

## Learning more about lesser known timber species

Together with its partners, Stichting Probos has been working on the selection, technical research and introduction of a number of lesser known timber species from Suriname. The project aimed to improve the business case for sustainable forest management in Suriname by creating a market for lesser known species and thus increase the economic value of the forest. During the implementation of the project, Probos learned valuable lessons. In this Forest Report (Probos' article series 'Bosberichten') we share the most important ones.



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## Challenging business case

Making the business case for sustainable forest management of natural tropical forests is challenging. While FSC/PEFC certified sustainable forest management aims to protect the natural species composition of forests, timber harvesting focuses on the most sought-after species. To reduce the pressure on this limited number of species, sustainable forest management should develop markets for the use of lesser-known timber species (LKTS).

In 2015, about 40% of the actively managed forest concessions in Suriname were FSC certified. Forest managers there - like everywhere else - faced the compelling need to create a global market for an additional number of promising timber species. Together with Tropenbos International (TBI) Suriname and the four FSC certified companies in the country at the time - Greenheart Suriname, Soekhoe & Sons, Dennebos Suriname and Tropical Wood Company - Probos started a project in 2016 for EU market introduction of LKTS. Besides FSC Netherlands, five tropical timber traders from the Netherlands also participated - World Timber Products, GWW Houtimport, Nailtra, Sneek Hardwood and Houthandel Van Dam. The project was supported by the European Sustainable Tropical Timber Coalition (STTC), the Netherlands Centre for the Promotion of Imports from Developing Countries (CBI) and the Dutch Embassy in Paramaribo.

The initiative comprised three phases.

<sup>1</sup> *Houtvadecum is the most commonly used wood reference book in Dutch, describing the properties and uses of over 250 wood species.*

Table 1 - The following 6 Surinamese species were chosen within the project. Factsheets for each species and more info on the project is available at <https://bit.ly/3DM3YEr>

Scientific name	Surinamese name	Commercial name
1. <i>Buchenavia tetraphylla</i>	<i>Gindya udu</i>	Tanimbuca, Fukadi
2. <i>Couratari spp.</i>	<i>Ingipipa</i>	Tauari
3. <i>Pradosia ptychandra</i> , <i>P. surinamensis</i> & <i>P. schomburgkiana</i>	<i>Kimboto</i>	Casca, Abiu, Chupon
4. <i>Eschweilera spp.</i>	<i>Manbarklak</i>	Manbarklak, Kakaralli
5. <i>Platonia guianensis</i> , <i>P. insignis</i> , <i>Rheedia spp.</i>	<i>Pakoeli</i>	Bacuri
6. <i>Hydrochorea corymbosa</i> (synonyms: <i>Pithecellobium corymbosum</i> , <i>Arthosamanea corymbosa</i> )	<i>Bostamarinde</i>	Angelim pintado

The first focused on selecting the most promising LKTS for further research. The second involved wood technical research and practical testing. Eventually, six timber species reached the third phase; promotion and market introduction (table 1). This was just in time to be included in the 11th edition of the *Houtvadecum*<sup>1</sup> species guide (2018).

## The importance of harvesting LKTS

Natural tropical forests consist of hundreds of different tree species. Sustainable forest management looks at the full range of species present and not just at harvesting the few well-known timber species for local and international markets. Using a wider range of species better reflects what natural forests can sustainably produce and in some cases LKTS can substitute well-known species in terms of performance and aesthetics. They may even be more cost-effective, as they may be abundant, but, until now, under-utilised. New timber species with rich, exotic colours and textures may also open opportunities in new markets. So using LKTS can reduce pressure on

known commercial timber trees, help maintain the natural species composition of forests, contribute to the conservation of biodiversity and increase the economic viability of their management. Promoting the use of LKTS in the global market thus contributes to sustainable forest management and conservation.

To increase the number of tree species included in felling plans, it is essential to include LKTS in forest inventories. The introduction of new timber species into mainstream global timber markets starts with reliable data on their long-term availability in commercially viable volumes.

## Selection and investigation of LKTS

The selection of potential new timber species involves several steps (Figure 1). The first relates to the forest, where the volume available over time and stem quality of the LKTS are assessed. Local knowledge about the processing and use of these timber species can provide valuable information. Other selection criteria are based on extensive literature

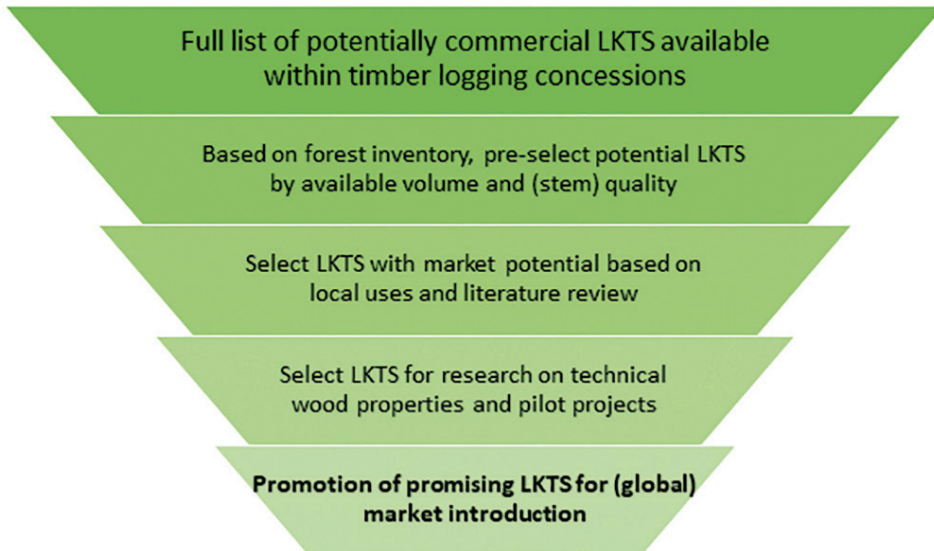


Figure 1 - Sequential actions for the selection of promising LKTS

research and consultation of wood databases. The aim of all these steps is to identify the most important and marketable LKTS in the forest.

Subsequently, representative samples are sent to specialised laboratories for technical investigation of the wood properties and to potential buyers for field testing. At this early stage, it is also advisable to create interest among potential buyers, build business relationships and become familiar with the trade requirements of specific countries or regions. Ideally, pilot projects with the species should be undertaken, so their performance in practice can be demonstrated for the longer term.

### **Comparison, grouping and substitution**

Technical research allows comparison between the properties and possibilities for use of new timber species with those of generally known timber species. If they match, this opens opportunities for

grouping and substituting commonly used species and provides convincing arguments in support of LKTS market acceptance. The potential number of species that can be used for a certain application, such as in garden wood products, can be increased by considering them as equivalent and marketing them as a group. This also increases the chances of reliable, continuous availability as new species with similar properties can replace commonly used timber species whose supply may be irregular.

### **Lessons learned**

The most important lessons from the project have been incorporated into the 'Promoting the lesser known; Best Practice Guide to successful introduction of lesser known timber species'. This guide offers many pointers for similar initiatives and recommendations to avoid reinvention of the wheel and pitfalls identified in the Suriname project. The most important recommendations are listed here.

### **Recommendation 1:**

*The minimum duration of an LKTS project is three years. This provides flexibility in terms of dealing with the uncertainties inherent in the research and testing of new types of wood from tropical forests.*

A project to introduce new species to the market is not just about additional harvesting of LKTS in a demanding environment. There are many other challenges to be tackled. Once trees are felled and logs delivered to the sawmill, primary sawing can be time-consuming due to the wood's unknown machining characteristics. Exports can also be time-consuming because customs authorities are unfamiliar with these 'new' timbers. In the Suriname project, the initial schedule for harvesting, processing and shipping of LKTS was too ambitious and had to be adjusted several times. The same applied to laboratory research and field testing. In the laboratory, the drying of the LKTS samples took much longer than expected, again emphasising that we were dealing with unknown timber species.

### **Recommendation 2:**

*Be clear about what contribution is expected from project partners, both in funding and in kind, and create opportunities for compensating them from the project budget for additional support required.*

During the preparation of the Suriname project, although agreements were made on co-financing by partners, the contribution in kind, such as pro bono provision of samples for testing, was described in general terms only. During the project set-up, the minimum required





*Manbarklak round poles in Akkrum Marina from 2009 and still in good condition.  
(Photo: Mark van Benthem - Probos)*

volumes for testing were not sufficiently specified. To enable scientific research and testing on a practical scale, they turned out to be higher than suppliers initially calculated.

**Recommendation 3:**

*It is important to keep the time between delivery of logs to the sawmill and sending of samples to the wood laboratory as short as possible.*

In the case of the Suriname project, not all the required volumes of selected LKTS could be delivered to the sawmill at the same time. First deliveries were exposed to the elements for a long time before it was shipped. As a result logs and samples suffered fungal and insect infestation, adversely affecting quality.

**Recommendation 4:**

*To guide partners and activities in the country where the LKTS are harvested, it is advisable to have a local project coordinator. Tasks, responsibilities and mutual expectations of those involved should be clearly defined.*

The involvement and motivation of the project partners gradually decreased during the Suriname project, which sometimes led to misunderstandings and caused further delays that could have been avoided. The deteriorating economic situation in Suriname exacerbated the situation. Consequently remote project management became increasingly challenging and, in retrospect, a local project coordinator would have been of great value.

**Opportunities for LKTS now**

For the image of wood in general and LKTS in particular, it is important only to use species for commercial purposes that have been shown to be suitable for the application concerned. That said, the current scarcity and high price of timber provide opportunities for the forestry sector to invest in developing markets for lesser-known timber species. End users are also more willing to consider alternative species due to the growing importance attached to sustainable forest management and conservation and mounting concern about the global climate challenge. The market should therefore be more open to specifying according to performance requirements rather than wood species. This offers the best opportunities for market introduction of LKTS and the tools are now available to support this.

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*Photo front cover: Mark van Benthem, Probos*