BRS SEMINAR SERIES PRESENTS:

Friday 11 November

Plantations and rural communities: current trends in plantation establishment, and socio-economic impacts of the expanding plantation industry

Jacki Schirmer — BRS
Mark Parsons — BRS

This seminar will provide an overview of Australia’s plantation estate, why it developed, recent rate of expansion and where the plantations are located. The socio-economic impacts of this expansion will then be discussed, based on the results of two comprehensive case studies of the plantation industry in the Great Southern Region of Western Australia and the South West slopes of New South Wales. The impacts of plantation expansion on rural populations, service provision, land prices, employment and spending will be discussed.

11.00am - 12:00noon (morning tea at 10:45am)
Edmund Barton Conference Centre (in the courtyard)
Department of Agriculture, Fisheries and Forestry
Edmund Barton Building
Kings Avenue, Canberra

Bookings not required.
Parking can be a problem, we suggest taking public transport or a taxi.
For further details, please call the BRS Seminar Coordinator on 6272 4011.

For further information on BRS Seminars or to obtain papers/presentations supplied by previous seminar presenters, please visit our website at: www.brs.gov.au/brsseminars
Socio-economic impacts of plantation forestry over time

Social Sciences Programme
Acknowledgments

Forest and Wood Products Research and Development Corporation

Timber Towns Victoria and Plantations 2020

Growers, harvest & haulage businesses, processors, PFDCs and forest industry organisations in the South West Slopes and Great Southern

Project Steering Committee – Alan Cummine, Adam Gerrand, Jill Lewis, Mark Parsons, Warwick Ragg, Jo Roberts, Richard Stanton, Stephen Taylor, Phil Townsend, Andrew Wilson

Bureau of Rural Sciences – the co-authors of the reports (Mark Parsons, Con Charalambou, Mijo Gavran) and special thanks to Tracey Lutton
Why did we need this study?

- Many different perceptions about socioeconomic impacts of plantations
- Much previous research has focused only on identifying perceptions
- The few studies that have sought to quantify impacts have often not answered community’s questions
- This study accessed and analysed independent data to answer key questions (eg from ABS)
- Two case studies: one of expansion of plantation estate; another of mature plantation industry
The diversity of perceptions...

• Following slides give statistics from a 2004 mail survey of 500 residents in Bombala region, NSW

• 62% response rate – 261 respondents

• Further information:

Julia Pickworth, Social Sciences Programme julia.pickworth@brs.gov.au
There is a loss of community services because of people leaving the area due to plantations.

- Disagree: 36
- Neutral: 22
- Agree: 35
- Don't know: 8

There is a growth in population associated with plantation jobs.

- Disagree: 39
- Neutral: 16
- Agree: 37
- Don't know: 9

Plantations cause people to leave the area.

- Disagree: 28
- Neutral: 17
- Agree: 48
- Don't know: 7

Plantations bring new people into the area.

- Disagree: 23
- Neutral: 18
- Agree: 56
- Don't know: 4

There is a loss of community services because of people leaving the area due to plantations.
Other social perceptions

- There is conflict in the community due to plantations
- Expanding plantations are negatively altering the character and identity of your community
- Plantations cause a loss of cultural heritage (e.g., historic properties)
- Increased road usage from plantations is a safety risk

<table>
<thead>
<tr>
<th>Perception</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>There is conflict in the community</td>
<td>81</td>
<td>5</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Expanding plantations are negatively altering</td>
<td>61</td>
<td>6</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Plantations cause a loss of cultural heritage</td>
<td>70</td>
<td>4</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Increased road usage from plantations is a</td>
<td>64</td>
<td>4</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>safety risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percentage

Disagree ▼ Neutral □ Agree □ Don't know
Economic perceptions

- The plantation industry has created career opportunities and increased employment in your region.
  
  - Disagree: 22
  - Neutral: 12
  - Agree: 60
  - Don't know: 6

- Pine plantations are the economic future of your area.
  
  - Disagree: 42
  - Neutral: 19
  - Agree: 36
  - Don't know: 4

- Plantations have negative impacts on other industries.
  
  - Disagree: 26
  - Neutral: 19
  - Agree: 48
  - Don't know: 7

- There have been changes to the price of land as a result of plantations.
  
  - Disagree: 29
  - Neutral: 15
  - Agree: 82
  - Don't know: 7

- Plantation companies buying land provide farmers with a way to leave the land.
  
  - Disagree: 10
  - Neutral: 15
  - Agree: 73
  - Don't know: 3
Key sources where respondents get their plantation information

Percentage of respondents of who rated the source in their top 5 sources

- Local Newspaper: 67.4%
- Relatives, friends, neighbours: 62.5%
- Personal experience: 59.4%
- ABC radio: 51%
- Pine plantation industry: 38.3%
- Timber industry groups: 37.2%
- Local government: 29.1%
- National or State newspaper: 20.3%
- State or national TV: 18.8%
- Lobby groups: 14.6%
- Environmental groups: 13.4%
- State government: 8.8%

Percentage
Communities ask what impacts plantations have on…

... the population living in rural communities and towns (both total number and socio-demographic profile)

... employment and spending in different regions

... levels of provision of local services

... rural land prices

... other agricultural industries

... housing availability in processing towns
Challenges

• Many changes occurring in rural areas
  – Number of farming families fell 22% over 1986 to 2001 (ABS 2003)
  – Introduction of intensive farm enterprises eg viticulture
  – Seachangers and treechangers

• How can we tell if socioeconomic change is a result of plantation expansion?
  – Examine changes outside plantation sector
  – Examine changes over time (back to 1991)
  – Compare trends with averages for larger regions eg State, Australia
  – Compare trends in plantation and non-plantation areas
Great Southern (WA) case study

- Rapidly expanding plantation resource established since 1988
- By 2001, over 127,000 ha plantation, 93% blue gum
- By 2001, plantations established on between 10% and 25% of agricultural land in three LGAs
- Harvesting expanding rapidly since 2001
- Community’s key questions include how plantation expansion impacts on rural population, rural services, land prices, and regional employment
Population change

- No evidence plantation expansion causes higher decline in rural population than other rural land changes
- The 3 LGAs with high plantation expansion experienced less rural population decline than rest of the Great Southern region
- Sub-division issues
Service provision

- Plantations often established where services already declining

- No evidence that leads to more rapid decline, but further data needed
Employment

- Rapid increase in employment occurring as harvesting expands

- Most employees located within GS: 64% by 2003, compared to 43% in 1996-97
Rural land prices

- Plantation expansion can result in high land value growth

**Rate of increase in average land prices, for sales > 40 ha, 1988-2004**

Source: Department of Land Information

- All high plantation Shires (Albany, Cranbrook, Plantagenet)
- Very high plantation areas (west Albany, west Plantagenet)
- Non-plantation coastal areas - Denmark
- Non-plantation areas (Broomehill, Gnowangerup, Katanning, Kojonup, Tampbellup, Woodanilling)
- Non-plantation areas outside the GS (Narrogin, Pingelly, Wagin, Boddington)
Rural land prices (2)

- Extent of impact depends on proportion of land market taken up by plantation sector

![Proportion of total land sales involving sale of agricultural land to the plantation sector](chart)

Source: Department of Land Information (WA)
Agriculture

- Rapid plantation expansion may accelerate existing decline in farmer population; however, similar rates of decline occur in some non-plantation areas.
South-West Slopes (NSW) case study

- Softwood plantations est. since 1920s
- By 2004, est. 110,000 ha, 74% public, 26% private; plus 19,000 ha nearby in Vic.
- Plantation processing from 1940s, currently processing facilities in Tumut, Tumbarumba, Albury, Holbrook, Wagga Wagga
- Community’s key questions include how plantation industry impacts on town and regional populations, how much employment and spending are generated in the region, and impacts on housing and rural infrastructure such as roads
Population

- Plantation sector contributes to town population growth where have strong processing sector (Tumut, Adelong, Tumbarumba)

Change in population of different towns in the South West Slopes
Working age population

- Mature plantation industry creates growth in working age population

### Change in proportion of population of different age groups, 1991-2001

Source: Australian Bureau of Statistics

- **Children (0-14)**
- **Youth (15-24)**
- **Working age (25-64)**
- **Retirement age (65+)**

Source: ABS Census of Population and Housing
**Employment**

- Over 90% of direct employment located within SWS
- 1.53 people employed per 100 ha in 2003-04
## Value of output

### Value of output from plantations grown in the SWS

<table>
<thead>
<tr>
<th>Plantation management</th>
<th>1993-94 ($ million)</th>
<th>2002-03 ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvesting and haulage</td>
<td>21.6</td>
<td>32.1</td>
</tr>
<tr>
<td>Softwood processing</td>
<td>361.4</td>
<td>549.8</td>
</tr>
<tr>
<td><strong>Total value of output (net)</strong></td>
<td><strong>401.4</strong></td>
<td><strong>574.5</strong></td>
</tr>
</tbody>
</table>

*Data sources:*
- URS Forestry (2004) – used for 2002-03 data
- Direct survey of plantation sector – used for both periods as appropriate to adjust data
Housing availability

- Rental and housing shortages common in small rural areas
- Construction of processing facilities & increase in employment can place considerable strain on housing resources
Conclusions

• Plantation expansion associated with socio-economic change, not socio-economic decline

• The plantation sector creates regional employment and investment, with most of this occurring in regional towns such as Albany and Tumut

• Plantation expansion can lead to higher rate of land price increase when there is strong demand for land

• Plantation processing expansion can create overall population growth, particularly of working age population

• Need to plan forward for housing & infrastructure needs