four billion years ago. The consequences of this continued destruction of the world's tropical forests hardly bear contemplating. Further deforestation threatens to condemn to extinction more than half the planet's plant and animal species, and promises cultural death for many millions of tribal people. Clearly the continued destruction of tropical forest will result in eventual widespread human misery in the Third World and can be considered a modern planetary disaster whose long-term effects are only a few steps short of the horrors of nuclear war.

Third World countries need to be convinced that tropical forest is important, not only to generate a cash flow, but as a

basic foundation for long-term socioeconomic development and security. The developed world must also play its part by moderating demands for commodities which cannot be produced by sustainable methods, and by assisting with debt burdens and other institutional difficulties.

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INSTITUTE NEWS



Comparisons with Sweden and Finland

I recently spent two weeks in Sweden and Finland. Although their forest growth rates and rotations could not possibly stand current economic examination, their forest industry is undoubtedly viable. This is especially so in Finland where nearly half of the overseas earnings come from the forestry sector.

How can these industries be viable? It certainly cannot be because they have access to cheap labour as wages (and conditions) are among the world's highest. Nor do they have cheap energy. And it certainly cannot be because they abuse pollution standards, as these countries maintain the highest standards in the world.

I do not know all the reasons for their viability but several factors must contribute.

There is a constant striving for efficiency at all levels. Labour-saving systems are adopted whenever possible. New technologies and innovation are encouraged. Research, especially in processing, is given not only priority and considerable resources, but also, their research is well integrated into the industry.

There is more and more emphasis on exporting processed goods - joinery and furniture rather than sawn timber; paper rather than pulp. In this process the emphasis on quality has reached almost obsessive proportions. Quality considerations extend well beyond the process itself. Design, especially in furniture and

joinery, is a major factor. In papermaking, quality and new product development dominate. Disposability aspects of the paper product are also becoming important. In an increasingly pollution-conscious market factors such as "what pollution products might be produced on decay or burning" are becoming increasingly important. One Swedish company, Korsnas, has the slogan "kvalitet fran start till mal" (quality from start to finish). There is no doubt, however, that this emphasis on quality, service, and design has given these high-cost producers the edge in the market.

From the President

Not surprisingly, this emphasis on quality extends to wood quality considerations as well. There appears to be a growing realisation in the Nordic countries that wood quality is becoming more and more important. There is less emphasis on commodities like framing timber (the market for which could be increasingly lost to steel and other products) and more emphasis on finishing end uses. Technology has helped considerably - e.g. triple glazed factory assembled and painted windows with a guaranteed maintenance-free life of 30 years are now being offered. Some Swe-



dish companies are even considering pruning to improve the quality of the trees at harvest.

Forest growing in Sweden and Finland may not be profitable but these countries have been determined to make certain that their processing is profitable. The benefits are considerable. Forestry is a major contributor to regional development (many regional communities would not be viable if there were no wood processing complexes providing well-paid and meaningful employment). The technology developed for their own processing industries can be profitably exported to the rest of the world. The country benefits from the high-quality products and from the increased earnings of overseas exchange.

While we may have little to learn from them in forest management, New Zealand has much to learn from the forest industries of Sweden and Finland.

W.R.J. Sutton