SINGAPORE : Experts say Southeast Asian countries are among those hardest hit by illegal logging. Governments may be stepping up efforts to tackle this but the problem remains rampant.

In countries such as Indonesia, experts say many timber exporters use false paperwork to smuggle wood out of the country.

Now, a technology developed in Singapore may provide a solution to stop this.

Stolen timber worth almost US$2.5 billion is traded between the countries of East and Southeast Asia each year. And experts say, one of the countries most affected is Indonesia.

Every year, the country loses 2.8 million hectares of forests - that is about the size of Belgium.

The Indonesian government has legislated laws to halt illegal cutting but smugglers have been known to bribe custom officers.

They also use forged certificates of origins to escape the law.

Buyers also find it difficult to verify if the wood purchased is legal, because there are many factories and middle men involved, making tracking close to impossible.

This is where a Singapore research effort comes in.

The researchers managed to proof the legal origin of timber, and they are now collaborating with a private company, Certisource, to market the technology.

Certisource takes samples in legally-managed forests and extracts the wood's DNA, almost like a fingerprint.

When the log reaches the mill, its DNA samples are taken again and the two records are compared.

If they do not match, the wood will be rejected and Certisource will inform its client.

Certisource uses the World Wildlife Fund's "Keep it Legal" standards to determine if a piece of wood is legal or not.

Assistant Professor Chew Fook Tim, Department of Biological Sciences, National University of Singapore, says, "For once we are now able to tell the difference between what is legal and what is illegal. Prior to that, wood is wood, you can't tell where did this come from, where did that come from?"

Such testing adds to the cost of timber by a few percentage points.

But Certisource believes that consumers will not mind paying for a peace of mind, and perhaps to satisfy their conscience.

Kevin Hill, CEO, Certisource Timber, says, "There's been a lot of public awareness; the consumer is now asking for legal timber, the market has to respond."

Simmonds Lumber, one of Australia's largest timber importing firms, has been the first to put this technology to use.
Certisource is hoping to reach the European, American, Japanese and Chinese markets. And in Singapore, the technology is expected to be taken up by a publicly-listed company, before the end of the year.

Mr Hill says, “Singapore is a very important part of the process, because if it wasn't for the fact that they've invested all this time and money into the Life Sciences, we wouldn't have been able to have a really good application for what we're doing today.”

Certisource says its next step is to build a database of timber DNA across Southeast Asia.

Governments and non-governmental organisations will be given access to this, and the information will hopefully help them identify which companies are guilty of illegal logging, and put a stop to the pillage of Asia's forests. - CNA/ms