2. PRODUCT MARKETING: A MAJOR ISSUE FOR PRIVATE FORESTRY DEVELOPMENT

Peter Byrne

Private forestry is considered to encompass all forms of forestry carried out on private land and, therefore, is characterised by diversity in scale, ownership, species and management objectives. Private forestry suffers in many localities, and particularly in north Queensland, from the dilemma that markets are unlikely to develop without suitable quantities of available material. Private forestry development is unlikely to occur without some certainty of markets. Private forestry continues to grow in importance in Australia as the area available for public native forestry continues to decline in most States and the proportion of the plantation estate in private ownership continues to increase. The need for some certainty in markets for private forest products continues to grow apace. In north Queensland, the potential for profitable private forestry exists but this potential cannot be realised without development of markets for the products. All of the mechanisms examined to assist in private forestry development will depend for their success on the building of positive commercial relationships between the parties in the value chain and, therefore, depend on cooperation between all levels of government, industry and landholders. Private Forestry North Queensland, the Private Forestry Development Committee in North Queensland, is put forward as a mechanism to achieve the building of commercial relationships.

INTRODUCTION

Private forestry is considered to include all forms of forestry carried out on private land, even when a party other than the landholder (including a government agency) owns the trees fully or partly. This definition includes both plantations and native forests which are being managed primarily for timber production. Private forestry, therefore, contains farm forestry and other forms of forestry practised on private land. Across all states in Australia, there is a trend towards private forestry in all forms becoming more important. Public native forests are increasingly being withdrawn from production; public plantations are being sold to the private sector and investment in new plantations is becoming dominated by the private sector.

Private forestry is distinguished from public forestry primarily by the diversity of scale, ownership, species and management objectives. While this diversity is inevitable with such a wide range of forest ownership, it provides private forestry with a range of challenges, not the least of which is product marketing of often small quantities of diverse products. Product marketing needs to be seen as being of primary importance to any private forestry investment. The available markets within a region limit what is commercially feasible in that region. This is a fundamental dilemma for private forestry development in regions such as north Queensland – markets are unlikely to develop without suitable quantities of available material and private forestry development is unlikely to occur without some certainty of markets. Some possible solutions are proposed to overcome this dilemma.

Some means of expanding markets for private forest products are examined with the aim of finding ways to expand private forestry in north Queensland. The principal means of expansion examined are:

- Commercial relationship building;
- Private Forestry Development Committees;
- Government policy framework for Private Forestry;
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- Investment framework for Private Forestry;
- Product 'fitness for purpose';
- Tree grower cooperatives; and
- Environmental services markets.

PRIVATE FOREST ESTATE
National Forest Inventory (2003) reported that as at December 2002, 50.5% of the total national forest plantation estate in Australia was on private land, with a further 1,655 ha reported as unknown but estimated to belong to private companies with plantations on private land. However, in Queensland, the majority (88%) of plantations occur on public land. The proportion of Queensland plantations on public land has decreased markedly from 94% at September 2000 (Wood et al. 2001).

Wilson et al. (2003) reported about 38 M ha (23%) of Australia’s native forests as privately owned. This compares with about 11.4 M ha (7%) of multiple-use public native forests where timber production is permitted. The remaining native forests are mainly on leasehold land (46%), nature conservation reserves (13%) and other Crown lands (8%). Private native forests contribute about 25% of the total national supply of sawlogs and other timber products from native forests, and are major sources in Queensland, New South Wales and Tasmania. However, it is likely that many private native forest owners do not have the motivation, knowledge or confidence to develop and apply sustainable forest management procedures.

At September 2000, Wood et al. (2001) reported that an area of 2,305 ha of farm forest plantations and 159 ha of plantations on private land under joint venture arrangements existed in the north Queensland region. It is unclear if all of the plantings carried out under the Community Rainforest Reforestation Program (CRRP) have been included in this inventory. However, it is clear that the joint venture plantation figures do contain all of the plantations established to September 2000 under the Department of Primary Industries Joint Venture Scheme.

As private forestry continues to increase in importance, the issue of markets for private forest products continues to grow in importance. However, there seems to be little evidence of successful coordinated action to correct the current situation.

TIMBER INDUSTRY IN NORTH QUEENSLAND
Prior to the 1988 listing of the north Queensland (NQ) tropical rainforests as a World Heritage Area, there was a substantial timber industry based on the native forest resource located in NQ. Since listing, the gradual erosion of the timber industry skills base, limited investment in value-adding processes, limited investment in managing the private native forest resource and limited marketing efforts have resulted in the majority of hardwood sawmillers exiting the industry.

An integrated softwood sawmill at Ravenshoe processing primarily plantation-grown softwood from public plantations now dominates the north Queensland timber processing industry. A scattered but significant private softwood plantation resource of variable quality remains without a market or processing opportunity. This plantation resource is not of interest to the one major softwood sawmiller at Ravenshoe. Private native forests in the region have very limited product processing and marketing opportunities.

FARM FORESTRY IN NORTH QUEENSLAND
Some landholder support has been shown for farm forestry with over 2500 ha being established through schemes such as CRRP and the DPI Joint Venture Scheme since 1992.
Farm forestry extension services have been intermittent in the region with a wide range of government-funded agencies providing advice under relatively short-term projects.

The desired transition from timber production using native forests to plantations, stated as one of the objectives of CRRP, has not occurred in NQ for a number of reasons. Emtage et al. (2000) suggested that, of the five groups of farmers identified in NQ, the group with the strongest interest in private forestry is the group who have least dependence on the land as a source of income, namely retired professionals or hobby farmers. This group is also likely to need guidance, assistance, established networks and access to specialised labour.

As assistance for private forestry is now very limited, it is likely that the area of private forestry in NQ will not increase dramatically for the foreseeable future. Unfortunately, traditional markets will remain limited if the available timber resource does not reach a critical mass. The problem facing all forms of private forestry in NQ, therefore, has a number of dimensions, including:

- A high proportion of small plantings with a range of species and ownership;
- A range of management objectives;
- A wide range of owner interest, knowledge and skills in preparing the crop for a particular market or markets;
- Limited quantities of particular product lines;
- Little processor interest in the available resource;
- Disillusioned owners of marketable private forests which have not found a suitable market;
- Small numbers of landholders showing continued interest in continuing or beginning commercial tree planting in the current environment;
- Very limited assistance available to potential commercial forest growers.

The problems faced by many growers in NQ are captured by the following quote reported by Borough (2002) from a well-known forester in Albury, NSW ‘Most of them have planted with encouragement and assistance from state government and now have an unholy battle to get a return on their investment’. There is, however, a range of opportunities for NQ private forestry:

- The predicted future global deficit in hardwood sawlog supply;
- Most Australian plantations have been established for either hardwood pulp or softwood sawlogs, thereby not contributing to overcoming the hardwood supply deficit;
- High quality technical information through existing research and development providers;
- A suite of unique tree species with excellent marketable wood properties;
- Rapid growth rates achieved by species in the tropics;
- Previous experience with tree planting schemes such as the Community Rainforest Reforestation Program (CRRP), Tree Assistance Scheme and Joint Ventures with the State Government;
- Suitable land which may become available in both the wet tropics and dry tropics;
- Complementary infrastructure developed for agriculture such as road and rail networks, dams and irrigation channels;
- Biomass production and processing opportunities with the established sugar industry;
- Proximity of NQ to expanding high volume markets in Asia; and
- An acknowledged need to create sustainable rural employment opportunities in the NQ region.
The potential exists in NQ to develop a marketable timber resource and a modern wood-processing sector based on private forests. However, there needs to be some concerted action to ensure the tree growing and processing industry grows to realise this potential.

INDUSTRY DEVELOPMENT REQUIREMENTS
As Borough (2002) reported, the wood processing industry in Australia has shown a strong preference for securing resource from public or private plantations of industrial scale (typically in excess of 10,000 ha). There are two major features that characterise enterprises of this scale:

- Capacity to supply a number of markets with a range of products through the rotation, thus improving the chances of the tree growing enterprise being profitable;
- Capacity to enter into long-term but flexible agreements that allow for such factors as log specifications, flexible quantity removal to allow the purchaser to respond to market fluctuations, force majeure\(^1\), specified supply arrangements and reliable resource information.

In the north Queensland context, these features may be seen as being irrelevant and unachievable. It is, however, useful to understand the requirements of the markets which are no longer regional but rather have become global. Growers need to understand that the processors are part of the same industry as they are, and are dependent for their own profitability on the right product being available to them.

Borough (2002) suggested that the small grower could learn much from the operation of the large industrial growers, namely:

- Pool the resource – small quantities need to be aggregated and structured in a way so that contractual arrangements can be made with one party;
- Provide harvest and transport capacity to harvest and transport logs to various markets;
- Secure an array of markets for the full range of products;
- Obtain good information on the resource;
- Establish trust of growers to reassure the growers that their resource is being marketed effectively and transparently.

It could be argued that the views of Borough (2002) are only relevant to broad-scale ‘pseudo-industrial’ monocultures grown on private land for only wood production, and are not relevant to the small-scale multi-species plantations that dominate the NQ private plantations. While this argument may be true, there are some common elements between the problems for industry development described by Borough and the problems for NQ described above. These common elements include:

- A lack of available markets for the marketable private timber resources;
- A lack of processors willing to buy the resource;
- Limited quantities of particular product lines;
- A wide range of landholder interest, knowledge and skills to prepare the crop for particular markets;
- Very limited assistance available for small growers; and
- Disillusioned owners of marketable private forests that have not found a suitable market.

\(^1\) A force majeure is an event or circumstances beyond reasonable control of any party to an agreement, except an inability to pay money when due.
There are also other factors that may apply in NQ but were not highlighted by Borough. These include:

- The transition from public native forest harvesting to private native forests and plantations, which is accelerating as access to the publicly owned native forest resource declines;
- The need to develop plantation investment vehicles that are suited to private landholder needs and emerging environmental services markets;
- A premium on land availability for plantation development, particularly in high rainfall areas; and
- Strong community and environmental pressure being brought to bear on the commercial plantation industry for ‘public good’ environmental tree planting and more sensitive placement within existing land uses, and undertaken on a smaller scale.

Blackwell and Stewart (2003) examined the issue of utilising scattered farm trees of high-density eucalypts in Southern Australia and concluded that ‘To gain the maximum value from these timbers, processors will be required to produce a consistent and accurately dimensioned quality product. Sawing, drying and grading of boards add value to the product. The limited supplies of suitable tree species should ensure a specialist market should be established without the intervention of large companies that will control prices and markets’. While the industry and market context in NQ differs from that in Southern Australia, the conclusion above seems to be relevant. Some solutions can be posed which may contribute to the overall solution of this seemingly insoluble problem.

RELATIONSHIP BUILDING

Given the increasing importance of private forestry and the suitability of many areas in NQ for commercial tree growing, some of the elements for a successful private forestry industry currently exist in NQ. Figure 1 presents a schematic diagram of the major elements of a successful private forestry industry specific to north Queensland.

The features highlighted in this diagram that are essential for development of the industry and make it different from the current situation include:

Markets for existing and new products and services provide the direction for the industry;
Positive relationships between all of the players in the industry are essential to improve the understanding that all players are important to the future of the industry. (This, of course, is not meant to imply that all players need to be in constant agreement but that there is a willingness to discuss issues of importance and reach agreement for the future of the industry):

- The central nature of Private Forestry North Queensland (PFNQ – the local Private Forestry Development Committee) in facilitating the positive relationships between all of the players;
- Positive relationships with all levels of Government, particularly Local Government, and clear supportive policies from Government;
- Active involvement in the industry by investors in all of their forms, including landholders and forest growers;
- Active involvement of service providers in the industry;
- Active involvement of representative groups in development of the industry, particularly those representing landholders, forest growers and forest product purchasers;
- A developing potential role for environmental services as one of the products for private forestry.
The above features are necessary no matter what products or services are to be produced, assuming that there is a requirement for the industry to be productive and profitable. The central nature of a coordinating and facilitating mechanism is seen as necessary and is seen as the role for PFNQ, the local Private Forestry Development Committee.

**Figure 1. Schematic framework of the North Queensland Private Forest Industry**

**PRIVATE FORESTRY DEVELOPMENT COMMITTEES**

Eighteen Private Forestry Development Committees (formerly Regional Plantation Committees) exist in the major plantation regions in Australia. Their broad roles are to:

- Enhance the economic development potential of their region by facilitating the expansion of the commercial plantation estate, through the alignment of regional objectives and those government policies and programs that pertain to furthering regional industry development;
- Promote sustainable management of private native forest resources; and
• Liaise with regional, State and national stakeholders to facilitate sustainable industry development.

Private Forestry Development Committees (PFDCs) are funded jointly by National and State governments through the national investment program of the Landcare stream within the Natural Heritage Trust. While they share a common focus on these roles, PFDCs are structured differently to meet regional needs. However, all structures include a management group comprised of representatives of key regional stakeholder groups. Management groups oversee implementation of detailed business plans, prepared by the PFDC Executive Officers, and specifying management, funding and performance assessment criteria. In some States, PFDCs are managed under the auspices of State and Regional Development organisations, while in others they sit under State forestry agencies (PFDC Leadership Group 2003).

One of the unique strengths of PFDCs is their potentially strong linkages between industry, local and State Governments, community, and environmental groups in regional Australia. In addition to industry development, PFDCs have an increasing role in leveraging their strong regional linkages to assist in implementation and monitoring of emerging natural resource management activities. PFDCs are also important to the continuing expansion and viability of the forest products industry.

The key national policy statements informing PFDC activities now include the natural resource management (NRM) programs, the Natural Heritage Trust Extension and the National Action Plan for Salinity and Water Quality. While PFDCs have effective regional networks focused on industry development, considerable challenges lie ahead for engagement by the Committees with regional natural resource management groups. PFDCs could make an important contribution to regional NRM groups by developing tree planting options that address natural resource condition targets identified in regional NRM plans. These options could be developed collaboratively with relevant stakeholders in the context of regional industry plans. By matching new tree planting projects designed to meet NRM outcomes with existing or potential regional processing enterprises, and possible investors, new synergies could be created between landholders, investors and regional NRM groups (PFDC Leadership Group 2003).

PFDCs can also make an important contribution to facilitating the process of industry restructuring by supporting the development and implementation of regional industry plans, and by focusing upon identification of key investment and marketing opportunities and areas for research and development. Liaising between regional communities, regional development organisations, all tiers of government and industry in relation to all aspects of private forestry development, will continue to form a major component of PFDC activities (PFDC Leadership Group 2003).

GOVERNMENT POLICY FRAMEWORK FOR PRIVATE FORESTRY
At State and National level, the government policies which have most relevance to development of the private forest industry are Plantations for Australia: The 2020 Vision and the developing Farm Forestry National Action Statement. Both statements suggest there is a fundamental need for all current and potential sectors of the industry to form productive working relationships in the interests of realising the multiple benefits possible with private forestry. The Australian Forestry Standard, particularly the provision for group certification, is also potentially highly useful for the purpose of marketing certified sustainably produced forest products.

At the Local Government level, planning schemes or their equivalent are the policy instruments that have a major influence over land uses. In NQ some planning schemes are not supportive of private forestry in the form of either plantations or native forest
management. Private native forestry is likely to assume greater importance as timber production from the public native forest estate continues to decline. Local governments can play an important role in supporting sustainable management of plantations and private native forests through appropriate encouragement in planning schemes.

The national effort to ameliorate environmental degradation has been predominantly approached from the landcare perspective and based on building up an ethical commitment to sustainable agriculture and environmental responsibility. This is a laudable and an essential component of any revegetation program but, by itself, is inadequate to drive the level of adoption needed to address the serious environmental problems. It is not credible to propose that a task of this size and importance be done on a voluntary, non-commercial basis.

Most farm businesses generate only modest profits and are not able to meet the cost of voluntary non-commercial revegetation on the necessary scale. Nor are sufficient funds likely to be available from the public purse or from some form of public subscription. Ways must therefore be found to incorporate the landcare ethic and the required level of environmental repair into farming systems. Private forestry has the potential to provide a credible solution, for governments to promote actively (National Farm Forestry Roundtable2 2000).

INVESTMENT FRAMEWORKS FOR PRIVATE FORESTRY
There is a wide range of possibilities for leveraging private investment in tree planting projects with multiple benefits. PFDCs are well placed to provide potential investors with critical regional information, and to assist regional NRM groups and farmer groups to understand investor decision-making processes. However, considerable attitudinal change will be required to achieve such partnership investment, and the challenges of regional information collation should not be underestimated.

Developing business models to enable integrated plantings in high rainfall areas has the potential to assist in addressing both industry requirements for resource expansion where land availability is contracting, and for meeting community expectations regarding the social and environmental impacts of large-scale plantings. Such approaches may also provide a unique opportunity to improve synergies between the industrial and farm forestry sectors in terms of both investment and marketing. PFDCs have the opportunity to act as information brokers in these processes (PFDC Leadership Group 2003).

PRODUCT ‘FITNESS FOR PURPOSE’
If growers and processors are encouraged to develop close relationships along the value chain, it will become obvious for growers that, if they wish to be rewarded adequately for their product, it must fit the purpose of the primary processor at the time. The current low quantity of available material suitable for high-value markets from NQ private forestry will limit the establishment of large-scale processing plants, which in turn will limit the capacity of growers to plan for a particular market. However, both potential processors and growers will need to be communicating clearly for the markets and the processing plants to develop. This clear communication will need to be encouraged and facilitated by a group such as PFNQ.

The diversity of species, management objectives and ownership provides the industry in NQ with some special challenges in relation to producing relatively uniform products for high volume markets. Low volume specialised markets have some real challenges in providing 'fit for purpose' product. These problems can only be overcome if the grower understands the problems confronting the processing industry and vice versa.

2 National Farm Forestry Roundtable was set up by the Australian Government in 1998 under the Wood and Paper Industry Strategy for a period of two years and charged with responsibility to provide an Australia-wide forum on farm forestry.
TREE GROWER COOPERATIVES

It would seem that NQ private forest growers would benefit from the establishment of an active tree grower cooperative. While a tree grower cooperative does exist, it struggles because it could not generate sufficient interest and capital to establish a wood processing and value adding facility that could be expected to attract further interest, membership and investment.

The principal of the use of cooperatives for landholders to be more actively involved in the processing, value adding and marketing of their products is well established in a range of primary industries. The cooperative model is highly adaptable and suitable to the private forestry situation because all control of the business is in the hands of those who are actively involved in the primary business of the cooperative, namely growing trees for processing and profit. Cooperatives act as an extension of its members’ business operation (Edols 2000). Tree grower cooperatives are also an ideal means of maintaining constant contact between the grower and the processor thus providing a mechanism for ensuring that each is aware of the other’s requirements.

Due to a lack of capital, the North Queensland Tree Growers Cooperative (NQTC) has struggled to carry on the value-adding business that was considered to be essential as it’s primary business. Edols (2000) noted that ‘organising a substantial investment up front has not been a typical facet of traditional cooperative start-ups because it normally takes time to build up a substantial funding base’. Edols proposed the use of a New Generation Cooperative that allows for raising of funds from shareholders for an up-front investment for value adding. Cronan (1999) noted that general cooperative legislation throughout Australia varies in relation to the options available for fund raising. Cronan also noted that cooperatives now have flexibility in developing an appropriate debt and equity structure for their cooperative using such mechanisms as member shares, entry fees, periodic charges payable by members, loans by members, external borrowings and, in some States, instruments to allow purchase of equity in the capital of the cooperative (not share capital). Despite these mechanisms, most Australian tree grower cooperatives are struggling to remain viable. At the National Farm Forestry Cooperative Workshop held in Brisbane in November 1999, participants proposed that government establishes a revolving fund to facilitate start-up of tree grower cooperatives. Despite these calls, no action has resulted.

ENVIRONMENTAL SERVICES MARKETS

Where an environmental outcome can be attributed to a particular land-use change and when the outcome can be measured and a value can be assigned, a market may be an efficient means of providing the outcome. In the case of NQ it is not clear whether private forestry as a land-use change will result in the measurable environmental change for which a market may be established. It is also not clear if the capacity exists within the regional community to initiate markets for environmental services (or market-based instruments) that address natural resource management outcomes at the landscape scale.

Beale (2003) explained that environmental services should essentially be seen as a mechanism to reveal the ‘value’ of an environmental good and service in a way that enables this value to be reflected in an exchange between the producers of the value and those who would see advantage in consuming it. The value could be positive or negative, and the ‘consumers’ could be either individual market actors or groups of actors or governments who stand in the market place to buy or sell on behalf of a community. There needs to be a number of prerequisites in place before successful markets are possible. Beale (2003) summarised the requirements as:

- clearly defined and legally enforceable property rights;
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- access to information concerning the quality and quantities of goods and services to be traded;
- good, or at least reasonable, knowledge about the supply function of the goods and services to be provided; and
- establishment of efficient and low cost ways of transacting, recording and tracking the trades.

Many environmental resources are not adequately valued through the market system. Markets are generally efficient in allocating resources to ‘exploitation activities’ but may be ineffective with respect to investment in environmental conservation (Chaudri 2003). Chaudri explained how a mix of policy instruments may be possible to shift the boundary between the marketed and the non-marketed sections of the economy.

The potential for private forestry to participate in any future environmental services markets remains to be developed. Private forestry as an environmental service could be advanced through the current series of pilot trials and continued research to establish accurately the environmental effects of planting in particular places in the landscape and within catchments thus identifying more clearly the environmental good or service being marketed. Active environmental services markets may also require some public policy development. For example, markets in carbon credits will require, among other things, policy development in the area of carbon emission control and market establishment for the emission offsets. Renewable energy certificates are a current example of a market-based instrument that is currently part of public policy in Australia. Beale (2003) concluded that ‘there are lots of uncertainties in applying markets to environmental problems. Markets are not a panacea, and often we are on the frontier of knowledge. We need to learn by doing.’

CONCLUSION
Private forestry remains a future land-use option with much potential for north Queensland landholders. This potential will not be realised unless there are more positive signals from potential markets than is currently the case. Some means of rectifying the current situation are highlighted. However, all of the mechanisms examined will depend for their success on the cooperation of all levels of government, industry and landholders.

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