Planting ideas

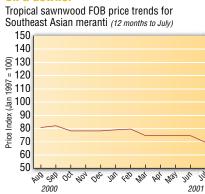
A survey of tropical timber traders suggests that plantation wood will increasingly replace natural forest timbers in further processing—with major implications for the sector

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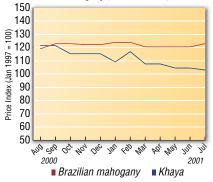
On a downer



Mahogany movements

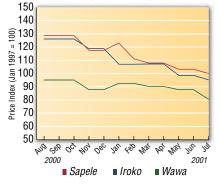
Tropical sawnwood FOB price trends for African and Brazilian mahogany (12 months to July)

Meranti



Hard times

Tropical sawnwood FOB price trends for West African hardwoods (12 months to July)



N JULY this year, subscribers to the ITTO *Market information* service (MIS) were canvassed for their opinions on trends in added value production. The results point to some significant changes in raw material sources and the future importance of plantations in added value manufacture.

Added value products, sometimes referred to as secondary processed wood

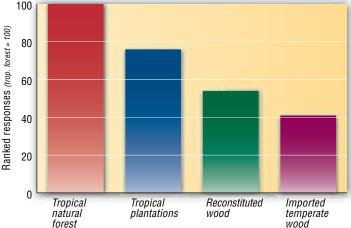
products (SPWP), include: wooden furniture (accounting for around 65% of the value of world trade in processed wood products), builders' woodwork (mouldings, joinery and other building items), products for domestic/decorative use (wooden tableware, ornaments, picture frames etc), packaging and pallets, and other wooden manufactured items such as tool and broom handles and so on.

The world trade in SPWP is estimated to have been just under US\$50 billion in 2000, with ITTO producer member countries contributing around 10% of that. While this contribution may seem small it has more than doubled since 1991 and is the result of tremendous growth in SPWP exports in Malaysia, Indonesia, Thailand, Brazil and the Philippines. Malaysia and Indonesia both export over US\$1 billion in SPWP; see *TFU* 11/1 for a more detailed look at the downstream processing sector in ITTO producer member countries.

The *MIS* survey received some 100 usable responses from tropical timber traders from the three tropical regions and also from Europe, North America and Australia. Respondents were asked to nominate what they thought were the key sources of raw materials for added value product manufacture in tropical countries today, and what they would be in ten years' time. *Figure 1* shows that in the view of respondents, natural tropical forests today provide the bulk of the resource for SPWP manufacture, followed closely by plantation timbers. The latter include the huge rubberwood plantation resource in Malaysia, Indonesia

Natural supply





and Thailand that forms the backbone of added value manufacturing in those countries. Respondents ranked reconstituted wood products (such as medium density fibreboard—MDF—and other fibreboards as well as particleboard) and imported temperate wood more lowly.

What a difference ten years make

According to survey respondents, the next ten years will see a major shift in raw-material supply for SPWP away from timber grown in natural forests. *Figure 2* shows that tropical plantations were predicted to become the most important source of supply within ten years. The natural tropical resource was relegated to second place alongside reconstituted fibres.

These projections must be viewed for what they are: the conjecture of a few busy traders. However, they do provide some insight into how the sector views its future development. If it follows the course suggested by the projections, the implications for the processing sector and for the market are far-reaching. For the miller, the species mix will change, logs will get still smaller, milling characteristics—saw blade configuration and tooth design will change, handling systems may need modification, and drying and treatment requirements will need to be altered.

For the manufacturer, the machining characteristics of plantation logs will be different compared to the current natural resource, as will be the strength, colour and texture ranges, with implications for end-product design. This, in turn, will have far-reaching implications for marketing: we will see a shift from a wood product that is red/brown with natural attractive grain to a lighter-coloured wood with fewer attractive features. If production shifts from solid hardwood processing to the processing of reconstituted products, complete mill re-tooling would be required.

Change the only certainty

If any one thing is certain it is that changes in the resource base in tropical countries and in market demand will continue and the pace of change will accelerate. For a fastgrowing plantation crop, even 10–15 years is a long time in today's economy, where events in faraway places can have an immediate effect on our own doorstep. Market demand will change, there will be profound shifts in sources of supply, and the distinctions between softwood and hardwood and tropical and temperate timber will diminish; the costs of trade will come down and technology will generate new composite products. Domestically grown plantation wood products will be competing directly in the domestic market with imports of radiata pine, US hardwoods and Russian softwoods and with alternative and substitute materials.

Mix and match

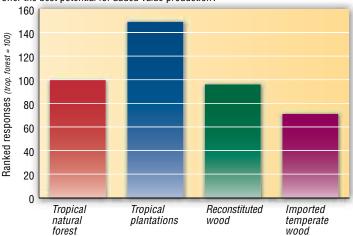
To be successful, plantations must take full advantage of the specific growing conditions for each and every site. All too often in plantation programs, opportunities to match site to species are missed in the rush to plant. My very first managerial job was as marketing manager with a plantation project in Zambia. Tens of thousands of hectares of *Eucalyptus grandis* plantations had been established, the objective being to provide raw material for a pulp mill that would be built as the resource matured. Half way into the nine-year rotation, studies revealed that a pulp mill was no longer financially feasible. In tackling the task of finding markets for a wood that was hardly suited to anything but pulp, it was disappointing to see the blanket way in which the eucalypts had been planted—over good and bad sites regardless.

Careful planning and imaginative selection of species to suit available sites and future markets is the way to go. As a timber technologist I was taught that if foresters could provide a continuous and large supply of any species then technology would provide the answer on how to use the wood. I do not believe that any longer. Zambian *Eucalyptus* taught me that and I suspect we may all learn the same lesson with *Acacia mangium* in Southeast Asia.

The harvest from natural tropical production forests is being reduced to achieve sustainable management and the

Plantations take over

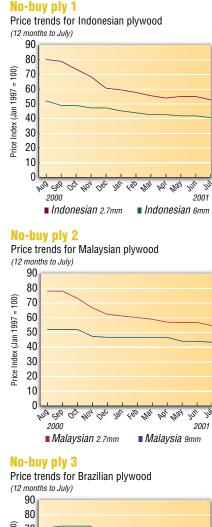
Figure 2: index of responses to the question: 'in ten years, which resource will offer the best potential for added value production?'

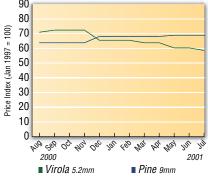


timber industry, which provides a livelihood for millions of workers in the tropics, is getting smaller. These pages have, in the past, painted something of a depressing picture for the tropical timber trade: attacked sometimes unfairly—on all sides for its environmental performance, and with a declining resource base and a disappearing market.

The future for the sector lies in being ready to adjust production technologies and marketing to a mixed resource of natural tropical and commodity plantation timbers. Imaginative applications of technology and good market promotion can revitalise the timber industry and help create muchneeded employment. Countries with a timber industry have a hardworking workforce with good wood-processing skills. In many countries, a strong timber research capability is in place to support industrial revival. Trees grow fast in the tropics: well planned and executed, a forest plantation program can provide raw materials to meet the demands of the global marketplace and take back the market share that has been lost in the last decade or so.

To do so, though, the manufacturers of today must be prepared for tomorrow. They must be flexible in approach, open to new ideas, and well informed about the global marketplace in which they are operating.





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