Expanding Plantation Investment in Australia

“Key policies and investment models to support continued Plantation Investment in Australia”

Presentation by
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Myoora Investments P/L
Presentation Overview

1. Current status
2. The Problem
3. Policy Success and Failures
4. Are their lessons from Overseas
5. Guiding principles for policy
6. How can we improve the investment model.
7. Rationale for Assistance
8. Conclusions
Plantation development in Australia has stalled!

Total Coniferous and Broadleaved Plantation Area, 1995 to 2012.

The Problem is Poor Profitability ….< 5% real ROI

<table>
<thead>
<tr>
<th>Sawlog Plantations</th>
<th>Units</th>
<th>Softwood</th>
<th>Hardwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Price $/ha</td>
<td>5,000</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Establishment &amp; Periodic costs $/ha</td>
<td>2,800</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Annual Maintenance $/ha</td>
<td>120</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>MAI $m³/ha/yr</td>
<td>21</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Rotation length Years</td>
<td>33</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Average log price $/m³</td>
<td>46</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>IRR</td>
<td>4.6%</td>
<td>3.3%</td>
<td></td>
</tr>
</tbody>
</table>

Add risks including:
- environmental – fire, drought etc
- social – mono cultures not particularly endearing to communities
- financial – poor cashflow, and externalities of plantations poorly priced
Why is this a problem?

1. Decline in industry cost competitiveness – lack of economy of scale
2. Demand for housing (& timber) is increasing with immigration
3. Softwood supply flat and augmented by imports – What if AUD falls?
4. Native forest supply is declining
5. Doubt over investment in 2R hardwood plantations
6. Future trend towards multi function plantations – investments looking more complex – particularly if government assistance is sought!
7. It takes time to build the resource so need a long term (30+ yrs) view.
How much more plantation do we need?

For an order of magnitude in softwood:

Replace softwood imports - 120 - 200,000 ha

Maintain current supply balance by 2050 (35 million pop’n) – 500,000 ha

Even spread over possibly 8 supply regions this is still a big task.
What policies have worked?

1. **Commonwealth Softwood Agreement Act** - 35 year loans to the states to top up plantation development.

2. **Managed Investment Schemes** for hardwood pulpwood plantations - MIS worked well in terms of area planted but financial failures by the bigger companies have tainted these schemes.

The above two policies were largely responsible for our 2 million ha estate.
What policies have not worked?

1. **Softwood grants and loans** – mostly by the states for private growers but some industrials did the same with limited success - conflicts of interest.

2. **Retail investment in Softwood & Hardwood Managed Investment Schemes** – in general a very poor history and few surviving schemes.

3. **Joint Ventures** – good concept but got lost in the oversupply from the maturing public resource – timing problem.
What lessons are there overseas?

Most countries have had government supported schemes of some sort but most are winding down and you need to understand context:

1. **Planting in the national interest such as:**
   - Japan
   - Korea
   - UK
   - Turkey

2. **Centrally planned economies**
   - China
   - Russia
   - Vietnam

3. **Plantation Definition**
   - USA
   - Russia
China – has reasons to plant trees!!!

Source FAO - 2010
Guiding Principles for Policy – the do’s

1. Provide a stable and coherent forest policy
2. Ensure that other (non forestry) policies are aligned
3. Develop strong Research & Extension support
4. Establish strong industry clusters
5. Collect and make readily available objective, high quality resource information
6. Encourage healthy debate and discussion on merits for any incentives

Source: Enters & Durst, 2004
Guiding Principles for Policy – the don’ts

1. Promote inequitable land-use policies
2. Persist with export and import controls
3. Maintain policies that allow plantation development with detrimental environmental and/or social impacts
4. Crowd out private sector investment
5. Keep policies and incentives in place longer than necessary
6. Retain bureaucratic procedures and other disincentives that reduce returns to investors

Source: Enters & Durst, 2004
What model - Softwood Plantation Profitability Drivers

*Impact of a 50% positive change in variables*

<table>
<thead>
<tr>
<th>Sofwood Sawlog Plantations</th>
<th>Original</th>
<th>New</th>
<th>IRR</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Price</td>
<td>5000</td>
<td>2,500</td>
<td>5.6%</td>
<td>22%</td>
</tr>
<tr>
<td>Establishment &amp; Periodic costs</td>
<td>2800</td>
<td>1,400</td>
<td>5.1%</td>
<td>11%</td>
</tr>
<tr>
<td>Annual Maintenance</td>
<td>120</td>
<td>60</td>
<td>5.0%</td>
<td>9%</td>
</tr>
<tr>
<td>MAI</td>
<td>21</td>
<td>32</td>
<td>6.0%</td>
<td>30%</td>
</tr>
<tr>
<td>Average log price</td>
<td>35</td>
<td>69</td>
<td>6.0%</td>
<td>30%</td>
</tr>
<tr>
<td>IRR</td>
<td></td>
<td></td>
<td>4.6%</td>
<td></td>
</tr>
</tbody>
</table>

**Order of impact:**
1. Growth and Log Price
2. Land Price
3. Establishment and Annual Costs
Is there a rationale for assistance?

1. Development of the supply of renewable resources
   i. Timeframe to develop - TVM
   ii. Risk to develop – fire, drought, etc
   iii. Transition from native forest to plantations needs assistance - Qld.
   iv. Self sufficiency

2. Maintaining a stable and economic regional industry
   i. Investment in processing has generally followed plantations
   ii. Prevent imports from suspect sources

3. Reforestation of Australia’s degraded landscape
   i. European settlement cleared 100 million ha – causing:
      a. Salinity
      b. Erosion
      c. Biodiversity loss.
   ii. Sequestration – positive contributor to national carbon accounts
Is our thinking correct – the difficult decade?

Plantation development is an investment in sustainable resources - but the resource creation phase is the hard bit?

Traditional investment appraisal techniques (Discounted Cash Flows) do not make sense during the creation phase because at high discount rates the plantation values are often negative.

Self Sufficiency has been a policy but is not supported by economists.

Is there an argument for self sufficiency in sustainable resources?

Plantation forestry suffers from the problem of time. Planting today can only provide real benefit in 25 to 35 years time.

Should plantations be considered this vital infrastructure?
What could work – can we change the drivers?

To improve profitability we need to consider mechanisms or policies that positively impact on the following three things;

1. **Cost of Land & Establishment**
   i. **Leasing** reducing up front capital costs
   ii. **Joint Ventures** - can reduce costs significantly (2-5M ha + of land in high Rf)
   iii. **Buy** – develop and sell but hold a forestry right – provides flexibility but has risk and needs capital
   iv. **Investors for** establishment of carbon, biomass, biodiversity etc

2. **Growth rate**
   i. **R&D** – (lift average growth rate will yield increase in harvest)
   ii. **Land swaps** – rationalise resource (sell marginal land to consolidate resource).

3. **End product price**
   i. **Improve the Log Price**
   ii. **Develop markers for** carbon, biodiversity and other values increases total return per hectare.
What could a new investment model look like?

<table>
<thead>
<tr>
<th>Sofwood Sawlog Plantations</th>
<th>Original</th>
<th>Change</th>
<th>Carbon Investment</th>
<th>per ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Price</td>
<td>5000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Land Rental</td>
<td>3%</td>
<td>$150/ha</td>
<td>$2,500</td>
<td></td>
</tr>
<tr>
<td>Establishment &amp; Periodic costs</td>
<td>2800</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Maintenance</td>
<td>120</td>
<td>120</td>
<td>Long term average</td>
<td>230 tCO2e/ha</td>
</tr>
<tr>
<td>MAI</td>
<td>21</td>
<td>21</td>
<td>Purchase Price</td>
<td>$10.87</td>
</tr>
<tr>
<td>Average log price</td>
<td>35</td>
<td>40</td>
<td>Sale Price</td>
<td>$20.00</td>
</tr>
<tr>
<td>IRR</td>
<td>7.0%</td>
<td>IRR</td>
<td>7.0%</td>
<td></td>
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</table>

Risk we don’t have a carbon price yet ...... so can we get the Government to invest in the meantime?
Summary

It is not going to be easy and there is no silver bullet

We have a poor reputation with retail investors and we have not engaged rural landowners.

The States do not have any spare land any expansion must be on freehold land

We are an old industry with low margins – therefore we must be efficient across the supply chain, everyone needs to make a fair return.

The answer will be a combination of the development of the case for sustainable supply of natural resources, integration with agriculture to improve efficiencies and investment returns for both industries and greater recognition of the externalities of plantations and “payment” for these values.