Green Jobs: A Case Study of the Forest Sector in Louisiana, USA

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Outline

• Brief Overview
• Why Study Green Jobs?
• Case Study-The Louisiana Forest Sector
Green Jobs Overview

Green jobs are…

• Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.

• Jobs in which workers’ duties involve making their establishment’s production processes more environmentally friendly or use fewer natural resources.

Green jobs should…

• provide fair wages
• tend to be local jobs
• contribute directly to preserving or enhancing environmental quality
• provide pathways out of poverty
• require new skills

Source: United States Department of Labor; Louisiana & Mississippi Green Job Consortium
Green Job Activity Categories

- Education, Public Awareness, and Compliance
- Energy Efficiency
- Green Certification*
- Greenhouse Gas Reduction
- Pollution Reduction and Cleanup
- Recycling and Waste Reduction
- Renewable Energy

Source: U.S. Department of Labor; *Unique to Louisiana forest-sector study
Green Jobs Case Study: The Forest Sector in Louisiana, USA

Orman 2011: Forests in a Green Economy, 10-14 October, Antalya Turkey
Louisiana Forest Sector

- €2.3 billion economic impact in 2010
- Louisiana’s second largest manufacturing employer: 12,700 jobs
- Harvesting and transportation: additional 8,000 jobs
- 5.7 million hectares of forestland (50% of land area)
- 148,000 forest landowners
- Private non-industrial ownership: 81%
- Private industrial ownership: 10%
- Public ownership: 9%

Source: 2011 Louisiana Forestry Facts – Louisiana Forestry Association
**Why did we do the study?**

Green Jobs labor market information in the forest sector is needed for both businesses and prospective employees.

There are gaps Green Job demand and in training available for these positions.

**Study Objectives**

1. Characterize green jobs across activity categories.
2. Estimate the number of green jobs and wage impact in the Louisiana forest sector supply chain.
3. Estimate growth potential in green jobs in the sector.
The Study

✓ Who was surveyed? All Louisiana companies in forest sector supply chain including loggers, newspaper publishers, lumber brokers, furniture distributors and wood products retailers (4,979 supply chain members).

✓ Forest landowners were not surveyed.

✓ The method of data collection was a mail survey questionnaire.

✓ 251 Useable responses (5% response rate)-Exploratory
### Percent of respondents by supply chain activity (n=251)
(multiple responses possible)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Product Manufacturing</td>
<td>32%</td>
</tr>
<tr>
<td>Forestry and Logging</td>
<td>25%</td>
</tr>
<tr>
<td>Distribution</td>
<td>23%</td>
</tr>
<tr>
<td>Furniture Manufacturing</td>
<td>6%</td>
</tr>
<tr>
<td>Periodical/Newspaper...</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
<tr>
<td>Brokerage</td>
<td>3%</td>
</tr>
<tr>
<td>Paper Manufacturing</td>
<td>1%</td>
</tr>
<tr>
<td>Other Print Media</td>
<td>0%</td>
</tr>
</tbody>
</table>
Green Attitudes and Behaviors
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Sig. Diff. 2-tailed t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has your company ever requested Green Products from a supplier?</td>
<td>46%</td>
<td>54%</td>
<td></td>
</tr>
<tr>
<td>Have your customers ever requested Green Products?</td>
<td>51%</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Are Green Practices a priority for your company?</td>
<td>35%</td>
<td>65%</td>
<td>**</td>
</tr>
<tr>
<td>Do you believe Green Practices could add value to your company?</td>
<td>66%</td>
<td>34%</td>
<td>**</td>
</tr>
<tr>
<td>Does your company prefer suppliers with that provide Certification wood products?</td>
<td>32%</td>
<td>68%</td>
<td>**</td>
</tr>
<tr>
<td>Is your company willing to incur additional costs to provide Green Jobs?</td>
<td>19%</td>
<td>81%</td>
<td>**</td>
</tr>
</tbody>
</table>

**statistically different at $\alpha =0.01$
## Likelihood of influences to spur green job creation within respondent companies (n=226)

Scale: 1=very unlikely; 2=somewhat unlikely; 3=neutral; 4=somewhat likely; 5=very likely

<table>
<thead>
<tr>
<th>Influence</th>
<th>Likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased Profits</td>
<td>3.5**</td>
</tr>
<tr>
<td>Government Incentives</td>
<td>3.5**</td>
</tr>
<tr>
<td>Environmental Protection</td>
<td>3.4**</td>
</tr>
<tr>
<td>State Regulations</td>
<td>3.3**</td>
</tr>
<tr>
<td>Federal Regulations</td>
<td>3.3**</td>
</tr>
<tr>
<td>Creation of Quality Jobs</td>
<td>3.2**</td>
</tr>
<tr>
<td>Company Values</td>
<td>3.2**</td>
</tr>
<tr>
<td>Public Perception</td>
<td>3.2**</td>
</tr>
<tr>
<td>Corporate Mandate</td>
<td>2.3**</td>
</tr>
</tbody>
</table>

*statistically different at $\alpha = 0.05$; **statistically different at $\alpha = 0.01$
Current Green Jobs

Respondents reported…

• 134 unique accurate green job descriptions.

• 5,130 total employees of which 667 are green job employees.

• Green jobs represent 13% of all respondent employees.
Percent of Green Jobs by Category (n=667 green jobs)

- Pollution Reduction and Cleanup: 8%
- Greenhouse Gas Reduction: 5%
- Renewable Energy: 28%
- Recycling and Waste Reduction: 24%
- Energy Efficiency: 12%
- Certification: 14%
- Education, Public Awareness and Compliance: 9%
Future Green Jobs
Areas of Green Job Growth (in 5 years) by Category
Percent of projects by category (n=194)

- Greenhouse Gas Reduction: 28%
- Recycling and Waste Reduction: 4%
- Education, Public Awareness, and Compliance: 22%
- Certifications: 11%
- Energy Efficiency: 10%
- Renewable Energy: 11%
- Pollution Reduction and Cleanup: 7%
- Other: 7%

Orman 2011: Forests in a Green Economy, 10-14 October, Antalya Turkey
Estimates of percentage of employees that currently have green jobs and will have green jobs in five years.

(n=229)

Percent of Employees

- **Current**: 13%
- **Five Years**: 17%
Employment and Wage Estimates

In the Louisiana forest products supply chain:

Avg. number of green jobs per respondent company: 2.7
Number of companies in Louisiana supply chain: 4,968
Green jobs employment (est.): 13,199
Green jobs hourly wage (est.): €14.46
Green jobs annual wage (est.): €30,100
Green jobs annual wages in 2010 (est.): €397 million
Take Away Conclusions

In the Louisiana forest sector......

• Governments, institutions of higher-learning and trade associations should focus efforts on educating companies on green activities and their importance.

• Government regulations and incentives should target green job creation that will one day be economically self-sufficient.

• Government regulations and incentives should target green job training.

• Further study should place greater focus on economic impact of green jobs in the Louisiana forest sector in terms of revenue creation and wage impact.
Joint Session of the ECE Timber Committee and the FAO European Forestry Commission

Location, Turkey – 10-14 October 2011

Thank You