

5 Things to Know about the Use of Scientific Testing in the Enforcement of Timber Import Regulations

In June 2019, Forest Trends surveyed government agencies responsible for the enforcement of timber legislation about their current and future plans for using scientific testing. Through its Timber Regulation Enforcement Exchange (TREE) network, Forest Trends received 25 responses from 21 countries. All but one country currently have operational timber import measures in place. The following include aggregated and anonymized results from 17 European countries, the US and Australia as well as countries in the Asia-Pacific region.

57% of the 21 countries surveyed are currently using scientific testing in enforcement of timber trade legislation. This is expected to exceed 95% by 2024.

Scientific testing of document claims is increasingly mainstream in the enforcement of laws to exclude illegal wood from global trade. This surge in interest among enforcement authorities has been a response to growing evidence of fraud and mismanagement in traceability systems in the forest sector, with a recent study showing 62%₁ of tested products available on the US market had one or more fraudulent claim.



% of Countries Using, or Planning to Use, Scientific

2

Enforcement officials report that the main scientific testing priorities for enforcement are (ranked in order of priority):



II. Authenticating location of harvest claims for timber trade regulation

III. Authenticating permits for the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) enforcement IV. Independent evidence for prosecution in courts **V.** Verifying certification claims

VI. Verifying Forest Law Enforcement Governance and Trade (FLEGT) license claims















Of the countries surveyed that report using scientific techniques in their enforcement, three quarters are testing sawnwood; the most likely product to be tested by enforcement officials. By June 2020, over half the countries expect to also be testing plywood and roundwood/logs using scientific techniques in their enforcement.

Product Focus of Scientific Testing by Enforcement Agencies (% of Countries Surveyed that Report Testing or Plan to Test)



(4)

Various techniques are available for testing whether species and location claims made in forest sector documents are correct. More than 80% of the countries report using at least two techniques. The most commonly reported technique is physical analysis to determine species. Of the countries that report testing, around half are using DNA analysis to determine species and isotopic analysis to determine location of timber harvest.

Isotopic testing for location authentication is fast developing as a testing technique and is already more widely used to determine location than DNA analysis.



% of Countries Using Different Scientific Techniques

Effective use of all these testing techniques requires extensive, credible forest reference material. Reference material for testing timber species is currently limited and this can make scientific testing challenging, and enforcement officials report a need for additional reference samples to comprehensively identify location of harvest and species. Enforcement officials ranked their priorities for improved reference materials from the forested areas of the following geographical regions:

- 1. East Asia (Including China)
- 2. South East Asia (Indonesia, Malaysia, Myanmar)
- 3. The Mekong Region (Cambodia, Laos, Vietnam, Thailand)
- 4. Latin America
- 5. Russian Far East

- 6. Central Africa (the Congo Basin)
- 7. Central America
- 8. West Africa
- 9. Melanesia (Papua New Guinea, the Solomon Islands)
- 10. East Africa (including Madagascar)

