacts	Risks and Mitigations
<p><b>Proposed land area for plantation:</b> 60,000 ha by 2025</p> <p><b>Concessional Land Lease from Central Government:</b> USD 10-30 ha/year for 30 years</p> <p><b>Proposed Model: Poly-cropping</b></p> <p><b>Proposed Species: Teak, Acacia Mangium, Eucalyptus</b></p> <p><b>Timeframe: 30 years</b></p>	<b>Cost USD</b>	<b>NPV USD @10</b>	<b>IRR %</b>	<ol style="list-style-type: none"> <li>1. Increased market access (to EU and region)</li> <li>2. 5,514 direct beneficiaries through employment</li> <li>3. 2,880 villages engaged</li> <li>4. 660,000 tonnes CO2 sequestered</li> <li>5. Carbon trading</li> <li>6. Annualized, expected per capita increase in income: USD 363</li> <li>7. Estimated Indirect beneficiaries: 2,059,200</li> </ol>	<p><b>Risk 1:</b> Climate change and climate related disasters (flood, drought)</p> <p><b>Mitigation:</b> Climate change adaptation/disaster risk management in place including alternate irrigation and drainage systems.</p> <p><b>Risk 2:</b> Forest fires in dry season</p> <p><b>Mitigation:</b> Fire risk management plan and necessary equipment in place.</p> <p><b>Assumption:</b> Macro-economic stabilization continues. GDP growth rate stabilized from 2.6% to 4% in six months in 2023</p>
	<b>157 m</b>	<b>26 m</b>	<b>17</b>		
<p><b>Eucalyptus:</b> plantation size 40,000 ha, harvest: 400 ha/year</p> <p><b>Acacia Mangium:</b> plantation size 10,000 ha, harvest: 200 ha/year</p> <p><b>Teak:</b> Plantation size 10,000 ha, harvest: 25<sup>th</sup> year</p>					

# Agro-Forestry Timber & Timber Product Value Chains



Transforming degraded land to sustainable, high-quality wood products



## Eucalyptus

(7 years Rotation)

- Plywood
- Veneer sheets
- Furniture
- Wood chips
- Sawn Timber
- Coal
- Bio-energy-residue waste to wooden pellets

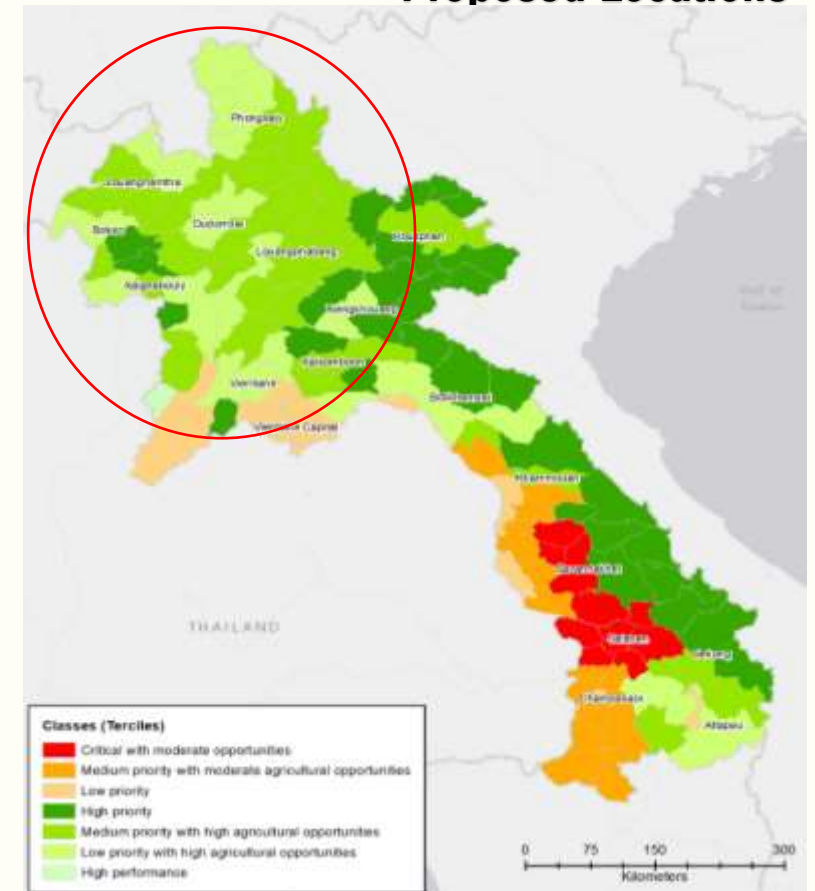


**Harvesting and Processing:** Harvesting machinery, water logging ponds, water pumping during dry season and establishing a Sawing Mill and Plywood Factory: **USD 20-30 million.**

# Agro-Forestry Non-Timber Forest Product: Cardamom

The Market	Supportive Policy Frameworks
<p><b>Global market</b></p> <ul style="list-style-type: none"> <li>Global Trade Value 2023: <b>USD 423 billion</b></li> <li>Compound Annual Growth Rate (CAGR): <b>4%</b></li> </ul> <p><b>Regional Market</b></p> <ul style="list-style-type: none"> <li>China leading regional and global markets. Used in over 100 traditional Chinese medicines</li> <li>Import Value of China: <b>USD 85.64 million (2022)</b></li> <li>Lao Net Export Value: <b>USD 44.5 million (2021)</b></li> </ul> <p><b>Farm-gate price</b></p> <ul style="list-style-type: none"> <li><b>USD 15-20/kg</b></li> </ul>	<p><b>Domestic:</b></p> <ul style="list-style-type: none"> <li>Investment Promotion Law</li> <li>NTFP - one of the priority products specified in the ADS 2025 and Vision 2030 and the National Plan of Action on Nutrition (2021-2025)</li> <li>Revised Law on Forest (2019)</li> <li>Certification mechanism in place (Rules of Origin)</li> </ul> <p><b>Regional:</b> ASEAN Sustainable Harvest Guidelines and Resource Management Protocols</p>

Proposed Locations



# Agro-Forestry

## Non-Timber Forest Product: Cardamom value chain



# Agro-Forestry Investing in Cardamom



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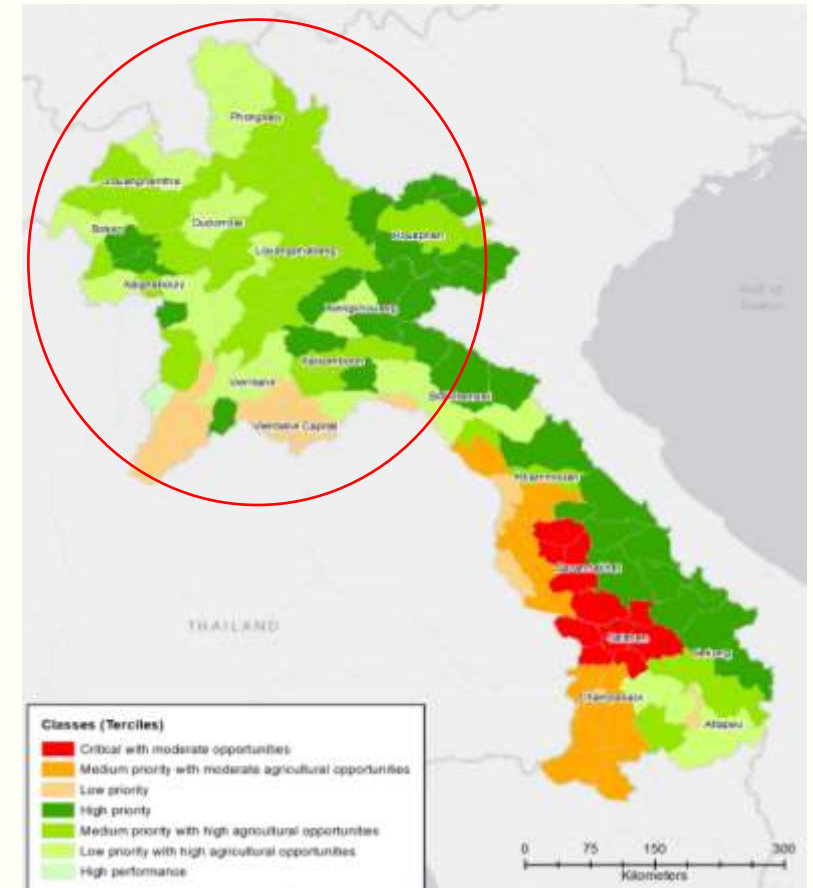


Hand-in-Hand  
Initiative

Investment Description				Impacts	Risks & Mitigation
<p><b>Proposed land area: 16,000 ha</b></p> <p><b>Plantation: in Production Forest</b></p> <p><b>Lease: Tripartite Lease with local government, farmers organizations and investor</b></p> <p><b>Proposed Species: Kouang Tung</b></p> <p><b>Plantation, Weeding &amp; Harvest: 15 years crop cycle</b></p> <p><b>Infrastructure: Drying, warehouse and packaging facility</b></p> <p><b>First Harvest: 3<sup>rd</sup> Year</b></p> <p><b>Peak Harvest: 5<sup>th</sup> - 8<sup>th</sup> years</b></p>	Cost USD	NPV USD @10	IRR %	<ol style="list-style-type: none"> <li>176,000 tons CO2 sequestered</li> <li>Direct beneficiaries: 15,220 persons</li> <li>Annualized, expected per capita increase in income: USD 365</li> <li>Indirect beneficiaries: 76,000</li> </ol>	<p><b>Risk 1:</b> Excessive rains can damage the cardamom plants.</p> <p><b>Mitigation:</b> Small check dams to control floods and erosion</p> <p><b>Risk 2:</b> Pest attacks (Cardamom thrips)</p> <p><b>Mitigation:</b> Integrated Pest Management</p> <p><b>Assumption:</b> Macro-economic stabilization continues. GDP growth rate stabilized from 2.6% to 4% in six months in 2023</p>
	10.4 m	6.5 m	12		
Drying, Packaging, Export to Regional and Global Markets via China and Thailand using Lao-China Railways					

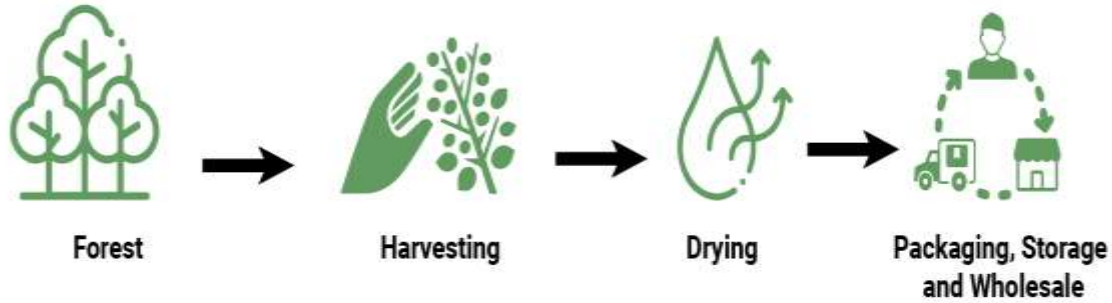
# Lao Organic & Geographical Indications (GIs) Teas

The Market	Supportive Policy Frameworks
<p><b>Global market</b></p> <ul style="list-style-type: none"> <li>• Growing global demand of organic products. Global Trade Value 2023: <b>USD 494.3 million</b></li> <li>• Compound Annual Growth Rate (CAGR): <b>16.4%</b></li> </ul> <p><b>Regional Market</b></p> <ul style="list-style-type: none"> <li>• A beverage of choice in Asia</li> <li>• China imported <b>USD 147 million</b> worth of tea (2022).</li> <li>• Net Export Value of Lao organic tea: <b>USD 3.44 million</b></li> </ul> <p><b>Domestic Market:</b></p> <ul style="list-style-type: none"> <li>• Retail Price of organic tea ranges from <b>USD 2.5/kg</b> to <b>USD 4.25/kg</b></li> </ul>	<p><b>Domestic:</b></p> <ul style="list-style-type: none"> <li>• Investment Promotion Law</li> <li>• 9<sup>th</sup> NSEDP: sustainable forest management as an outcome</li> <li>• Revised Law on Forest (2019)</li> <li>• Certification mechanism in place (Rules of Origin)</li> <li>• Geographical Indications (GIs) system in place fetching 20-50% higher price</li> </ul> <p><b>Regional:</b> ASEAN Sustainable Harvest Guidelines and Resource Management Protocols</p>





# Lao Organic & Geographical Indications (GIs) Tea Value Chain



White tea



Green tea



Red tea



Pu'er tea



# Investing in Lao Organic & Geographical Indications (GIs) Teas



Investment Description				Impacts	Risks & Mitigation
<p><b>Unit of Land Lease: 1,000 ha</b>  <b>Production Forest</b>  <b>Lease: Tripartite lease agreement between local government, farmers organizations and investor</b>  <b>Species: Organic GI Tea</b>  <b>Timeframe: 15 years</b>  <b>Infrastructure: processing, warehouse and packaging facility</b>  <b>Harvesting/picking season: 3 periods: Mar – May, Jun-Aug, Sep-Nov</b>  <b>Conversion rate: 5 kg fresh leaves to 1 kg of dried tea</b>  <b>Current tea products: Rough tea (Mao Cha), green tea, red tea, tea cake</b></p>	<p><b>Cost</b>  <b>USD</b></p>	<p><b>NPV</b>  <b>USD</b>  <b>@10</b></p>	<p><b>IRR</b>  <b>%</b></p>	<ol style="list-style-type: none"> <li>2,428 direct beneficiaries</li> <li>11,000 tons CO2 sequestered</li> <li>Annualized, expected per capita increase in income: USD 362</li> <li>Estimated Indirect beneficiaries: 82,180 persons</li> </ol>	<p><b>Risk:</b> Fragile eco-system may be disturbed.  <b>Mitigation:</b> Training and support farming communities on eco-system preservation for households incomes.  <b>Assumption:</b> Macro-economic stabilization continues. GDP growth rate stabilized from 2.6% to 4% in six months in 2023</p>
	<p><b>10 m</b></p>	<p><b>6.5 m</b></p>	<p><b>11.8</b></p>		

# Investment Summary



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Hand-in-Hand Initiative

**USD 177.4 million**

Total Investment for 3 cases

**11 - 17 %**

IRR Range

**23,162**

Direct Beneficiaries

**363 USD /annum /capita increase in Center & South  
727 USD/annum / capita increase in North**

**847,000 tCO2**

Sequestered

**2.2 million**

Indirect Beneficiaries



1

## Intervention

**Agro-forestry (Timber & Timber Products in degraded land)**

Total degraded land available: **400,000 ha by 2025 with 200,000 ha allocated for 2021-25**

Investment need: **USD 1.46 billion**

Proposed investment (60,000 ha by 2025): **USD 157 million**

- IRR – **17%**

- NPV – **USD 26 million (@ 10% discounted)**

## Sustainability Benefits:

- Reforestation of degraded land.
- Carbon sequestering: **660,000 tons**
- Estimated direct beneficiaries: **5,514**
- Estimated indirect beneficiaries: **2,059,200**
- GDP/capita increase of direct beneficiaries: **USD363**
- **SDGs: 13, 1, 2, 10 & 17**

2

## Intervention

**Agro-Forestry (NTFP-Cardamom)**

Total forest area available for Cardamom: **80,000 ha for next 5 years**

Investment need: **USD 52 million**

Proposed investment (16,000 ha): **USD 10.4 million**

- IRR – **12%**

- NPV – **USD 6.5 million (@ 10% discounted)**

## Sustainability Benefits:

- Poverty reduction for remote forest-dependent communities and ethnic minority groups.
- Carbon sequestered: **176,000 tons**
- Estimated direct beneficiaries: **15,220**
- Estimated indirect beneficiaries: **76,000**
- GDP/capita increase of direct beneficiaries: **USD 365**
- **SDGs: 13, 1, 2, 5, 10 & 17**

3

## Intervention

**Organic and Geographic Indications (GIs) Teas**

Total available land for cultivation of all types of tea: **10,000 ha**

Investment need: **USD 1 billion**

Proposed investment (1,000 ha): **USD 10 million**

- IRR – **12%**

- NPV – **USD 6.5 million (@ 10% discounted)**

## Sustainability Benefits:

- Poverty alleviation in remote forest communities.
- Carbon sequestered: **11,000 tons**
- Estimated direct beneficiaries: **2,428**
- Estimated indirect beneficiaries; villagers engaged: **82,180**
- GDP/capita increase of direct beneficiaries: **USD362**
- **SDGs: 13,1,2,5, 10 & 17**