

FOREST LEGALITY
ALLIANCE

“Forest Legality” in Theory and Practice: Policy and Technology Developments

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World Resources Institute

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Outline

1. International Policy Landscape
2. The Forest Legality Alliance
3. Emerging innovative technologies
4. Global Forest Watch

SFI is a Forest Legality Alliance Member

SFI / WRI dialogue on Global Forest Watch

Longstanding concern about global forests

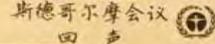


**STOCKHOLM
CONFERENCE
ECO**

JOINTLY PRODUCED BY
THE ECOLOGIST
AND FRIENDS OF THE EARTH

16th JUNE 1972 THANK YOU SWEDEN

STOCKHOLMS-
KONFERENSENS EKO
ЭКО СТОКГОЛЬМСКОЙ
КОНФЕРЕНЦИИ
ECO DE LA CONFERENCE
DE STOCKHOLM
ECO DE LA CONFERENCE
DE ESTOCOLMOU
斯德哥尔摩会议

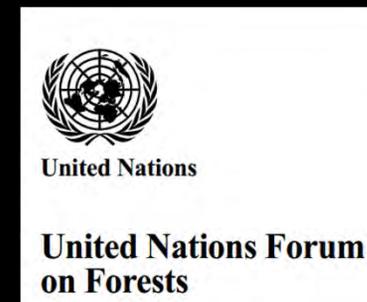


OUT OF STOCKHOLM, A NEW INITIATIVE

**World Ecological Areas
Programme Launched**

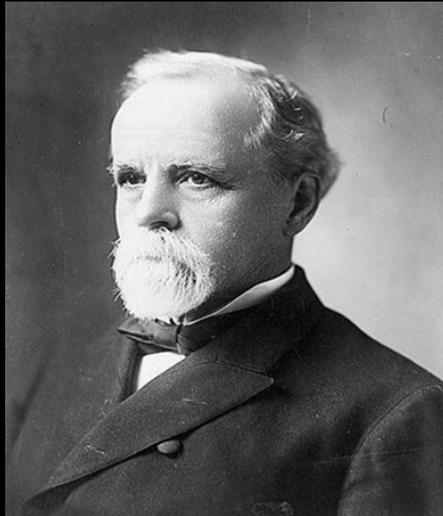


Context: No international forest treaty



- **Shift from voluntary to mandatory requirements**
 - Before: certification, SFM
 - Now: globalization of legality standards

Mandatory legality standards



Lacey Act Amendment - 2008



Do you deal in wood?
Have you heard? On 3 March 2013, an EU Timber Regulation (EUTR) to stop the placing of illegally logged wood on the European Union market will apply.

EU Timber Regulation - 2010



Illegal Logging Prohibition Act 2012

No. 166, 2012

An Act to combat illegal logging, and for related purposes

Australian Illegal Logging Prohibition Act - 2012

Relevance for North American Forestry Sector

- Changing relationship between legality and sustainability
- Legality in bilateral and multi-lateral policy discussions: TTIP
- Solving the illegal logging crisis is key to achieving SFM
- Not just about catching criminals: mainstreaming legal sourcing

Certification remains a key tool to source legal timber

The Forest Legality Alliance

- Launched in June 2010
- Public private partnership
- 100 members from private sector & NGOs
- Objectives:
 1. Build alliance of supply chain actors
 2. Demonstrate that compliance is feasible
 3. Practical tools for exercising due care
 4. Educate Stakeholders



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USAID
FROM THE AMERICAN PEOPLE

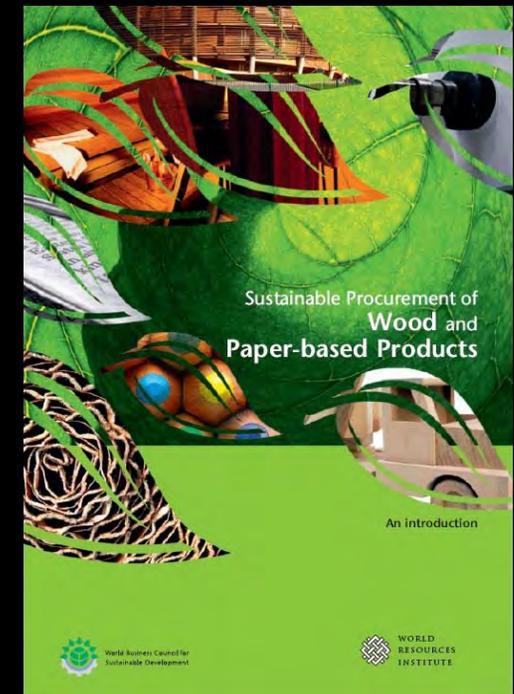
Implementation through partnership

- Secretariat (WRI & USAID)
- Members: anyone with a stake supporting legal forest product supply chains
- Industry Advisory Group



Moving into phase 2

- **USAID funding: 2014-2016**
 - Continue global FLA work
 - Decentralize FLA
 - Emerging technologies

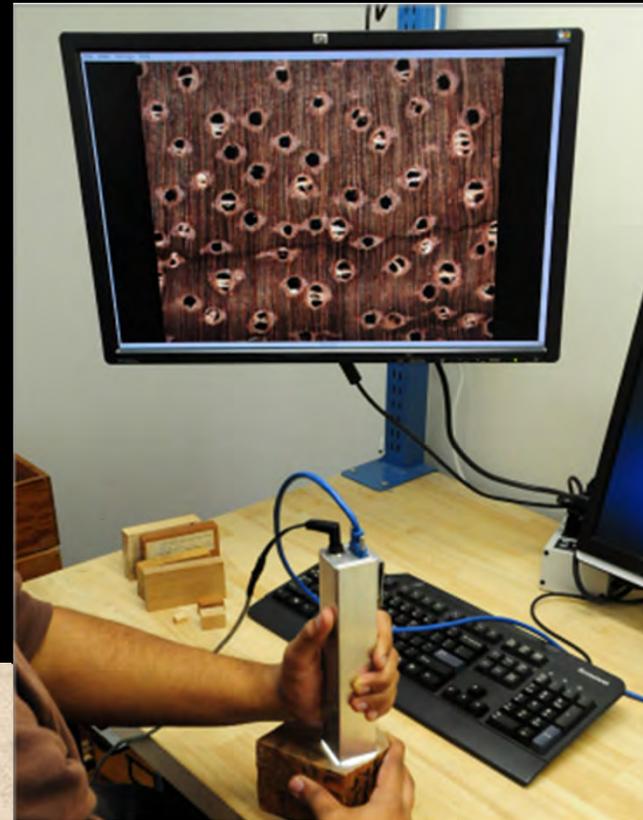
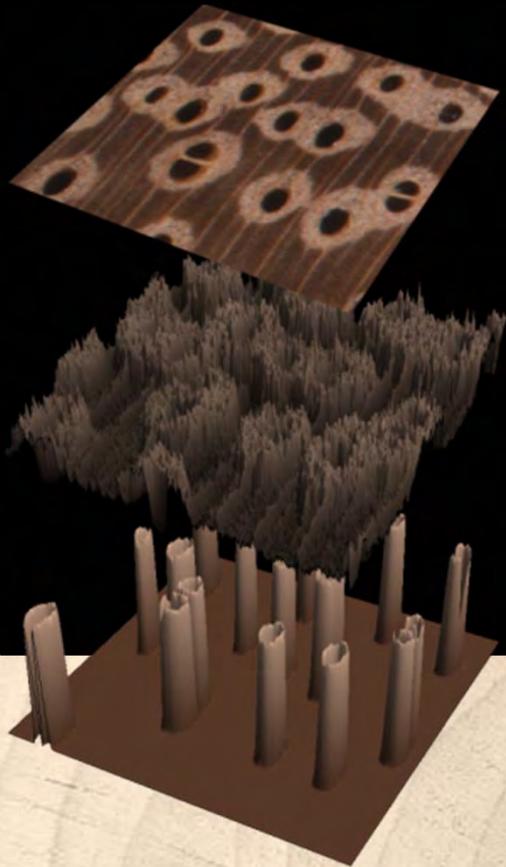


Emerging innovative technologies

Enormous potential for range of users:

- Law enforcement (detection, investigation, evidence)
- Wood buyers/traders (due care)
- Wood producers
- Watchdogs

1. Microscopic wood species identification (species)



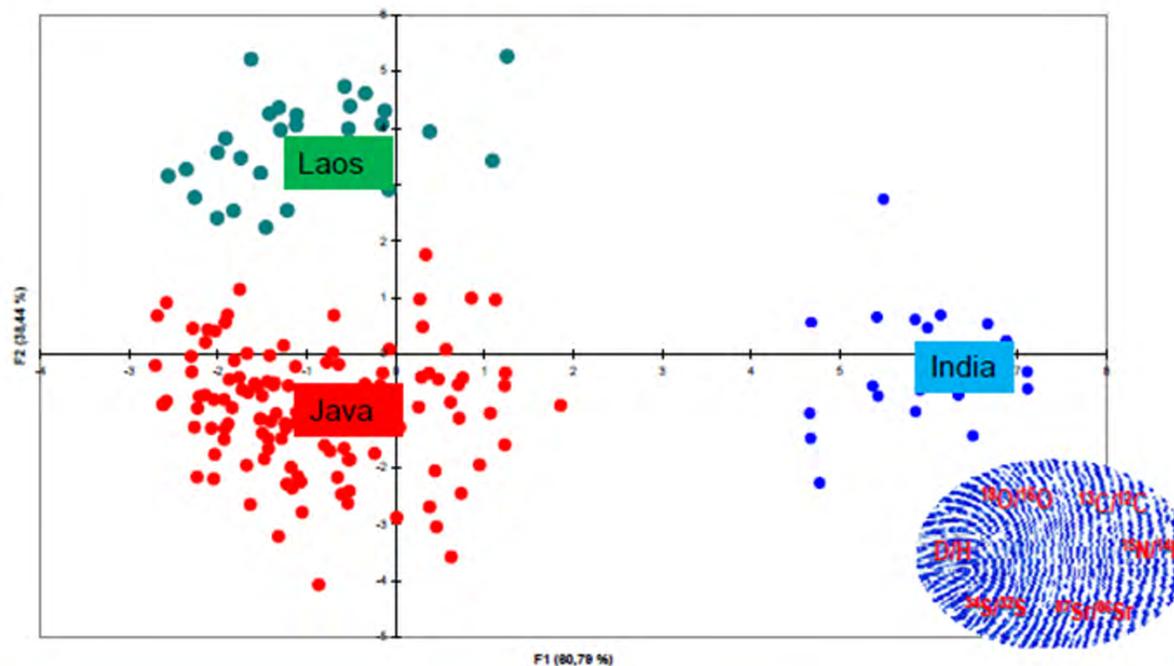
2. Stable isotopes (origin of wood)

TÜV Rheinland Agroisolab.

WWF-project II: Differentiation of tropical timber (2008-2010)

Teak (*tectonia grandis*) in the Asian region (DA analysis: D, ^{13}C , ^{15}N , ^{18}O , ^{34}S)

Beobachtungen (Achsen F1 und F2: 99,24 %)



3. DNA analysis (species and origin of wood)



Map credit: Double-Helix Tracking Technologies

4. Near infrared (species and origin of wood)

J.A. Espinoza, G.R. Hodge and W.S. Dvorak, *J. Near Infrared Spectrosc.* **18**, 437–447 (2012)
Received: 9 February 2012 ■ Revised: 24 May 2012 ■ Accepted: 7 June 2012 ■ Publication: 20 June 2012

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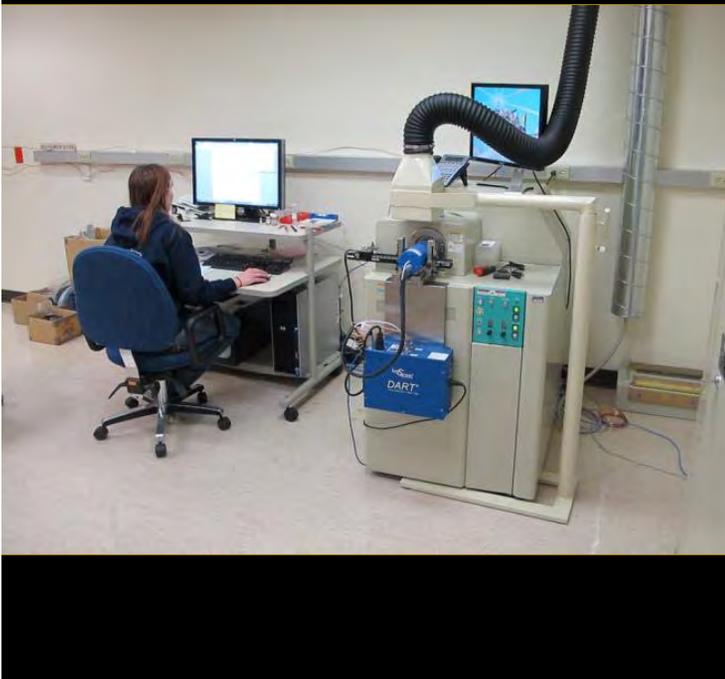


The potential use of near infrared spectroscopy to discriminate between different pine species and their hybrids

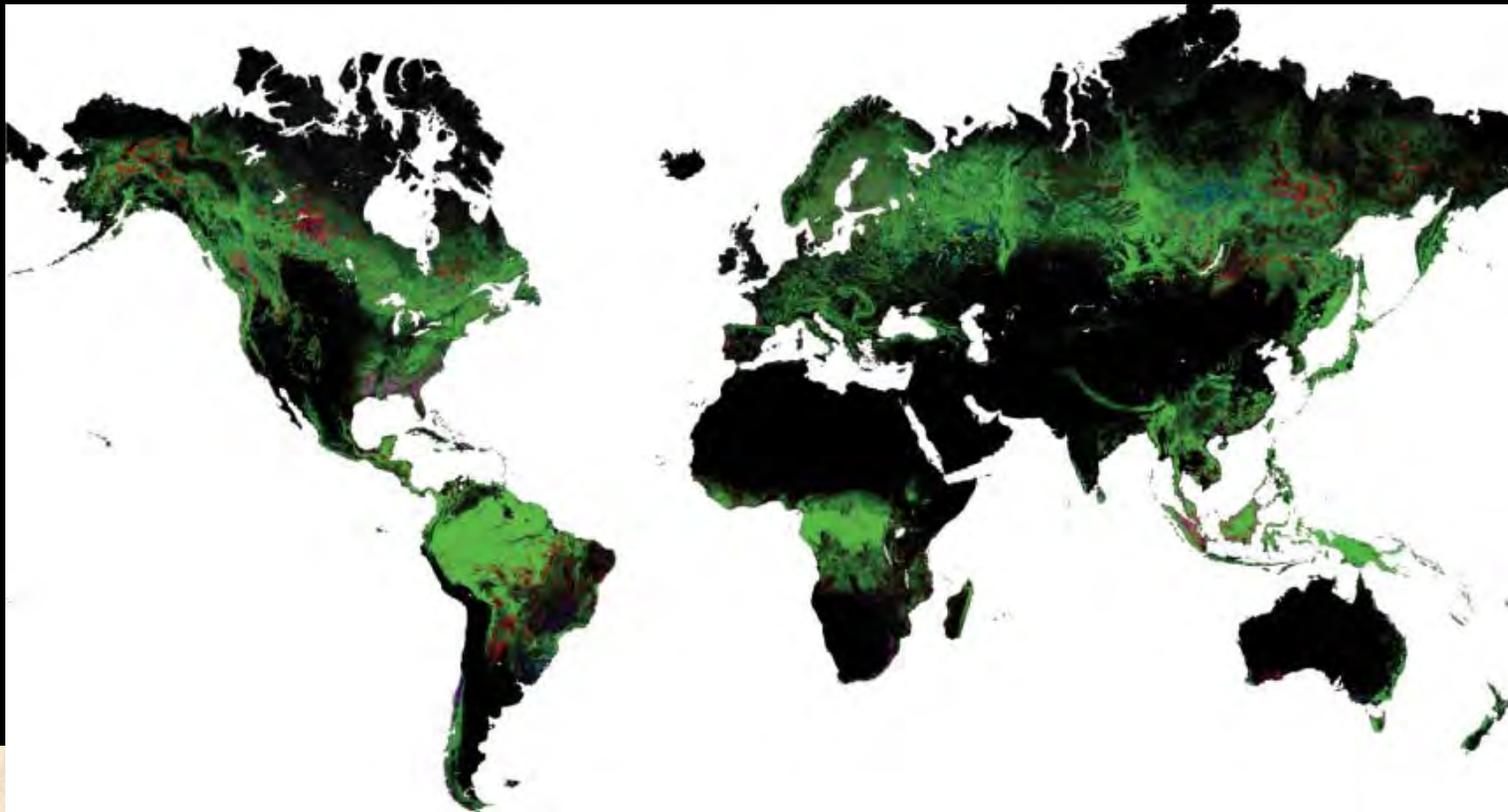
Jesús A. Espinoza, Gary R. Hodge and William S. Dvorak

Department of Forestry and Environmental Resources, Camcore, North Carolina State University, Raleigh, NC 27695–8008, USA.
E-mail: jaespino@ncsu.edu

There is growing interest in the use of pine hybrids in commercial forestry plantations in the tropics and sub-tropics. However, the production of pine hybrid seeds can be difficult and is dependent on the presence of an adequate number of male and female strobili, timely application of the pollination bag, good pollination techniques and reasonable weather conditions. After pollination, a wait of two or more years is required for cones to mature and for seeds to be collected. The seeds collected from artificial hybrid crosses in an orchard are assumed to be true hybrids, but might also be (female) pure species if pollen contamination has occurred prior to or during bagging of the male strobili. Confirming hybridity in pines is often very difficult in the seedling stage when only needle morphological characteristics are used. In this study, we examined ground oven-dried needle samples of 16 pine species from different geographic regions using near infrared (NIR) spectroscopy to determine if this method is effective in discriminating between pine species. We also created



5. Remote sensing (forest cover change/degradation)



Forest cover change from 2000-2012

Map credit: Hansen et al. 2013

6. Paper fiber analysis (species)



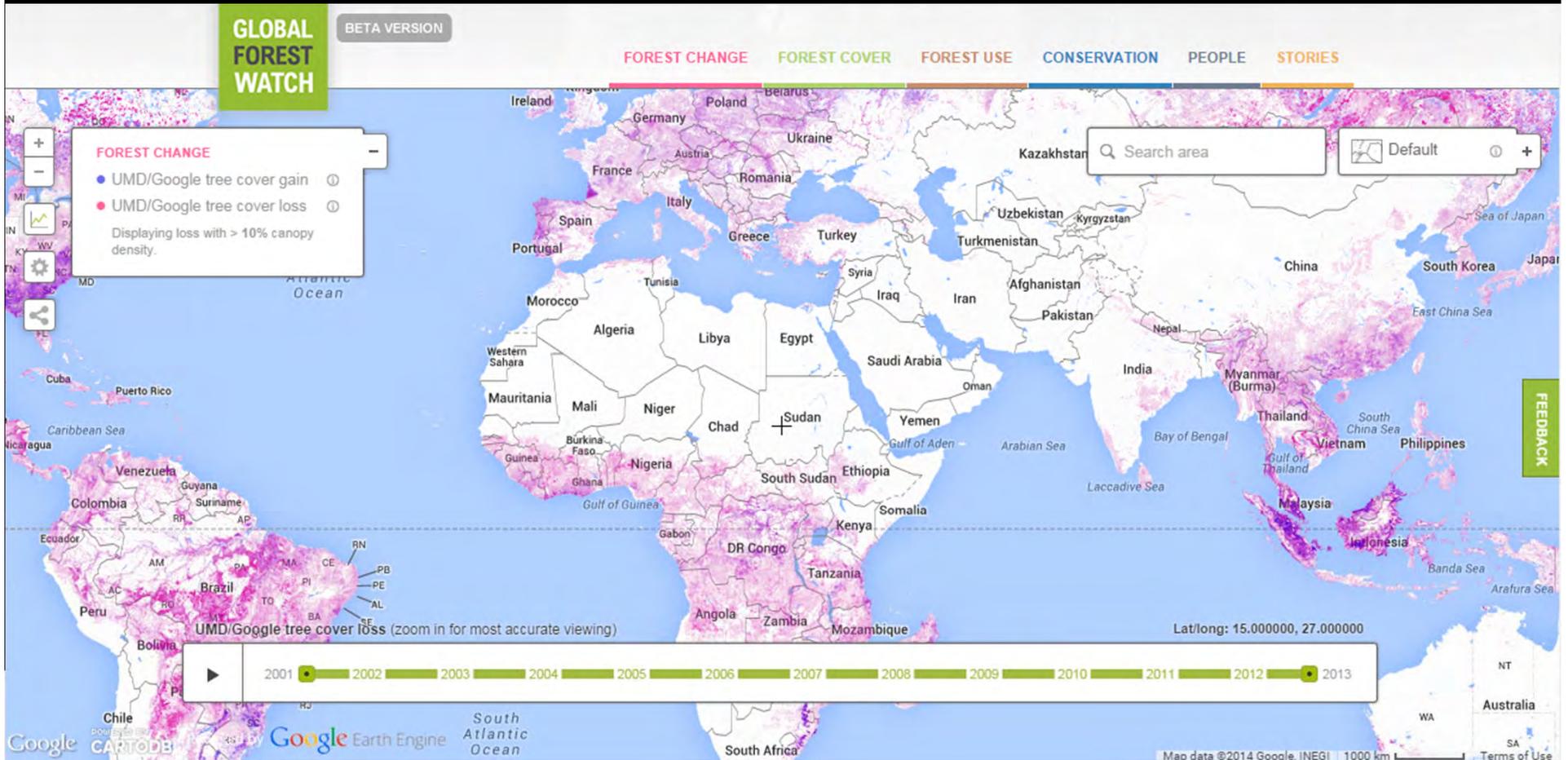
Challenges

- Cost
- Complexity and speed
- Field capacity
- Reference library investments
- Data accessibility & exchange
- Matching information tools with user needs

What We Need to Know

- What are the major information gaps for detecting illegal logging in your supply chains?
- Which of these emerging technologies sound most promising to you?
- What is the best way to engage you to ensure that technology development meets your needs?

Radical Transparency



Additional platforms

- GFW-Fires
- GFW-Commodities
- GFW-Biodiversity (in development)

The Forest Legality Alliance

www.forestlegality.org

Thank you!

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