



# **Lao PDR Drivers of Change Affecting Mekong Forests**

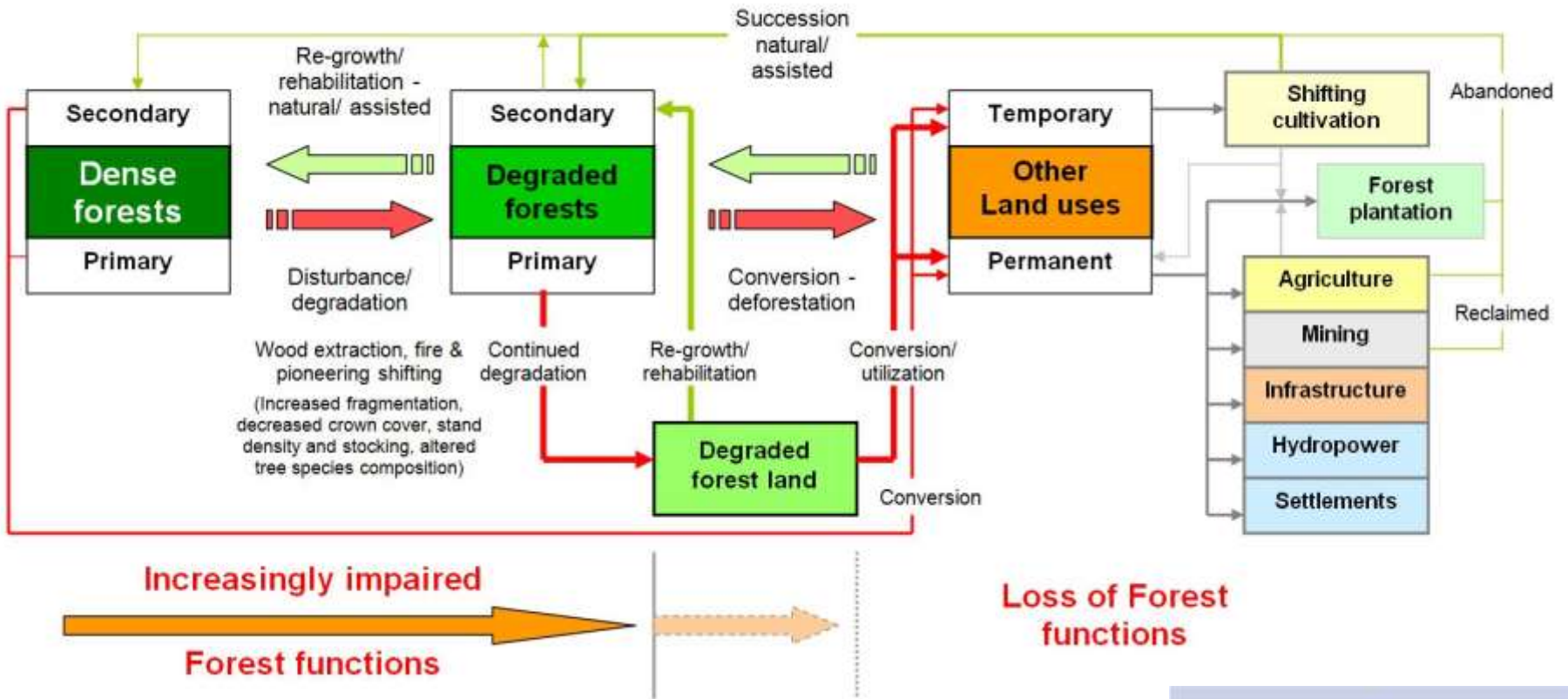
**Rowena Soriaga**

on behalf of

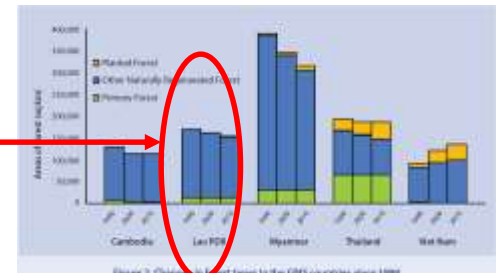
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# Overall Land Use and Forest Change Process



Lao forests decreasing by 0.5% per year on average (1990-2010)



# Direct and Indirect Negative Drivers (Deforestation and Forest Degradation)

Governance

Economic

## Institutional issues

- Capacities (human & financial)
- Unclear functions/ role
- Weak cooperation/ information exchange
- Salary structure
- High capacity for timber processing
- 'Power' issues

## Regulative framework

- Policies - nat./ regional
- Programs
- Legislation
- Technical guidelines

## Governance

- Corruption
- Misuse of power
- Lack of transparency

## Socio-cultural factors

- Population dynamics
- Consumption pattern
- Education
- Cultural differences by ethnic groups

## Demographic

## Markets

- Global, regional, national demand
- Prices
- Trade liberalization

## Economic factors

- Global, regional, national economic development
- Investment
- Income
- Financial mechanism

## Global climate change

- Increasing weather extremes
- Alteration of dry & rainy season
- Increasing flooding

## Underlying drivers

## Resource/ site conditions

- Land suitability
- Existence of desired species
- Productivity potential

## Limited awareness

- Forests - bio-div, climate & watershed functions
- Rights to use and access land & forests

## Access

- To markets, resources, services
- Roads, buildings

## Availability of technology

- Extension services
- Information exchange

## Household economy

- Labor
- Capital
- Land access
- Alternative income

## Local priorities

- Socio-economic development
- Infrastructure
- Land use
- Implement. of programs

## Local Socio-economics

- Labor availability
- Qualification level

## Tenure insecurity

- Land tenure

## Main drivers

Weak control & law enforcement

Profitability

Insufficient land access

Resource management & monitoring

Absent incentives

Individual poverty

Values & beliefs

People's fears

Unsustainable Wood extraction

Pioneering shifting cultivation

Agricultural expansion

Industrial tree plantation

## Sources

Sources	Impact	Projected Annual Forest Loss Rate	Remarks
Wood Extraction	Forest Degradation	Estimated between 0.97 to 1.57 million cu. m per year during the period from 2002 until 2009	Includes commercial logging, illegal logging & household consumption and the combined total represents the primary driver of unsustainable deforestation and degradation and is a high GoL priority to control.
Agricultural Expansion	Deforestation	Commercial 34,200 ha/year Small-holder 14,700 ha/year	Since 2007 GoL has placed successive moratoriums on new concessions.
Industrial Tree Plantation	Deforestation	6,000 ha/year	GoL is prioritizing tree plantations however deforestation occurs when plantations replace natural forest.
Pioneering Shifting Cultivation	Forest Degradation & Deforestation	57,300 ha/year Degraded	GoL continues to make efforts to control shifting cultivation. It should however be noted ray areas typically regenerate quickly.
Hydropower	Deforestation	13,100 ha/year	The rate is likely to increase further as many more new hydropower projects are built.
Mining	Deforestation	5,100 ha/year up to 14,100 ha/year	Only certain types of mining (such as large-scale bauxite strip mining) are individually likely to cause extensive deforestation. However the cumulative effects of thousands of smaller local artisanal mines are most likely currently a bigger driver of deforestation.
Infrastructure	Deforestation	1,000 ha/year up to 2,000 ha/year	Direct impact may be relatively small but indirect impact especially due to increased accessibility due to road construction is much higher.
Urban expansion	Deforestation	Not significant except in Vientiane Prefecture where annual loss rates average -1.5%	Could also be an overall positive change due to associated rural de-population putting less pressure on forests.
Fire	Forest Degradation	MODIS satellite has detected more than 10,000+ fires in a one week reporting period	The satellite imagery shows that during dry seasons Laos can have an astonishingly high frequency of forest fires however burnt areas typically regenerate very quickly.

***Primary source of the Projected Annual Forest Loss Rate estimates is the REDD-PP (Unpublished 2010)***

# Positive Drivers

- Government concern over loss of logging revenues due to illegal logging
- Societal concerns over loss of ecosystem services led GoL to reduce logging quotas and issue land concession moratorium
- Land tenure category includes communally managed lands
- Programs and initiatives valuing ecosystem services and promoting participatory approaches

# Ways to Grow the Future

## To curb negative drivers :

- **Strengthen enforcement** of existing forest-related laws & regulations especially with regards to illegal logging
- Improve performance of forest financial incentive schemes (**REDD is too slow**)
- Control future agriculture expansion and commercial plantation development
- Reform the domestic wood processing industry

## To grow positive drivers:

- Improve participation of community & village stakeholders
- Strengthen management & planning in production forests
- Provide training & build capacities in SFM
- Improve forest trend monitoring (mapping & statistics) through inter-sectoral coordination

**ຂອບໃຈ - Khàwp Jai – Thank You!**

