

What is Coexistence and how do we know if we have it?

Quantifying the interactions between agriculture and CSG (2015)

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Aims and Overview

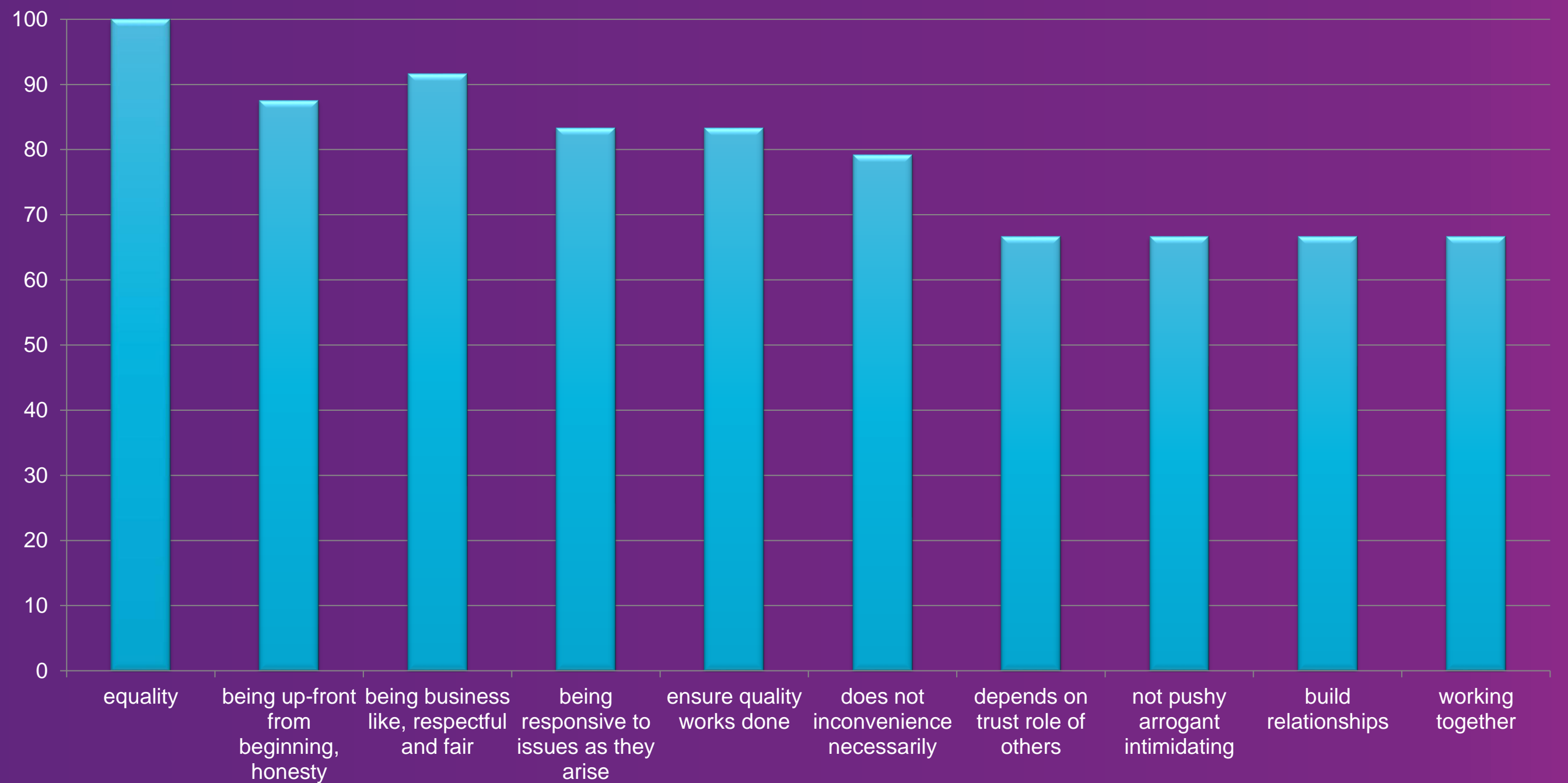
- Quantify effects on production and profitability
- Development of strategies for co-existence

Features

- Conducted over early years of CSG interactions 2013-15
- On-farm focus capturing landholder perspectives
- Identified and tracked metrics of coexistence through interviews with 50 landholders and longitudinal case studies with six properties
- Three different production systems – all dryland (grazing, cropping, mixed)



“Top Ten” co-existence factors (by proportion of farmers reporting)



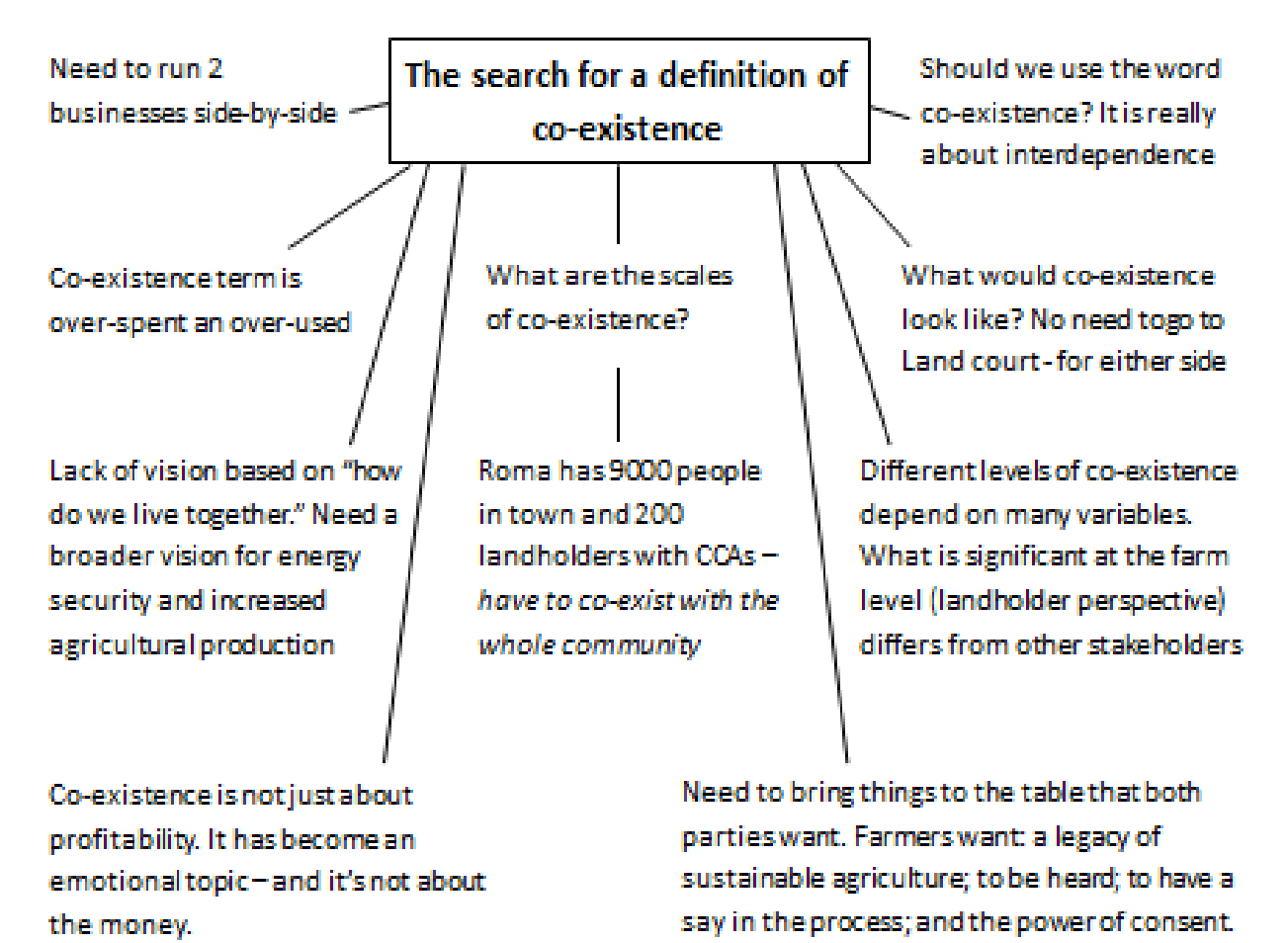
A workshop held with agricultural peak bodies, NRM groups, state government agencies, and CSG industry representatives in 2015 developed the definition of coexistence as:

Coexistence promotes the development and management of resources that are coordinated across agricultural and coal seam gas industries and land uses to optimize the economic, social, and environmental welfare of those involved.

Metrics used

- Production** e.g. productive land, yields, asset value
- Profitability** e.g. changed practices, labour costs,
- Logistics** e.g. cultivation, grazing management
- Biosecurity** e.g. weed and pest management
- Business** e.g. enterprise mix, compensation payments
- Business** e.g. time, engagement
- External influences**

What does coexistence mean?



This is what landholders said...

Said by:	Co-existence factors identified by farmers
All	-Equality (between companies and farmers; and all farmers treated equally)
Majority	-Being 'up-front' from beginning, honesty -Being business-like, respectful and fair -Being responsive to issues as they arise -Ensure quality works done -Does not inconvenience unnecessarily
Many	-Depends on trusting the role of others -Not pushy, arrogant or intimidating -Building relationships -Working together -Farmers collaborating -Negotiation
Some	-Mutual benefits -Learning from each other -Good mindset, positive attitude -Opportunities to grow (personally and business) -Clear and consistent timeframes
A few	-Sharing responsibility -The right to say 'no' (but can say 'yes' – relates to decision-making authority)

Interviews showed:

- There are no consistent quantitative measures of coexistence
- Most impacts are **disruption, time, and stress**
- Impacts are **less in more extensive systems**
- Landholders **seldom measure** or record impacts and benefits
- **Perceptions of benefits vary**- improved tracks are seen as both positive and negative. Coexistence will be on a property-by-property basis
- There are **additional costs involved in changes to practices associated with coexistence**
- Some clear benefits from **additional income**
- Landholders want to see opportunities to **learn and grow from each other – not just operate side by side**
- Concerns about **long-term and cumulative impacts**

What lessons for renewable energy???

