Economic and socioeconomic impacts of CSG development

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Introduction

Research conducted as part of the Gas Industry Social and Environmental Research Alliance (GISERA)
Established to conduct independent and rigorous research on the gas industry
All research overseen by a strict governance model to ensure independence
GISERA is a large and diverse portfolio of research
Multiple Programs not just socio-economic
• (water, biodiversity, methane emissions etc)
GISERA Socio-economic research agenda

Research priorities:

- What degree of benefits stay in the region (e.g. due to FIFO)
- Levels of industry acceptance amongst communities,
- Impacts on broader well-being of regional communities
- What do residents expect from the CSG industry?

This presentation presents highlights across the Socioeconomic Program
Analysis of census data

Looking at all local areas with CSG

- 2001
- 2006
- 2011

Compared with a control group other rural locations without CSG
What are the main economic benefits from CSG...?

Direct jobs
Indirect jobs
Income
  • All these increased during construction
  • But there were substantial non-resident workforces

But what about the transfer of labour from other sectors?
So what’s the Net impact: how much of the benefit stayed in the Surat?

Results for the Surat: 1400 Net new jobs 2006-2011

• 600 direct industry jobs
• 800 Indirect

Family income increased by 15% relative to rest of rural Queensland

But what about income distribution?

• Did that change?
### Income distribution: Compare with national average

<table>
<thead>
<tr>
<th>Location</th>
<th>GC 2001</th>
<th>GC 2011</th>
<th>% change, 2001 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Non-mining/gas regions</td>
<td>0.351</td>
<td>0.373</td>
<td>8.704</td>
</tr>
<tr>
<td>Non-metro regions without mining/gas</td>
<td>0.360</td>
<td>0.372</td>
<td>5.151</td>
</tr>
<tr>
<td>All CSG Regions</td>
<td>0.373</td>
<td>0.376</td>
<td>1.594</td>
</tr>
<tr>
<td>CSG regions in Surat Basin</td>
<td>0.384</td>
<td>0.392</td>
<td>2.487</td>
</tr>
<tr>
<td>CSG regions in Bowen Basin</td>
<td>0.358</td>
<td>0.354</td>
<td>0.402</td>
</tr>
<tr>
<td>Non-CSG control group</td>
<td>0.361</td>
<td>0.376</td>
<td>4.819</td>
</tr>
</tbody>
</table>

**Key Points**

- Income inequality (Gini Co-efficient) rose across the country.
- Income inequality rose less in CSG regions compared to non-CSG regions.
But it’s not all about jobs and money

We know from social science that rural regions have a dominant profile of:

- Losing their young people
- Losing their skilled people
- Gender imbalance: losing more young women

So we looked at this for CSG regions

We found a reversal of all three trends 2001-2011

- Gaining youth
- Gaining skills
- Equal numbers of young women and men
Focus on Chinchilla: Where did youth come from?

- Within regional Queensland,
- Coastal/urban areas and
- Interstate, overseas

**Top ten origin regions**

<table>
<thead>
<tr>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas (44)</td>
<td>Overseas (22)</td>
</tr>
<tr>
<td>Toowoomba (35)</td>
<td>Toowoomba (27)</td>
</tr>
<tr>
<td>Queensland, not stated (18)</td>
<td>Queensland, not stated (15)</td>
</tr>
<tr>
<td>Brisbane (16)</td>
<td>Murilla-Wan (15)</td>
</tr>
<tr>
<td>Kingaroy (13)</td>
<td>Emerald (12)</td>
</tr>
<tr>
<td>Dalby (11)</td>
<td>Mount Isa (10)</td>
</tr>
<tr>
<td>Mount Isa (10)</td>
<td>Monto (10)</td>
</tr>
<tr>
<td>Murilla-Wan (10)</td>
<td>Banana (9)</td>
</tr>
<tr>
<td><strong>Hervey Bay (9)</strong></td>
<td><strong>Ipswich (9)</strong></td>
</tr>
<tr>
<td>Other Aus (113)</td>
<td>Other Aus (168)</td>
</tr>
</tbody>
</table>
What about Community Wellbeing?

2014 Western Downs

- Community wellbeing robust 3.82 /5

- Many factors contribute to well-being...
Importance for predicting community wellbeing

- Services & facilities
- Community spirit
- Community cohesion
- Personal safety
- Built environment
- Community participation
- Community trust
- Income sufficiency
- Roads
- Health
- Decision making and citizen voice
- Environmental management
- Employment and business opportunities

Satisfaction
Acceptance: most people either tolerated or accepted CSG in 2014

Percentage of participants

Attitude towards CSG

- Dalby
- Chinchilla
- Miles
- Tara
Adapting to change

When people feel their communities are adapting well to change

• they are more accepting of and positive towards CSG

• they are more positive about their future
Approximately half the sample were adapting to changes or changing to something better.

The bar chart shows the percentage of participants in different categories for each town.

- **Resisting**: Low percentages across all towns.
- **Not coping**: Low percentages across all towns.
- **Only just coping**: Moderate percentages across all towns, with variation.
- **Adapting to the changes**: High percentages in Dalby and Chinchilla, moderate in Miles, Tara, Out of town, and In Town.
- **Changing to something different but better**: Low percentages across all towns.

The chart highlights that a significant portion of participants are adapting to changes or changing to something better.
What does the community expect from CSG?

Assessed using visual aids and qualitative process:

• Residents expect CSG to reinforce what they value in their community:
• Agriculture and rural identity not compromised
• Diversity and inclusion
• Opportunities to retain youth
What about the shift to operations phase?

- Recently started a new project to:
  - forecast economic effects during the Operations phase
  - consider local business resilience
  - Still in early stages

- Qualitative indication from 2014:
  - Getting on with life
CONCLUSION:

1. There is clear evidence of economic benefits
2. Local acceptance of the industry is quite strong
3. Yet many residents struggling to adapt
4. Will be interesting to forecast socio-economic effects during operations phase
Thank you

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