



# ITTO's work in promoting legality and traceability of timber and timber products





# ITTO's mandate & lines of action

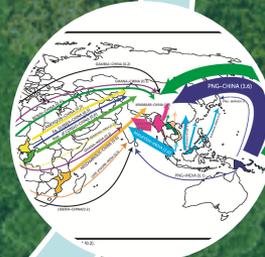
**ITTO is an intergovernmental organization promoting the conservation and sustainable management, use and trade of tropical forest resources.**



ITTO develops internationally agreed policy documents to promote sustainable forest management and forest conservation.



ITTO assists tropical member countries to adapt such policies to local circumstances and to implement them in the field through projects



ITTO collects, analyses and disseminates data on the production and trade of tropical timber.



ITTO promotes human resource development and to strengthens professional expertise in tropical forestry, through its Fellowship Programme



# Thematic programmes – addressing emerging issues

Innovation of ITTA, 2006  
Focused on essential elements of SFM



Forest Law Enforcement, Governance and Trade (TFLET)



Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in Tropical Forests (REDDES)



Community Forest Management and Enterprises (CFME)



Trade and Market Transparency (TMT)



Industry Development and Efficiency (IDF)



# Forest Law Enforcement, Governance and Trade Programme



**Strengthens** forest law compliance and governance by improving transparency and supporting effective management practices in the trade of legally produced tropical timber.

**Enhances** international cooperation in forest law enforcement and governance through robust partnerships.

**Builds** community capacity to actively promote and implement the principles of sustainable forest management (SFM).

**ENHANCING  
CAPACITY &  
STRENGTHENING  
EFFECTIVE  
GOVERNANCE  
IN TROPICAL  
FOREST  
COUNTRIES.**



# Trade and Market Transparency Programme



**Provides** comprehensive information about market conditions to promote international trade.

**Improves** market transparency to help countries develop a sustainable and profitable tropical timber trade.

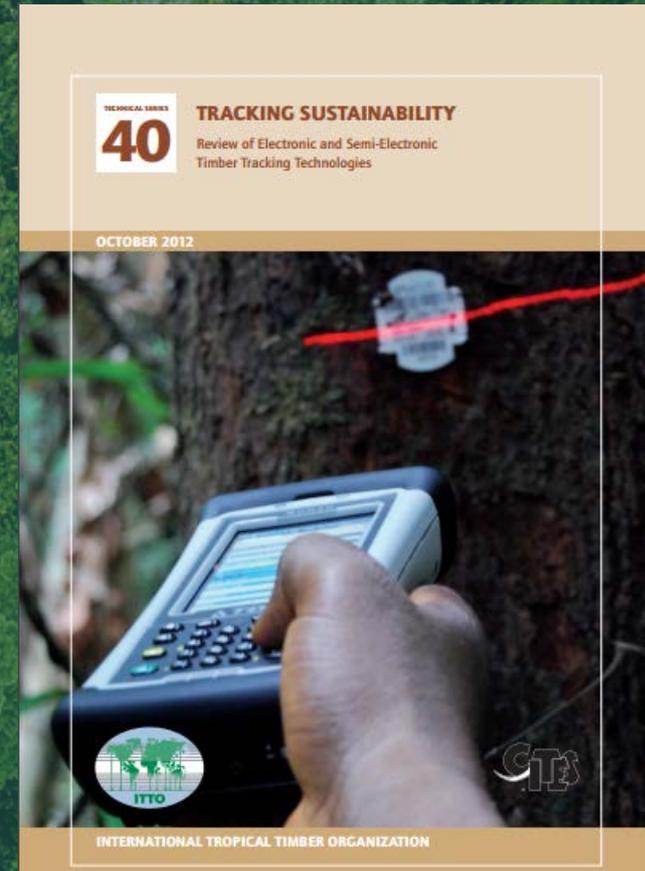
**Strengthens** tropical timber producers' capacity in trade development and marketing.

**INCREASING TROPICAL TIMBER PRODUCERS' CAPACITY TO DEVELOP & APPLY MARKET INTELLIGENCE & IMPROVING MARKET TRANSPARENCY BY ENHANCING INFORMATION SHARING.**



# Timber tracking

- Reliable information on the flow of forest products through the supply chain to:
  - Improve forest management
  - Assure legality and sustainability
  - Ensure fair capture of forest revenues
- Rapid evolution of timber tracking systems
  - Technology
  - Scope of products and scale

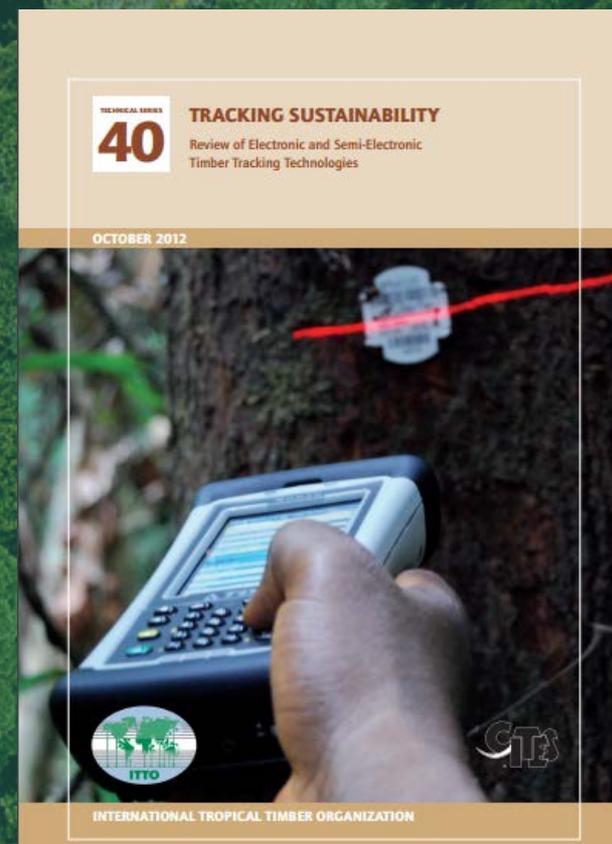




# Timber tracking

## *types of systems*

- Mass balance or inventory management
  - Based on systematic understanding of inputs, outputs and accumulation of timber without physical tracking
- Physical identification methods:
  - Paint markings
  - Plastic tags
  - Barcoding
  - Radio Frequency Identification
- Chemical identification methods:
  - DNA sampling
  - Isotopic sampling



*This and other relevant publications can be downloaded at*

*[http://www.itto.int/technical\\_report/](http://www.itto.int/technical_report/)*



# ITTO projects on legality and traceability of timber

## Tropical Forest UPDATE

*A newsletter from the International Tropical Timber Organization to promote the conservation and sustainable development of tropical forests*



### Moving beyond conflict on procurement

Public timber procurement policies have been a hot topic of debate among governments, tropical timber traders and environmental groups for a very long time. Environmental groups argue that tropical timber-importing countries can lead the way to sustainable forest management by buying only certified or at least legally verified tropical timber; timber-exporting countries say that such procurement policies give non-tropical timber an unfair market advantage; and traders worry about the cost of conforming to new standards. Public timber procurement policies, therefore, are a divisive issue in international forest policy.

Yes, as Martin and Bakaruddin demonstrate in their article on page 3 of this edition of the *Tropical Forest Update*, major changes are under way in the tropical timber trade that even shadow the impacts of public timber procurement policies. Most notably, the trade is shifting from its traditional markets (such as the European Union and the United States) towards emerging, south-south and domestic markets.

Such a shift need not—and indeed should not—reduce the impetus to the trade to provide credible evidence of legality and

*Inside: the impact of public procurement policies; timber legality verification*



- Species identification and timber tracking using DNA finger printing and stable isotopes (Africa & Indonesia)
- Guatemala's timber traceability system
- Data management system for the forest sector in Ecuador
- Online platform to facilitate the flow of information on timber legality to SMEs in China
- Chain of custody verification in PNG
- Capacity building in monitoring and control mechanism in Panama

Further details of ITTO's projects available from ITTO's project search

[http://www.itto.int/project\\_search/](http://www.itto.int/project_search/)

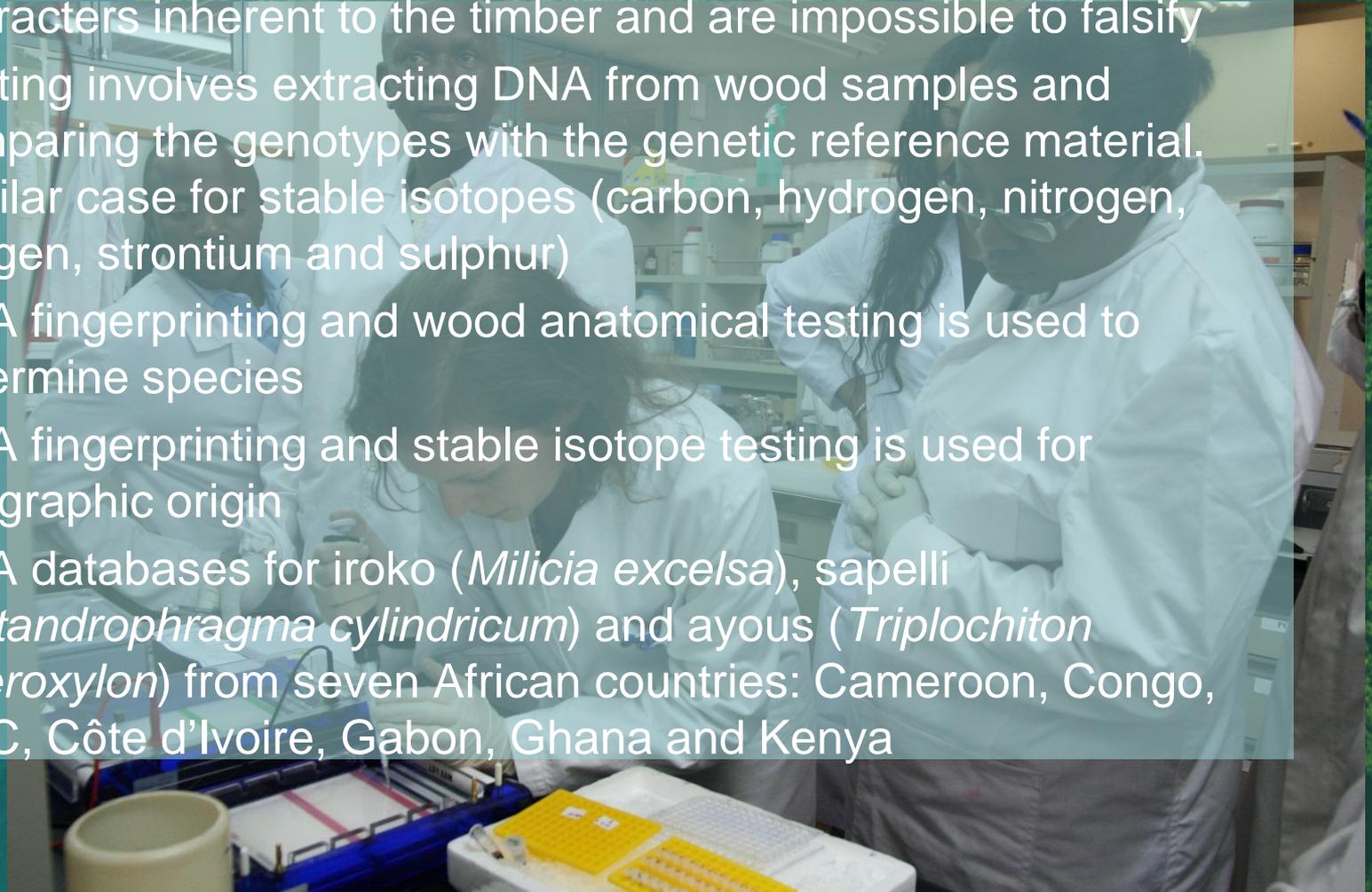
A magazine with a comprehensive review of above projects is available at

<http://www.itto.int/tfu/id=4367> or from "TFU app" (Apple & Google Play)



# DNA finger printing & stable isotopes

- DNA fingerprinting and stable isotope techniques use characters inherent to the timber and are impossible to falsify
- Testing involves extracting DNA from wood samples and comparing the genotypes with the genetic reference material. Similar case for stable isotopes (carbon, hydrogen, nitrogen, oxygen, strontium and sulphur)
- DNA fingerprinting and wood anatomical testing is used to determine species
- DNA fingerprinting and stable isotope testing is used for geographic origin
- DNA databases for iroko (*Milicia excelsa*), sapelli (*Entandrophragma cylindricum*) and ayous (*Triplochiton scleroxylon*) from seven African countries: Cameroon, Congo, DRC, Côte d'Ivoire, Gabon, Ghana and Kenya





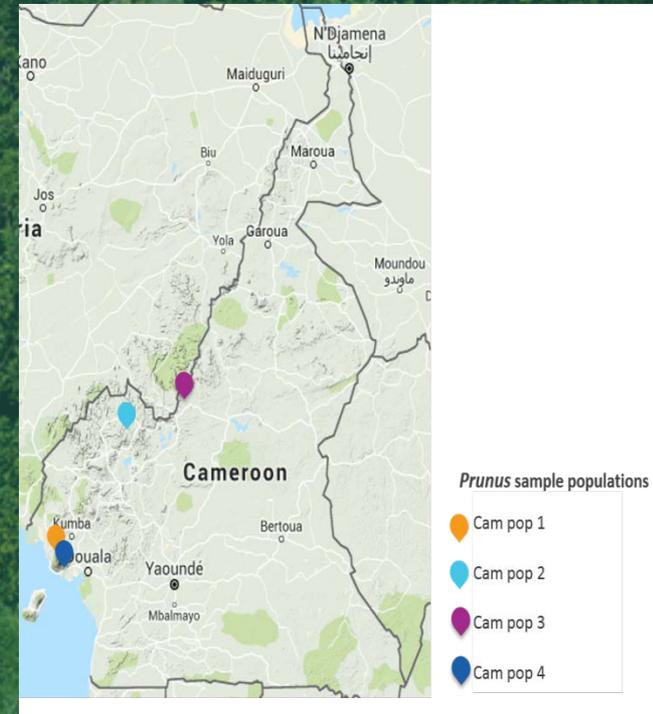
# DNA finger printing & stable isotopes

- DNA-based traceability systems are assisting to control trade in two CITES-listed tree species: *Pericopsis elata* (timber) and *Prunus africana* (bark)
  - Detect attempts to substitute timber and bark from non-authorized harvest zones with two approaches:
    - Matching of *Prunus africana* bark with individual trees in controlled harvest zones
    - Traceability of bark back to distinct *Prunus africana* populations for which sustainable harvest plans have been drawn up and approved. (known as “*Prunus* allocation units”)
  - These capabilities enable the independent scientific verification of CITES document claims
  - The identification of sufficient genetic markers enables reliable discrimination between individual trees of the same species, and between trees of different geographic origin.



# DNA finger printing & stable isotopes

- **Boarder applications:**
  - Effective mechanism for detecting illegally harvested bark in the supply chain, closing off channels to market for illegally harvested forest products
  - DNA traceability works on top of existing document controls
  - Export markets gain access to a wider range of controlled timber sources, and responsible exporters gain better access to overseas markets





# Guatemala's timber traceability system

- It was developed to automate forest-related processes, minimize response times, standardize forms, clarify procedures, avoid data duplication, minimize human error, limit officers' discretionary powers and bureaucracy, and meet the deadlines established by law to process requests and applications.
- It consists of 3 information systems:
  - Electronic Forest Enterprises Information System (*Sistema Electrónico de Información de Empresas Forestales—SEINEF*);
  - Electronic Forest Administration System in Protected Areas (*Sistema Electrónico de Administración Forestal en Áreas Protegidas—SEAF-CONAP*)
  - Electronic Forest Management System (*Sistema Electrónico para la Gestión Forestal—SEGEFOR*—for forests outside protected areas)



Guatemala's Electronic Forest Enterprise Information System

<http://www.seinef.inab.gob.gt/>



# Guatemala's timber traceability system

	Information system	Services/processes	Activities
Forest Information System of Guatemala—SIFGUA	Electronic Forest Enterprises Information System (SEINEF)	Registry of forest enterprises Verifying the traceability of forest products entering forest enterprises	Electronic registration of forest enterprises
			Submission of initial information report
			Submission of (quarterly) reports on forest product stock entries, processing and exits
			Printing of company bills of transport
	Monitoring of forest enterprises	Identification and supporting documents Uploading of monitoring results and reports	
	Electronic Forest Management System (SEGEFOR)	<ul style="list-style-type: none"> <li>• Forest harvesting</li> <li>• Forest incentives</li> <li>• National Forest Registry</li> <li>• Applications for company bills of transport</li> <li>• Export permit applications</li> </ul>	Electronic registration
			Compliance with technical and legal electronic requirements
			Verification and validation of information by INAB officers
			Issuing of approval
	Miscellaneous applications	Application receipt acknowledged by INAB officers Acknowledgement sent to users confirming receipt and electronic follow-up/processing of response	
Electronic Forest Administration System in Protected Areas (SEAF-CONAP)	<ul style="list-style-type: none"> <li>• Harvesting permit applications</li> <li>• Registration of professionals developing management plans for protected areas</li> <li>• CITES certificates</li> </ul>	Electronic registration	
		Compliance with technical and legal electronic requirements	
		Verification and validation of information by INAB officers	
		Issuing of approval	



# Guatemala's timber traceability system

- Participation of forest-sector stakeholders was important in the design and testing of the system:
  - Identify critical points in data collection
  - Patterns of the private sector
- The implementation of the system would not be possible without suitable revisions, updates and amendments to the regulatory framework
- The *raison d'être* of SEINEF, was the standardization of a single timber transport document for the industry — the “company bill of transport”

**NOTA DE ENVIO DE EMPRESA FORESTAL** 00000015  
Número Correlativo: 0000015  
Correlativo SEINEF: 0000015

Logo: **inab** INSTITUTO NACIONAL DE FORTALECIMIENTO DEL SECTOR FORESTAL

Nombre de la empresa: MUEBLES LUNA Fecha de salida: 30/04/2013  
Dirección de la empresa: LAS TAPAS ZONA 18 LA JOYA #34 Hora de salida: 09:21 hrs  
NIT: 25224-9 Número del destinatario: UNIDAD DE PRUEBA, S.A.  
Código del Registro: #1001 Dirección del destinatario: DIRECCIÓN DE PLANTA DE PRUEBA  
Misional Forestal:

Tipo de Producto	Especie	Unidad de Medida	Cantidad
FAB. BORDA ANCHO 1.80x2.40x1.80	MOHO	Metros cúbicos	10.00
MEDIDA SUBSISTEMAS	MOHO	Metros cúbicos	3.50
Total en Metros cúbicos(*)			13.50

Tipo de Vehículo: Truck  
 No. de Placa: C-001

Firma y sello: \_\_\_\_\_ Firma y sello: \_\_\_\_\_  
 Nombre de emisor: MUEBLES LUNA Nombre de receptor: \_\_\_\_\_  
 Fecha de recepción: \_\_\_\_\_

\*Bajo juramento y solemnidad de los partes relativos al hecho de declarar, declara que la información consignada en el presente Bole de Envío es "veraz y exacta".  
Acta para efectos de control de aplicación de Camalote.





# Guatemala's timber traceability system

- The system also brings benefits for the companies through the production chain:

*“We entrepreneurs base our decisions on figures—if we get positive figures, we will be willing to change, and SEINEF has proven to be a helpful system, not only to keep our records in order for INAB but also to streamline the process. We no longer need to visit an office to have our report reviewed, which used to take up to three months, and then we had to go back to the office to pick up the report. This was a costly and tedious procedure for obtaining an approval.”* Edy Corado (right), the general manager of a wood-exporting company

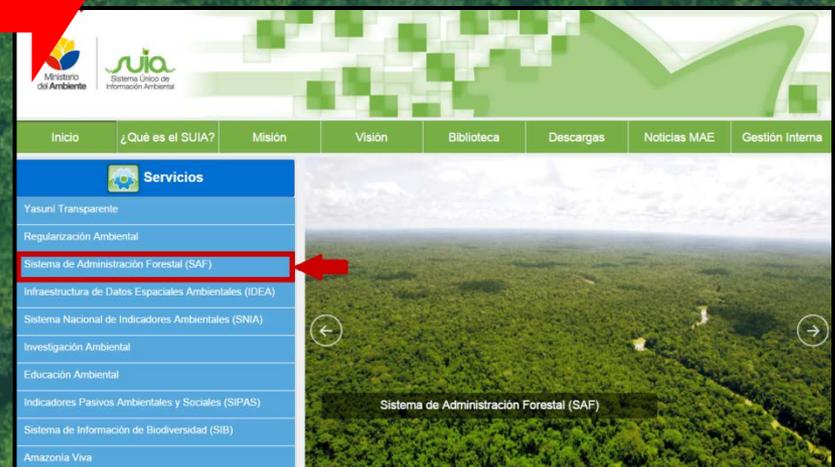




# Ecuador's Forest Information System

- The system issues forest harvesting licences and waybills for timber and non-timber forest products, as required by the national forest law and regulations.
- Generates information that can be translated into effective control procedures and improved capacities to monitor and verify the legality of all forest operations, from forest harvesting to the transport of forest products to their final destinations.
- Ecuador's forest governance framework has five action pillars:
  1. forest information;
  2. forest monitoring and administration;
  3. forest incentives;
  4. forestry culture; and
  5. land-use planning.

SAF now performs that function





# Ecuador's Forest Information System

- The system is linked to a geographical information system to validate site coordinates and to show the locations of forest harvesting activities. Now even the annual forest figures come from it

Module	Step	Activity
Forest registry	1	A forest registry application is generated (by any stakeholder)
	2	Forest activities are certified at a technical office
Application for plantation logging or establishment, or agroforestry programme approval	1	The operator fills out a programme approval application
	2	The application is submitted to a technical office
	3	Waybills are issued as the only documentation authorizing the movement of timber forest products at the national level (with an identified end destination, or without an identified end destination pending subsequent declaration)
Application for natural forest harvesting programme approval	1	The regent fills out an integrated management plan (IMP) approval application
	2	The IMP is reviewed and approved by a technical office
	3	The regent fills out a programme approval application
	4	The technical office reviews and (if appropriate) approves the programme, of which there are several types—sustainable forest harvesting, simplified management, legal conversion, private protection forests
	5	Waybills are issued as the only documentation authorizing the movement of timber forest products at the national level (with an identified end destination, or without an identified end destination pending subsequent declaration)



# Ecuador's Forest Information System

- Benefits from the system:
  - Coordinate the various institutions with relevance to the forest sector, such as the Internal Revenue Service (*Servicio de Rentas Internas*) and the National Customs Service of Ecuador (*Servicio Nacional de Aduanas del Ecuador*). The National Transit Authority (*Comisión Nacional de Tránsito*).
  - Quantify the value of the forest sector to society and decision-makers
  - For forest owners, reduction of time and cost of obtaining government approvals (previously documentation had to be presented physically). Approvals are now user-friendly. This in turn, is facilitating compliance with laws and regulations.







# China's online platform on timber legality

- The platform addressed the lack of understanding among SMFEs of:
  - procurement policies for imported tropical timber,
  - application of such policies, and
  - appreciation of the market risks by the use of unsustainably or illegally harvested tropical timber
- SFMEs normally buy imported timber in the local market, therefore they were not aware of regulations such as EUTR or Lacey Act
- SFMEs are also confused by the various trade policies of importing countries and information sources are limited and third party verification systems are too expensive





# China's online platform on timber legality

- the Forest Products Index (FPI), is a platform for information exchange between the private sector and the government:
  - Provides detailed on the production of timber products such as veneer, fibreboard, facing paper and flooring
  - Provides data on imports and exports in timber markets important to China, such as those of the United States, the European Union and Japan
  - Provides a modern means by which stakeholders—industry, government agencies, research institutions and associations—can share information on timber procurement and sustainability and engage in a dialogue on these issues
  - Government agencies are also using the FPI to gauge trends in the sector.

*Forest Products Index is available at*

<http://chinafpi.org>



# Conclusions

- Implementing tracking systems involve many stakeholders, the key to success relies in understanding their reality and in creating mutual benefits so that changes in practices may be accepted
- Design and pilot testing is extremely important so that the systems may be user-friendly while fulfilling its purpose
- Tracking systems should be supported with appropriate and stable policies
- Appropriate levels of confidentiality and protection should be established, so that stakeholders may be comfortable in using the systems and sensitive information may remain confidential
- Socialization and training in the use of tracking systems is essential for their adoption
- Tracking systems need to be self-sustain in terms of funding so they can remain relevant, updated and operational
- Timber tracking systems assist in identifying (i)legal products, and do not substitute good governance



**Thank you for your  
attention!**

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