

Growing Trees on Rural Properties - Timber Products

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The aim of farm forestry in the Top End of the NT is to encourage the incorporation of commercial tree growing into traditional farming systems for multiple products and benefits. The purpose of this Agnote is to describe the benefits of wood production on farms. The growing of trees to achieve this end can be done in a number of ways, planting styles and management regimes. It can also include sustainable licensed harvest from native stands of timber on farms.

Where a farmer/forest grower has, as his primary concern, future financial returns, then consideration should be given to the potential end uses of the trees. This is very important when selecting the plantation species which will provide the highest commercial value. A commercial forestry venture involves the complexities of production and marketing issues as well as the requirements of growing the trees.

A range of issues which will affect the returns from a commercial forestry venture include:

- costs of establishment and maintenance of the forest during growth;
- productivity of the forest and the timing of harvests;
- location of processing facilities near to the forest and the range of processing options available including on-farm value adding;
- the range of wood products that can be recovered from the wood grown in the forest; and
- the potential markets, the market prices and levels of consumption of recoverable wood products.



(Palmer and Leggate, 1996)

Obviously, the first assurance the landholder must have is that the species selected will establish easily, survive and produce optimum volumes of wood for sale. Based on these criteria, the choice of species may narrow considerably and assuming the end user, (the market place) is conservative in its acceptance of new or different timbers, the choice of suitable species which maximise the return per cubic metre of wood grown is reduced again.

For timber based enterprises, commercial farm forestry should be based on competitive prices for wood produced. Therefore farmers should not grow particular wood species if the price commanded/m³ is too low to justify the effort. Landholders who intend to add tree production as a component of their commercial enterprise need to be aware of the needs of processors and markets prior to planning as sustainable farm forestry is dependent upon coordinated action between growers and end users to ensure the long term viability of the industry. In the NT where woodlots are relatively small and commercial mills are virtually non-existent the option for growers is to value-add on farm. Small mills on farm are portable and cost-efficient, or growers can form co-operatives whereby the capital costs of a larger mill can be shared around. The economic benefits of on-farm processing of saw logs would certainly enhance the overall operation of timber production.

The Department of Primary Industry, Fisheries and Mines is currently evaluating several species at the Berrimah and Douglas Daly Research Stations which will hopefully meet these criteria.

Farm forestry development is generally well supported by the forest industries provided it is able to supply a resource they require at competitive prices, it is of high quality and consistent with market demands. The ability of farm forestry to satisfy the needs of the forest industries with wood and non-wood products will:

- increase and diversify resources for processing;
- reduce the need for industry capital to be invested in land assets; and
- supply timber resources back to the industry.

As outlined in the Strategic Plan on farm forestry in the Top End of the Northern Territory produced by Margules Poyry Pty Ltd in 1997 there are a number of alternatives for growing trees in the NT. Preference for growing trees for meeting any of the end products (shown below) will depend on the ability of the site to grow trees and on land holder objectives.

- **Soft Wood Sawn Timber:** wood products from these species are imported to the NT from southern States and are derived mainly from the exotic species *Pinus radiata* with supply generally coming from large publicly owned plantations. The timber is used in building and construction. The local soft wood species, *Calitris intratropica* or cypress pine could be used in similar applications with superior results.
- **Hard Wood Sawn Timber:** as well as providing timber that is of high value appearance grade, used in cabinet and furniture making, hardwoods also have a market as structural timbers which are stronger and more durable than softwoods. At present the vast majority of hardwoods are imported from the Asia/Pacific region and make up about 10,000 cubic metres of unseasoned structural timber coming into the Territory every year. With diminishing overseas resources and increasing controls on public native forests there will be a continued demand for such timbers in the NT and throughout Australia. (Margules Poyry, 1997)
- **Wood Panels, Posts and Poles:** opportunities exist for farm forestry in this area if niche markets can be established and accessed for specific forms of posts and poles such as girders, "pole construction" houses, fences and vineyard posts. It also presents a potential market for thinnings and short rotation forest products. Specifications for these products are often very tight, change often and the products may require treatment for termites.

- Woodchips, Pulp and Paper: the production and processing of timber to produce these products involves high capital outlay requiring large capital investment and guaranteed continued access to large volumes of low value product. Potential exists however, for the farm forester to supplement large scale operations providing woodchips for export, thus relieving pressure on native forests. This should only be contemplated when a producer can enter into a purchase agreement prior to planting and is aware of low returns per volume of product produced but with a quicker return on capital.
- Non-Wood Products: products that can be considered are oils and tannin extracts from species such as eucalypts, melaleucas, sandalwoods and cypress pines as they show potential for smaller niche markets. Other products that may offer opportunities are medicinal plants, nuts, honey, seed collection and Aboriginal artefacts. This specific objective is addressed in a later Agnote (G23) "Opportunities for Growing Tree Crops in the Top End of the NT" where further opportunities for growing trees are outlined.

REFERENCES

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