



Experiences in Peru with Tracking Technologies and Forest Governance

www.trazabilidadforestal.com

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WORKSHOP ON TRACKING TECHNOLOGIES FOR FOREST GOVERNANCE
15-17 MAY 2012, KUALA LUMPUR, MALAYSIA





1ST FOREST EXPERIENCE WITH GEO-ELECTRONIC TRACEABILITY IN PERU

- Public-private alliance (w/ ITTO seed funding)
- Objectives: (1) Guarantee the legal origin of wood coming from a sustainable managed forest.
(2) Fulfill international commitments, conventions and trade agreements.
(3) Follow up a **container with mahogany*** using electronic traceability, from an indigenous community forest (isolated in the boundary with Brazil) till the harbor (coast) crossing the Andes, and shipping to the final purchaser in the USA.

***Equivalent to ~ 10-30 mahogany trees / 180m³ in 60Ha for a 90m³ x container**

Peruvian model

Sustainable forest management, forest health, reforestation and benefits to local and indigenous communities





PARTICIPANTS

PUBLIC /GOVERNMENT

- ☐ National Forest Authority
- ☐ 4 Ministries
- ☐ 4 National Supervision Bodies.
- ☐ 2 Universities
- ☐ 2 Science and Technology Bodies.
- ☐ Customs and IRS.
- ☐ 1 Regional government.
- ☐ Police.
- ☐ Navy.

**Independent Staff: Director
and 3 consultants (analysis)**

PRIVATE

- ☐ Indigenous Communities and private forest concessionaire FSC-certified.
- ☐ Company for electronic forest census and geo-referencing
- ☐ Export and services companies
- ☐ Traceability technologies and hosting providers
- ☐ Logistics operators
- ☐ Financial sector
- ☐ Shipping companies and custom agents



Traceability ALL along the way...



Inventories/Census



Gathering



Storage



Cut



Transport



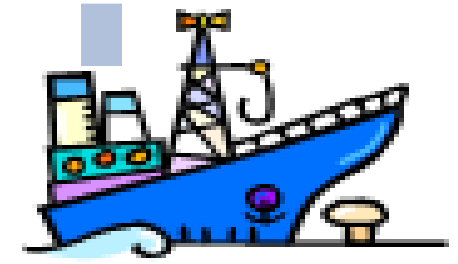
Product



Moving/pulling



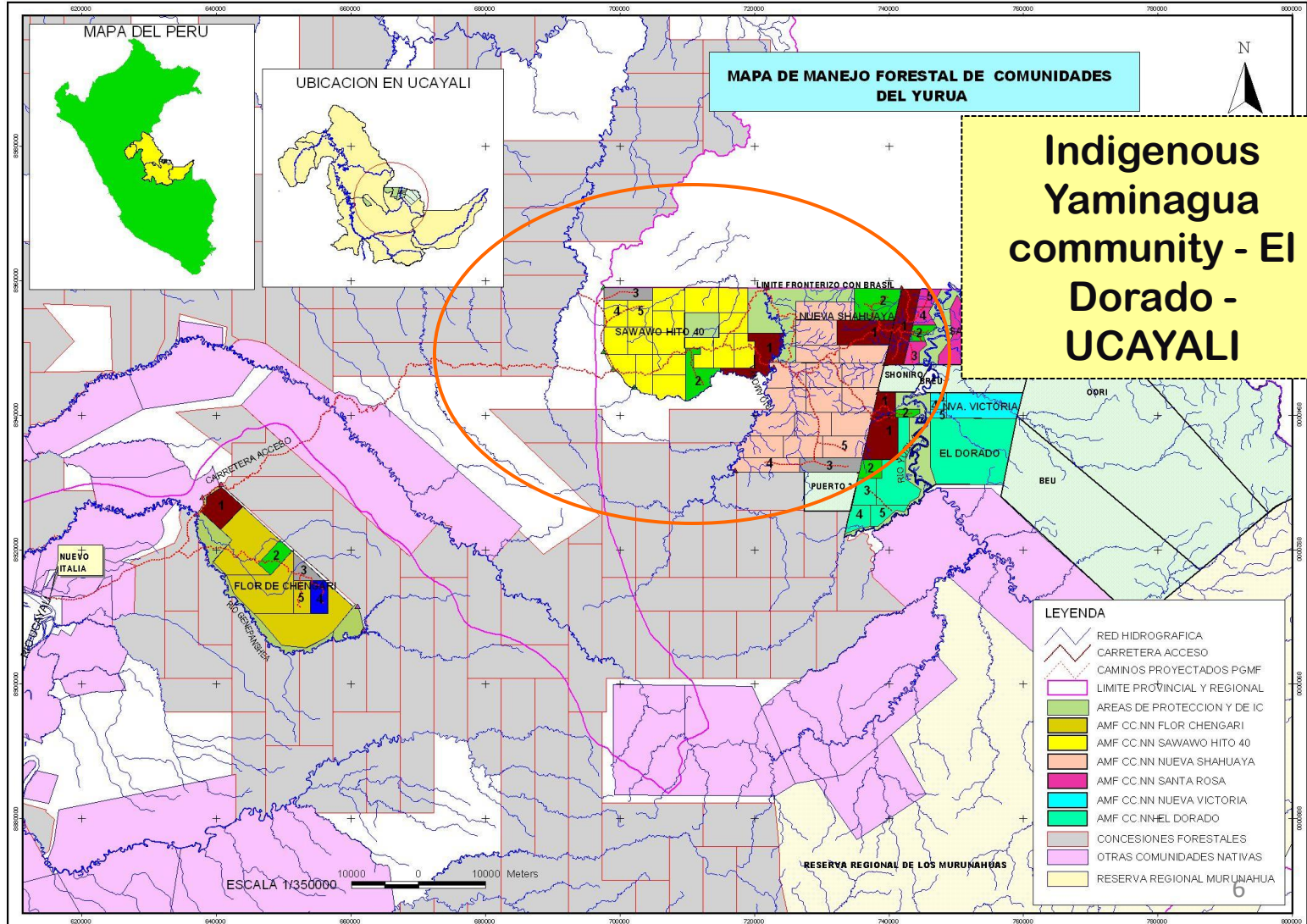
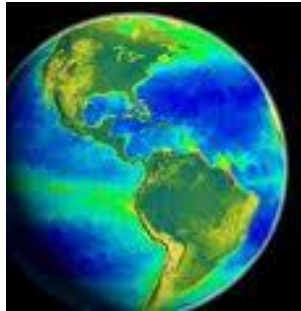
Sawmill



Export



Where does the traced wood come from?



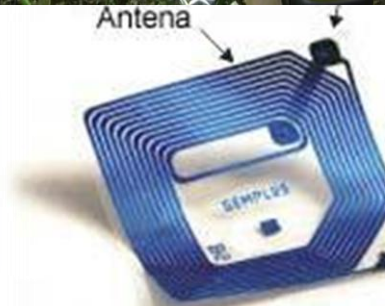


Step 1: Electronic forest census

- Satellite information
- Field Map (Czech Republic): hardware & software;
- Mapping
- Electronic ID of trees
- Information about the forest including census, that is key for sustainable forest management and traceability.



Used Combination of Technologies (PDA, Tags, RFID chips, nails, code bars labels....)





Step 2: Electronic chain of custody

- Wood flow information and document management done in real time (internet), from the forest to the harbor, available to the authorities, users and observers.
- Used Helveta technology.



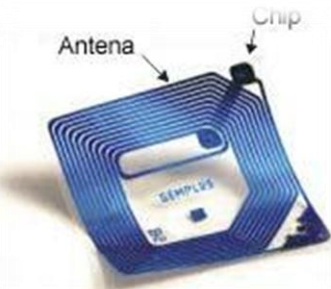
Diversity of technologies at sawmill and harbor (electronic arcs, nails, labels, tags)



CONTROL DE CADENA DE CUSTODIA
MADERA NO CERTIFICADA

LOTE DE TROZAS N° 02	LOTE DE ASERRIO N°
SUB LOTE N°	RUMA/PAIHUELA N° 99
AREA: <input checked="" type="checkbox"/> ASERRADERO <input type="checkbox"/> SECADO	<input type="checkbox"/> PAQUETERIA <input type="checkbox"/> OTRO:

Procedencia: DS 25-Pm/P-100-A-009-07
Fecha de ingreso al área: 08/10/09
Fecha de producción o aserrio: 09/10/09
Producto: Madera Conoscolor
Especie: Cedro Chileno
Medidas: 25x30x6 Calidad: 1ª y 2ª
Volumen controlado: 92 unidades: 8 (p/m)
Cant. Embalaje (Pzas.): 13
Humedad actual (%): Humedad final requerida (%):
Fecha de Secado:
• Aire Libre: Del ____ Hasta ____
• Hornos: Del ____ Hasta ____
Producción final: CISA
Pedido N° Cliente: OP N°
OBSERVACIONES: Trazabilidad Forestal
SIN FLOTAMIENTOS
VLD: 07/09
Responsable declarante: Roy Nolasco
Firma: [Signature]





Step 3: GOVERNANCE Institutions and competitiveness

- Assessment of forest governance status
- Proposals for a competitive and efficient forest management





WOOD EXPORT

CONTROL PROCEDURES – FOREST AUTHORITY

(~12 control posts not-connected)



TOTAL TIME FOR EXPORT FLOW: ~ 1 - 2 years

Due to: Paper work (bureaucracy), seasonality, climate change, access to the forest and wood transport.



New Proposed Forest Governance

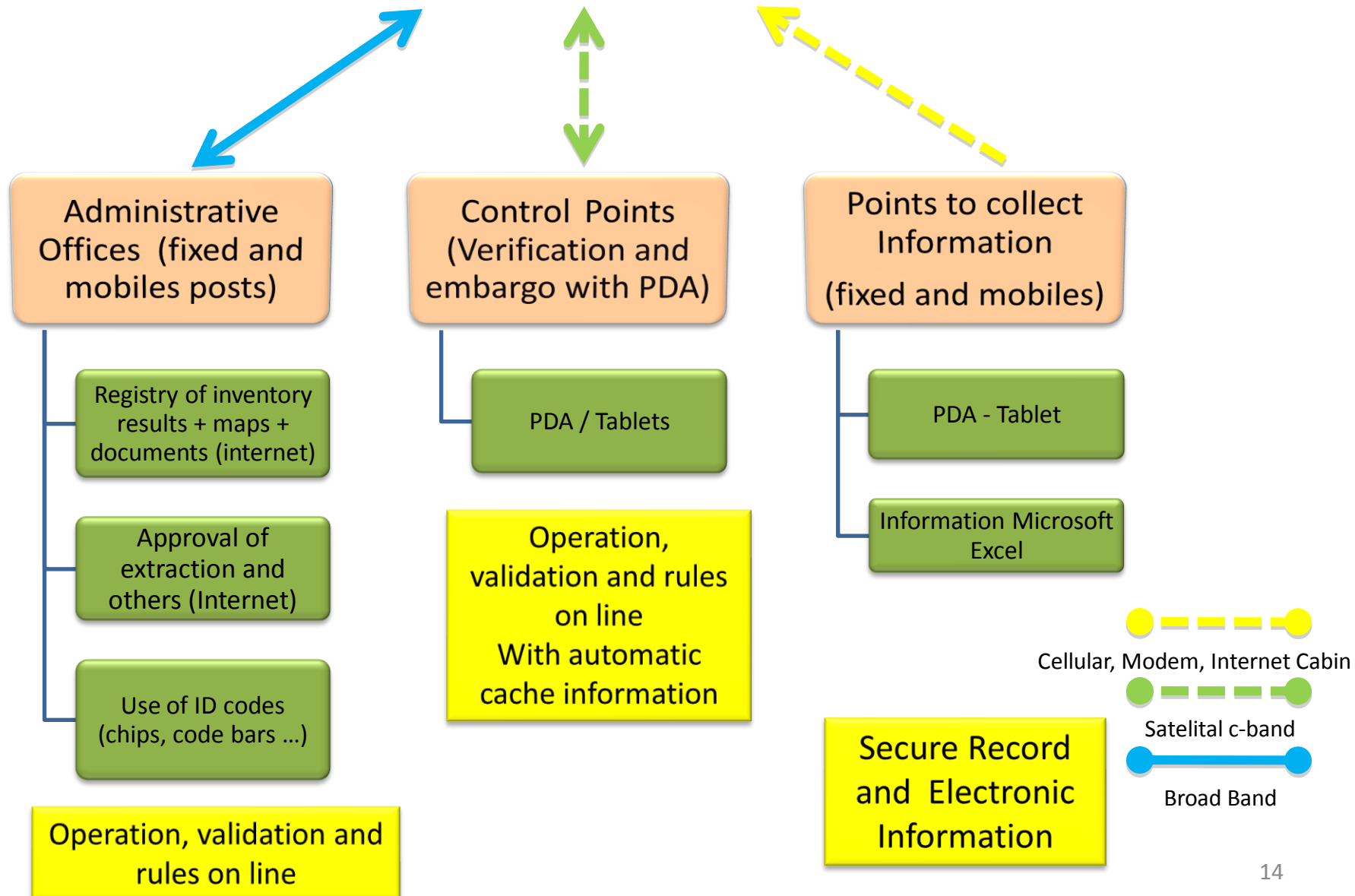
▪ **To generate trust, credibility, efficiency and competitiveness for all forest stakeholders.**

- Long-term policies and modern laws that promote SFM.
- Modern institutional design. One-stop shop and electronic management.

▪ **Market-based approach**

- Provide tax incentives
- Access to funding for SFM
- Promote public-private partnerships/alliances
- Promote easy access to friendly technologies.
- Promote better prices and fast track access to markets
- Diminish total time required to export to **< 12 months**.

Proposed Forest Management System





Benefits of an Electronic Management System

For the government

- Accelerates flow of documents (**GMP, AOP, Transport Guide**)
- Accelerates** export permits
- Compliance with national regulations and international conventions: **Verification of legality and SFM provenance**;
- Facilitates **charging of fees**; **Saves** time and costs
- Improve **confidence and credibility**.

For the Market

on line Information for better:

- Decision-making**
- Wood flow control**
- Bank transactions**
- Improve confidence and credibility

For the Private Sector

- Process improvement and **competitiveness**.
- Electronic Integration** with governmental procedures – CITES – customs-IRS- payments, etc.
- Added value to Voluntary Forest: FSC/ PEFC
- Wood flow Control – warehouse adm.**
- Saves** time and costs
- Best **market search and access**.



ACHIEVEMENTS

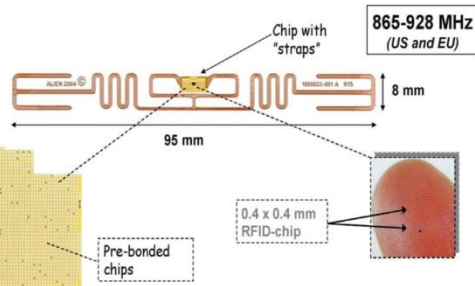
16 months (agreements, partnerships and project cycle), 3 months of technical and logistical planning. Field work: 3 months. Reflection, analysis, dissemination: 4 months.

- ❑ **Effective public–private association + private –indigenous people alliance;** and testing of cutting-edge technologies and information on forest traceability. Also tested how the forest administration operates.
- ❑ Verified **wood transport by river and dirty rural roads.** Also verified the interactions with the different institutions and procedures from forest to port, to client
- ❑ Generated information that is **available** (web). Credit was given to all participants and observers of the process;
- ❑ Designed a **Forest Governance Proposal;**

Some key findings...

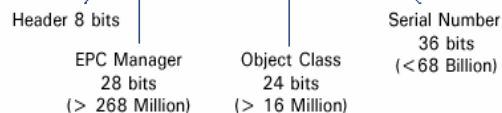


Typical RFID-tag



The EPC Number dissected (96 bit version)

21.203D2A9.16E8B8.719BAE03C



- ✓ The **EPC number** is the cornerstone of traceability. **All tested technologies worked successfully** and with a **positive cost/benefit balance**; prices are getting cheaper over the time.
- ✓ In the long term the **savings are significant** (around 25%). **Cost** of technology (2008-2010) was around \$10-15 per ha x year 1.
- ✓ **Open, friendly and flexible combination of technologies and procedures** to be used depending on the infrastructure and connectivity available
- ✓ Its wide implementation **requires leadership**, confidence, consultation, consensus-building and participatory processes (voluntary and inclusive);
- ✓ Governments could be considered a temporal **private third part administration**, supervision and control until they are ready to take full responsibility of traceability pursuits.
- ✓ RFID chips also allows gathering of **social and environmental information**.



Forest Certification: Private to Private

Is voluntary traceability based on paper tracks

Electronic Traceability : Public-Private Partnership

Adds value; provides information and visibility in real time; work for all actors at the same time.



Transparency and Information

Internet y Google Earth

www.trazabilidadforestal.com



La Comisión Forestal para América Latina y el Caribe confiere el presente:

DIPLOMA

A las Comunidades Sawawo Hito 40, Nueva Shahuaya, El Dorado, Nueva Victoria, Santa Rosa y Flor de Chengari, y la empresa Venao SRL.

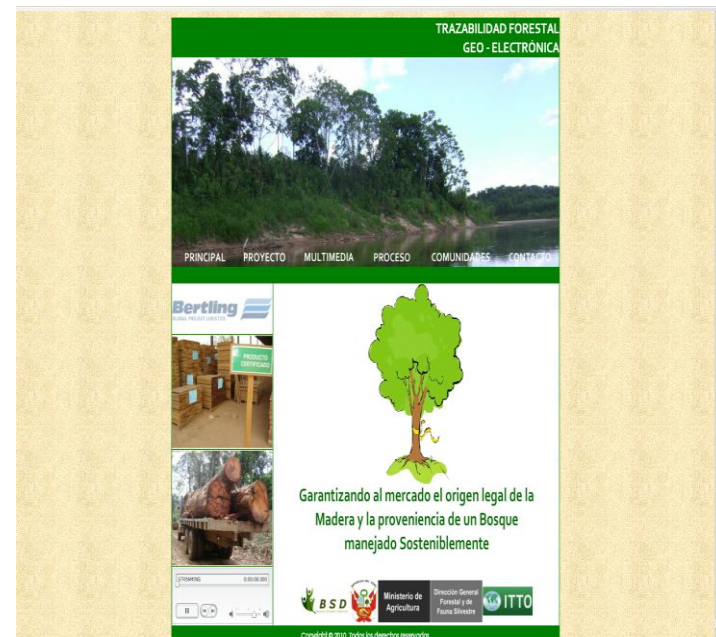
por la excelencia en la implementación de procesos y prácticas de manejo forestal sostenible y su contribución a la sostenibilidad de los bosques de nuestra Región.

Este reconocimiento se enmarca en el estudio regional "En Busca de Casos Ejemplares de Manejo Forestal Sostenible en América Latina y el Caribe", que ha sido ejecutado a través de la FAO con la cooperación de la Junta de Castilla y León de España.

Octubre de 2010

Josué Iván Morales Dardón
Presidente COFLAC
Gerente
Instituto Nacional de Bosques, Guatemala

Carlos Marx Carneiro R.
Secretario, COFLAC
Oficial Principal Forestal
Oficina Regional de la FAO para
América Latina y el Caribe



Ensure access to markets while ensuring a sustainable and inclusive forest management.



THANKS

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