

# Achieving forest landscape restoration (FLR) through legal and sustainable business models and value chains

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## Programme Objective

**To tackle illegal logging, promote trade in legal timber products and contribute to sustainable forest management (SFM) and poverty reduction.**

- 1) VPA Support.** *Incl. Guyana, Honduras*
- 2) Non-VPA targeted country approach.** *Incl. Columbia, Peru, Guatemala, Panama*
- 3) Private sector (focus SMEs)**
- 4) Improved knowledge of FLEGT and exchange of experiences.**
- 5) Impact Monitoring** *Coordinated approach of CIFOR, EFI and FAO*

# Content

1. Context for legality & FLR
2. Potential investments and institutional approaches for FLR.
3. Applications & impacts of FLR with VC approaches in Latin America: The case of Teak in Costa Rica



*Hojancha, Guanacaste, Costa Rica*



# **1. CONTEXT FOR LEGALITY & FLR**

# Economic FLR Approach

- **Change logic of intervention for FLR:** Develop **BM&VC** that will produce human well-being, and rehabilitation of ES will come as a co-benefit!
- **FLR is expensive**, and it will have higher cost as landscapes become more degraded.
- It is imperative to invest in **governance reforms, technologies and BM** that will yield interesting **long-term returns** to attract private sector and financial institutions (profitability and ES)
- FLR technologies have to be **knowledge-intensive** to turn trade-offs into synergies (production & conservation as complementary).
- FLR requires a **strong institutions** to attract sound investments.

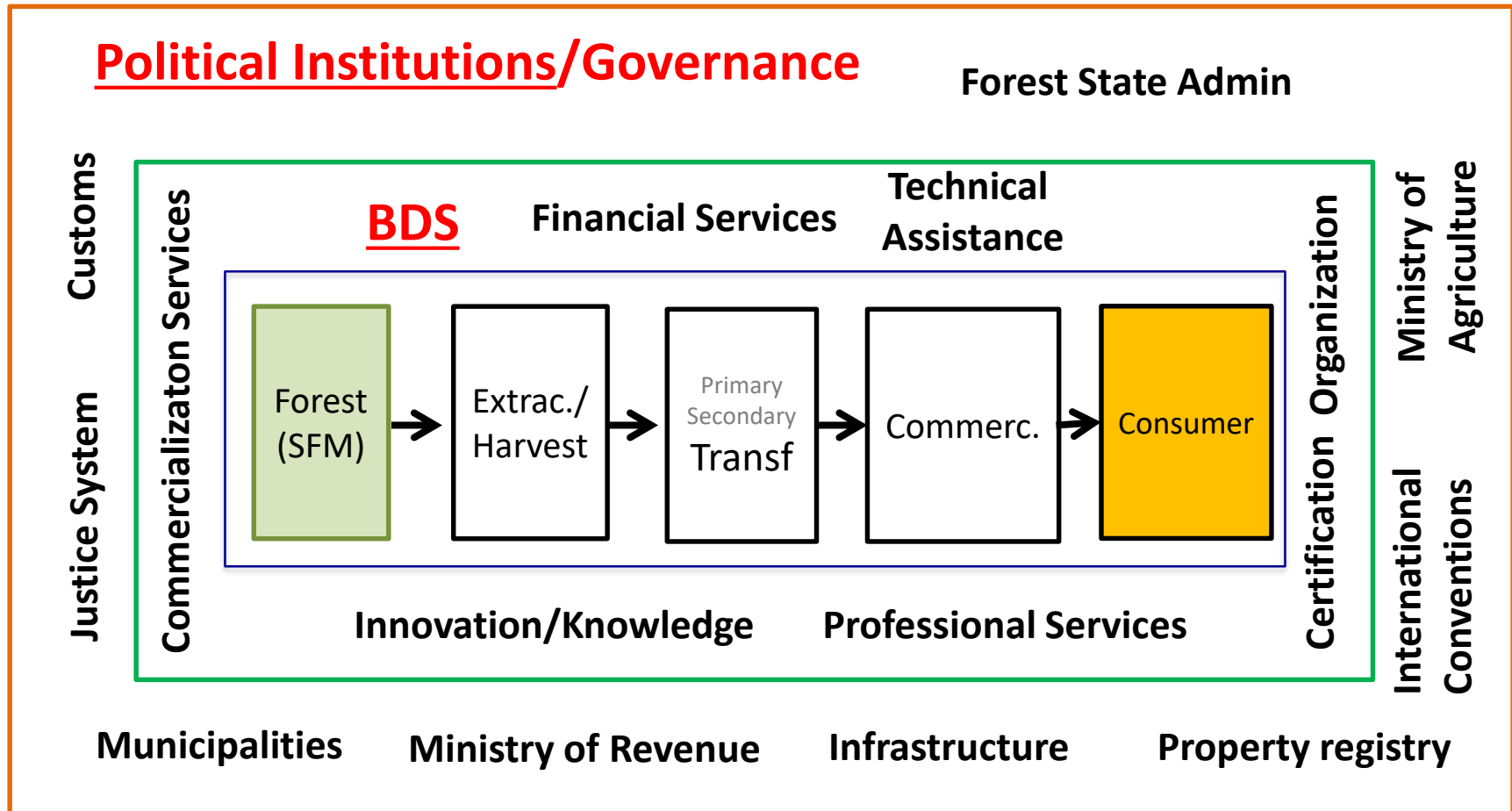


# FLR value chain approach

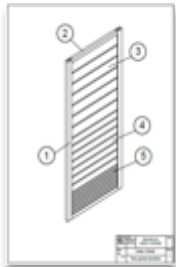
- Functional structure of interrelated actors in a sequence of productive operations,
- Bi-directional information transfer (product and prices)
- Political, institutional and a socio-economic context (**Clear and effective legal standards, and favorable investment environment**)
- Efficient allocation of resources provided by sustainable management of (agro-) forestry lands.
- Actors/links recognize the mutual need for working together for:
  - Identify common strategic goals,
  - Invest time, energy and resources for realizing an articulated work.
  - Share costs and risks in order to obtain bigger benefits and a common progress.



# Understanding sustainable business models & value chains



**Business Model = [VCh + BDS + Governance]**



## **2. POTENTIAL INVESTMENTS AND INSTITUTIONAL APPROACHES FOR FLR.**

# FLR Potential

The need to integrate socio-economic focus:

- Increase productivity and improve access to markets.
- Identify/map where FLR is economically viable and ES can be internalized.
- Avoid that the poor will end up financing most of the FLR effort (**Avoid restrictive regulations, bans, and high transaction cost of being legal**).
- Provide long-term permanence to FLR transformations and impacts (**Recognize rights to farmers/communities**).



*Hojancha, Guanacaste, Costa Rica*

# Driving private investment into Legal FLR



- Create consumer and investors aware on the importance of FLR and legally sourced products.
- **Legal framework** allows for innovation, competitiveness along BM/VC.
- **Risk management and governance**
  - **Clear rights and rules (legal certainty)**
  - Development of competitiveness indices and benchmarking analysis.
  - Knowledge/technological gap solved to ensure economic efficiency.
- **Business development services:**
  - Competitive financial products and services (impact investment)
  - Forest State Services (**Legality as an incentive and adapted to business dynamic**)

# INSTITUTIONAL APPROACHES TO FLR

In order to be successful, FLR needs these necessary conditions:

- Being legal has to be cost effective
- Improve credibility of the forest sector/country of origin
- Protect dignity of forest actors.
- Improve competitiveness of forest sector (reduce transaction costs)
- Reduce impunity of illegal activities.



# Administrative governance



## Administrative procedures to export wood products from the CA region

Tipo de Proceso/ País		BLZ	CRI	SLV	GTM	HND	NIC	PAN	DOM
Especies Forestales No-CITES	Cantidad de documentos	7	10	10	11	10	14	18	13
	Días necesarios	5-9	2-6	2-6	2-6	3-6	5-11	4-10	4-10
	Costo (USD)/contenedor	260-420	231-404	70-220	226-374	273-523	144-290	212-472	288-512
	Costo (US\$)/m³	8.7-14.0	7.7-13.5	2.3-7.3	7.5-12.5	9.1-17.4	4.8-9.7	7.1-15.7	9.6-17.1
Especies Forestales CITES	Cantidad de documentos	13	13	13	22	22	24	22	13
	Días necesarios	13-17	10-14	4-8	13-17	33-36	13-19	4-10	4-10
	Costo (USD)/contenedor	260-440	231-404	85-235	242-524	573-1123	184-330	212-472	308-562
	Costo (US\$)/m³	8.7-14.7	7.7-13.5	2.8-7.8	8.0-17.5	19.1-37.4	6.1-11.0	7.1-15.7	10.3-18.8



### **3. APPLICATIONS & IMPACTS OF FLR WITH VC APPROACHES IN LATIN AMERICA: THE CASE OF TEAK IN COSTA RICA**

# Best practices & impact on FLR with BM & value chain approaches

## Teak Value Chain in Peninsula of Nicoya, CR Wealth Allocation among links (2013-2014)

Teak  
Plantation

Harvest

Exporter

India  
Market



US\$ 331,4/m<sup>3</sup>  
(39,5%)

PES US\$ 33/m<sup>3</sup>  
(3.5%)

Tax/Reg US\$40/m<sup>3</sup>  
Margin 4% (17years)

US\$ 45,36/m<sup>3</sup> (5,4%)  
Margin 9%

US\$ 376,76/m<sup>3</sup> (45%)  
US\$ 464/m<sup>3</sup> (55%)  
Neg. Margin US\$56.5/m<sup>3</sup>  
(6.5%)

Margin: >28%

US\$ 840/m<sup>3</sup>  
(100.0%)  
CIF  
1US\$ = 530col

# Teak Value Chain in Peninsula of Nicoya, CR

## Ecological Integrity (2013-2014)

Teak  
Plantation

Harvest

Exporter

India  
Market



**Opportunity cost of protection water/slope areas.**

US\$ 7.860/ha (17yrs) (100% Land area use in PF)

-US\$ 1.622/ha (21% protection area)

US\$ 6.238/ha (79% production area)

**Land Price**

•VET < PT (US\$ 7.547/ha)

( US\$ 23,77/m<sup>3</sup> is the opportunity cost of land conservation).

# Teak Value Chain in Peninsula of Nicoya, CR

## Administrative governance (2013-2014)

Teak  
Plantation

Harvest

Exporter

India  
Market



**-US\$ 5,41/m<sup>3</sup>**

**Net Incen: 0.87**

Net PES

**US\$ 33,45/m<sup>3</sup>**

Income tax

**-US\$ 6,38/m<sup>3</sup> (0,8%)**

Land tax

**-US\$ 8,71/m<sup>3</sup> (1%)**

OC land protection

**-US\$ 23,77/m<sup>3</sup> (4%)**

**-US\$ 5,77/m<sup>3</sup>**

Forest control

**-US\$ 4,74/m<sup>3</sup>**

Income tax

**-US\$ 1,03/m<sup>3</sup>**

**-US\$ 22,5/m<sup>3</sup>**

Export procedures  
cost

**-US\$ 14,25/m<sup>3</sup>**

Income tax

**-US\$ 8,25/m<sup>3</sup>**

**Total:**

**-US\$ 33,68/m<sup>3</sup>**

**STATE**

**I/C ratio: 2,17**

# Teak Value Chain in Peninsula of Nicoya, CR

## Macro Vision (2013-2014)

### Teak Plantation



US\$ 8,9 Mio/y (39,5%)  
40.000 m<sup>3</sup>  
382 ha

- Labor **\$ 1,47 Mio/y**  
**(82.024 Jor.)**
- Input **\$ 0,19 Mio/y**
- Serv **\$ 0,29 Mio/y**
- LO **\$ 0,5 Mio/y**
- CO\$ **0,27 Mio/y**
- TO **\$ 0,6 Mio/y**
- **PES \$ 1,01 Mio/y**
- Imp R **\$ 0,06 Mio/y**
- Land tax **\$ 0,09 Mio/y**

### Harvest



US\$ 1,2 Mio/y (5,4%)

- Labor US\$ 0,36 Mio/a  
**(18.613 Jor)**
- Input **\$ 0,19 Mio/y**
- Serv **\$ 0,26 Mio/y**
- Control **\$ 0,13 Mio/y**
- Incom tax **\$ 0,04 Mio/y**
- Profit **\$ 0,24 Mio/y**

### Exporter



US\$12,4 Mio/y (55%)

- Transp. Pto. **\$ 0,81 Mio/a**
- FoBing **\$ 0,24 Mio/a**
- BL **\$ 0,007 Mio/a**
- O. Freight **\$ 2,68 Mio/a**
- Trust control **\$ 0,13 Mio/**
- **Field \$ 2,15 Mio/a ??**
- **Office \$ 2,68 Mio/a ??**
- Income tax **\$ 0,22 Mio/a**
- Neg. Margin **\$ 1,5 Mio/a**
- Profit **\$ 1,75 Mio/a**

### India Market



US\$ 22,5 Mio/y  
31.300 m<sup>3</sup>

1.566 Cont/yr

US\$14.400  
/container

# Strategies

## Market:

- Organization of teak producers
- Capacity building in commercialization of teak to capture negociation margins (improve bilateral negotiation)
- Create conditions for fair competition among teak exporters to make them more efficient so they offer better prices to farmers
- Organize a Cluster to standarized quality, create a teak productive base, and provide a sustained supply of teak

## Legality:

- Simplification of procedures. Being legal has to be cost-effective.
- Opportunity cost of regulaitons can not compromise profit. PES has to be adjusted to compensate profit loss for providing ES.
- Policy incidence to prove that PES and Teak are good business for the State and the economy. Request additional support for Cluser development and market access.



# What was the impact and sustainability of FLR outcomes?

- Income improved 250 families owners of Teak plantations.
- Farmers organized in one organization (PROTECA)
- Training of organizations for providing Technical services (CACH) and commercialization services (UNAFOR)
- Establishment of Timber Auctions - Increased prices by 31.5% (2016)
- Decree reform on simplifying procedures – It is Ministry ready for publication.
- Ministry – Created a Teak Cluster in the Nicoya Pennynsula, and FONAFIFO (Fund) committed to finance at least 500Has/yr of Teak plantations in the area.



***FAO-EU FLEGT builds a culture of governance and legality  
to achieve food safety and to eradicate poverty***

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**Thanks for your kind attention**

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