



CSIRO survey of Community Wellbeing and responding to change

Western Downs region in Queensland

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Gas Industry
Social & Environmental
Research Alliance



Phase 2: Survey

Main aim

To *measure* community wellbeing and responding to change in the Western Downs Region

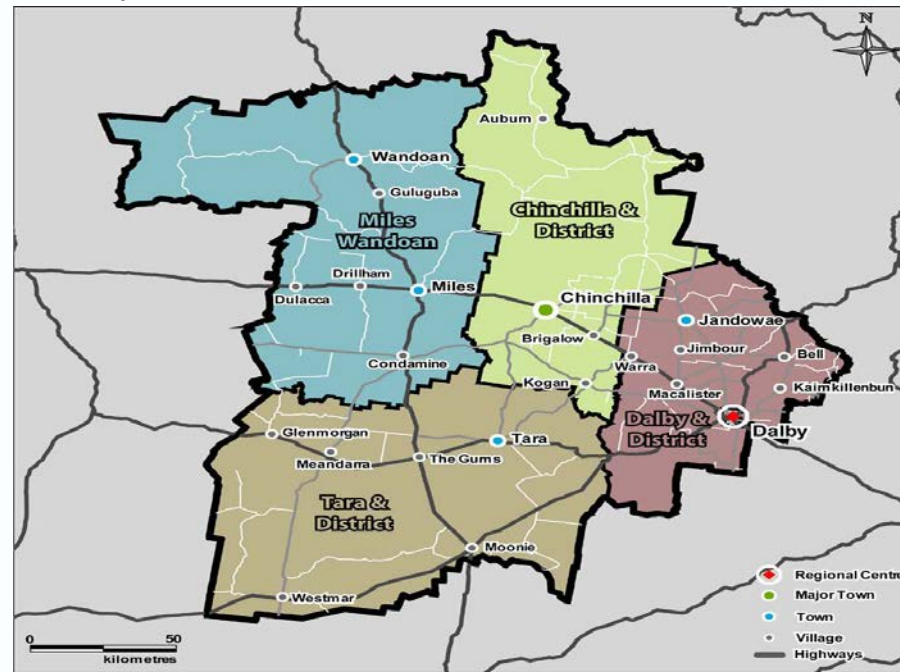
Key topics

- Community wellbeing
- Community resilience
- Expected future wellbeing, and
- Attitudes and feelings towards CSG development in the region.

METHOD: Telephone survey



- February 2014
- Western Downs region
- 400 randomly selected respondents
- 100 per Dalby, Chinchilla, Miles, Tara
- Equal representation 'in-town' and 'out-of-town' residents
- Representative sample (ABS)



What we measured: Perceptions about...

1. Community wellbeing (74 items)

- **15 dimensions:** across social, economic, services and facilities, environment, political, health
- **overall community wellbeing** e.g.. community offers a good quality of life, happy to be living in the area

2. Community resilience (13 items)

- e.g., planning, leadership, access to information, supporting volunteers, intergroup working relations, perseverance, working together to deal with problems; level of community adaptation

3. Future Community Wellbeing (5 items)

- e.g., in 3 yrs time – happy to be living in the area, it will offer a good quality of life

4. Community Attitudes and Feelings towards CSG (7 items)

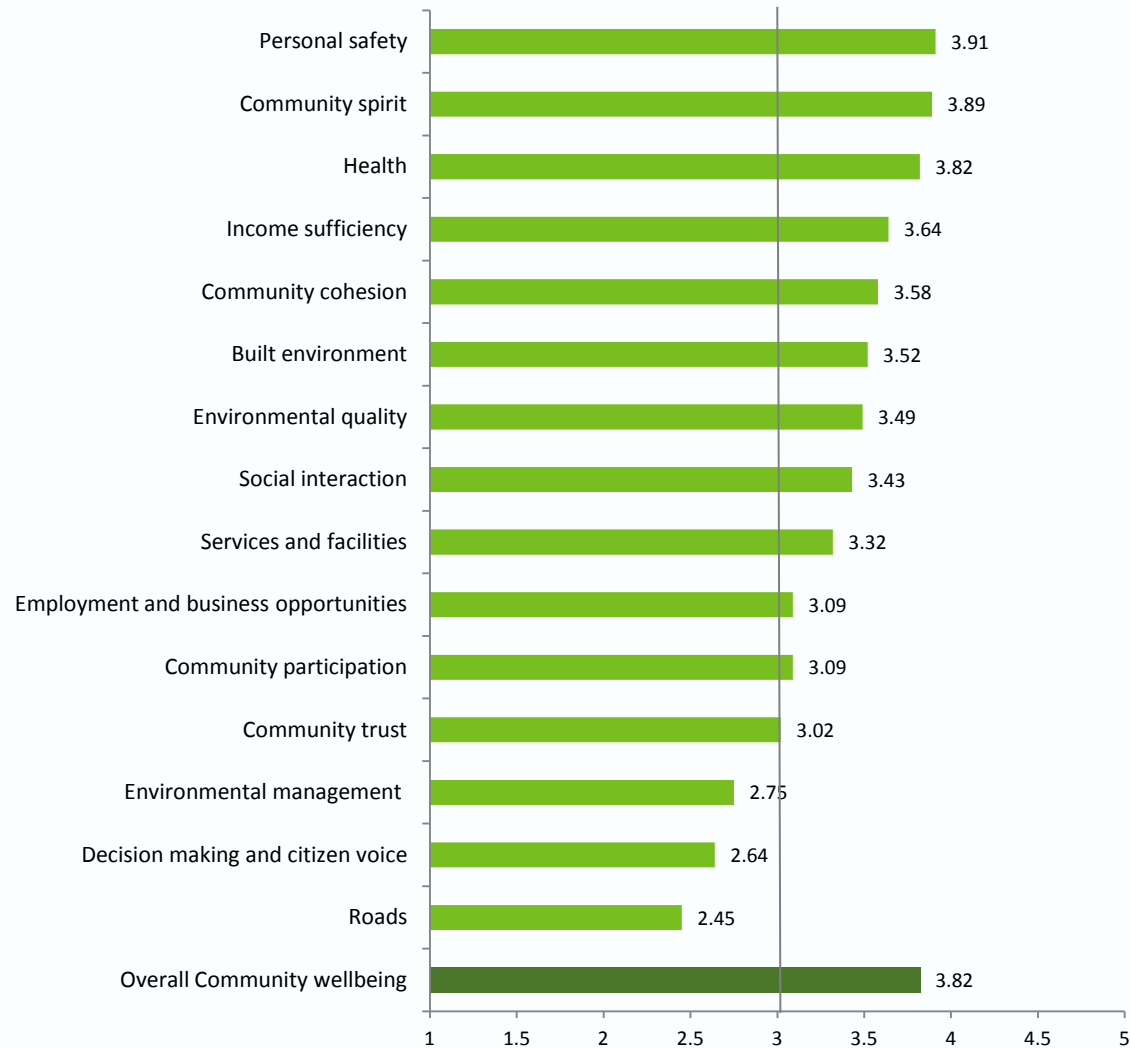
- A mix of positive and negative emotion-based questions, e.g., I am pleased....; I am worried

RESULTS: Community Wellbeing

	WD region	Sub-regions				Location type	
		Dalby	Chinchilla	Miles	Tara	Out of town	In Town
Overall community wellbeing	3.82	4.00	3.99	3.79	3.48^L	3.70^L	3.93

	LGAQ survey			CSIRO survey
	Rural	SEQ	All Qld	WD region
Community is suitable for young children	63.40 % (N = 93)	54.40 %*** (N = 239)	56.50 %*** (N = 468)	70.20 % (N = 396)
Community is suitable for teenagers	27.20 %** (N = 92)	40.50 % (N = 240)	31.60 %*** (N = 468)	43.50 % (N = 395)
Community is suitable for seniors	54.50 %** (N = 99)	60.80 %** (N = 243)	57.10 %*** (N = 490)	70.00 % (N = 397)

RESULTS: Community Wellbeing



Dimensions of community wellbeing	WD region	Sub-regions				Location type	
		Dalby	Chinchilla	Miles	Tara	Out of town	In town
Personal safety	3.91	3.80	3.97	4.12^H	3.74^L	4.0	3.8
Community spirit	3.89	3.90	4.08^H	3.92	3.66^L	3.8	3.9
Health	3.82	3.76	3.92	3.85	3.77	3.9	3.7
Income sufficiency	3.64	3.58	3.91^H	3.69	3.40^L	3.6	3.7
Community cohesion	3.58	3.49	3.81^H	3.61	3.40^L	3.5	3.6
Built environment	3.52	3.72^H	3.53	3.37^L	3.45	3.6	3.5
Environmental quality	3.49	3.57	3.56	3.24^L	3.62^H	3.5	3.5
Social interaction	3.43	3.68^H	3.49	3.39	3.15^L	3.3[^]	3.6
Services and facilities	3.32	3.53^H	3.59^H	3.31^H	2.83^L	3.2[^]	3.4
Community participation	3.09	3.09	3.10	3.37^H	2.82^L	3.1	3.1
Employment & business opportunities	3.09	2.95^L	3.63^H	3.01^L	2.76^L	2.9[^]	3.3
Community trust	3.02	3.00	3.12	3.06	2.92	3.0	3.1
Environmental management	2.75	2.88	2.79	2.59	2.72	2.7	2.8
Decision making and citizen voice	2.64	2.76	2.65	2.50	2.65	2.6	2.7
Roads	2.45	2.63^H	2.33	2.21^L	2.61^H	2.4	2.5
Overall community wellbeing	3.82	4.00^H	3.99^H	3.79^H	3.48^L	3.7[^]	3.93

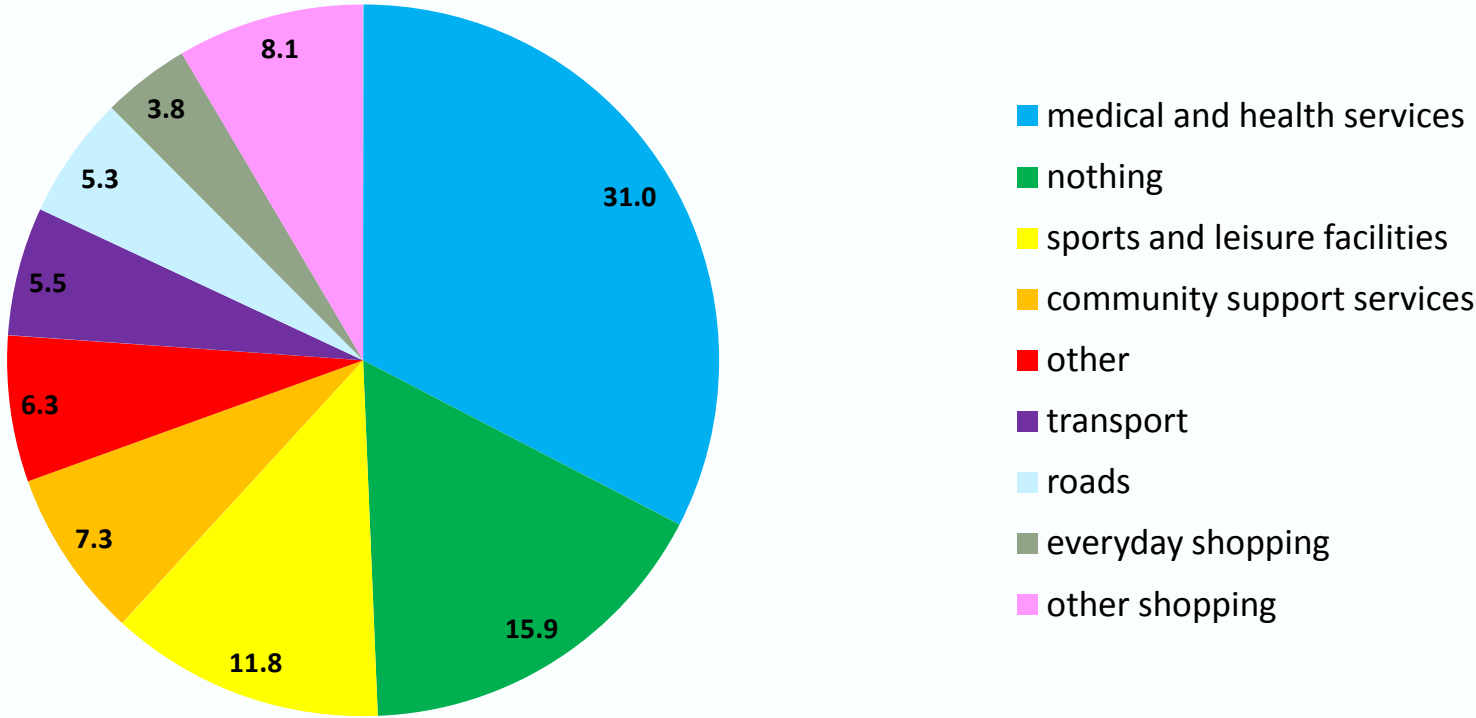
RESULTS: Community Wellbeing

Dimensions of Community Wellbeing	Mean score	Beta
Services and facilities	3.32	.25***
Community spirit	3.89	.23***
Community cohesion	3.58	.19***
Social interaction	3.43	.14**
Personal safety	3.91	.10*
Environmental quality	3.49	.10*
Built environment	3.52	.08
Community participation	3.09	.07
Community trust	3.02	-.07
Income sufficiency	3.64	.04
Roads	2.45	.02
Health	3.82	.01
Decision making and citizen voice	2.64	.01
Environmental management	2.75	.01
Employment and business opportunities	3.09	.01

Adj R^2 = .54

What would be the single most needed service or facility that you could suggest for [name of community]?

Needed services and facilities (% of responses)



Community resilience: future oriented actions

Planning for the
future

Leading

Accessing
information

Good inter-
group relations

Connecting

Supporting
volunteers

Persevering

Working
together to
solve problems

Working
together to take
opportunities

RESULTS: Community Resilience:

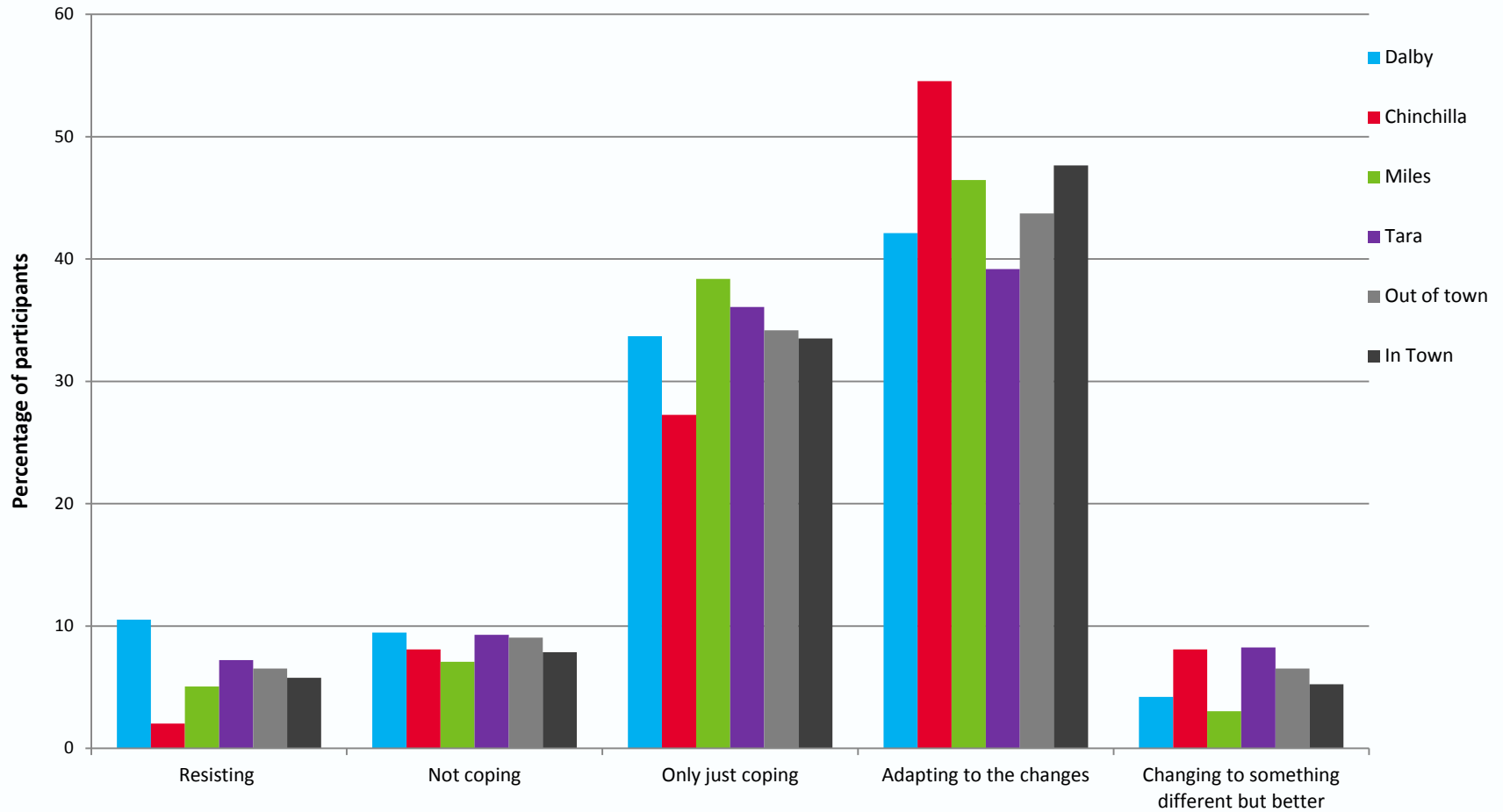
Thinking about how your community is responding to the CSG development

Community resilience actions	Mean score	Beta
Good working relationships within and between groups	3.69	.30***
Planning	2.79	.21***
Long term support for volunteers	3.31	.17***
Leadership	2.82	.16*
Access to information	2.93	.12*
Working together to solve problems	3.15	.11
Perseverance	3.30	.08
Key people to connect across the community	3.20	-.08
Working together to take advantage of opportunities	3.23	-.05

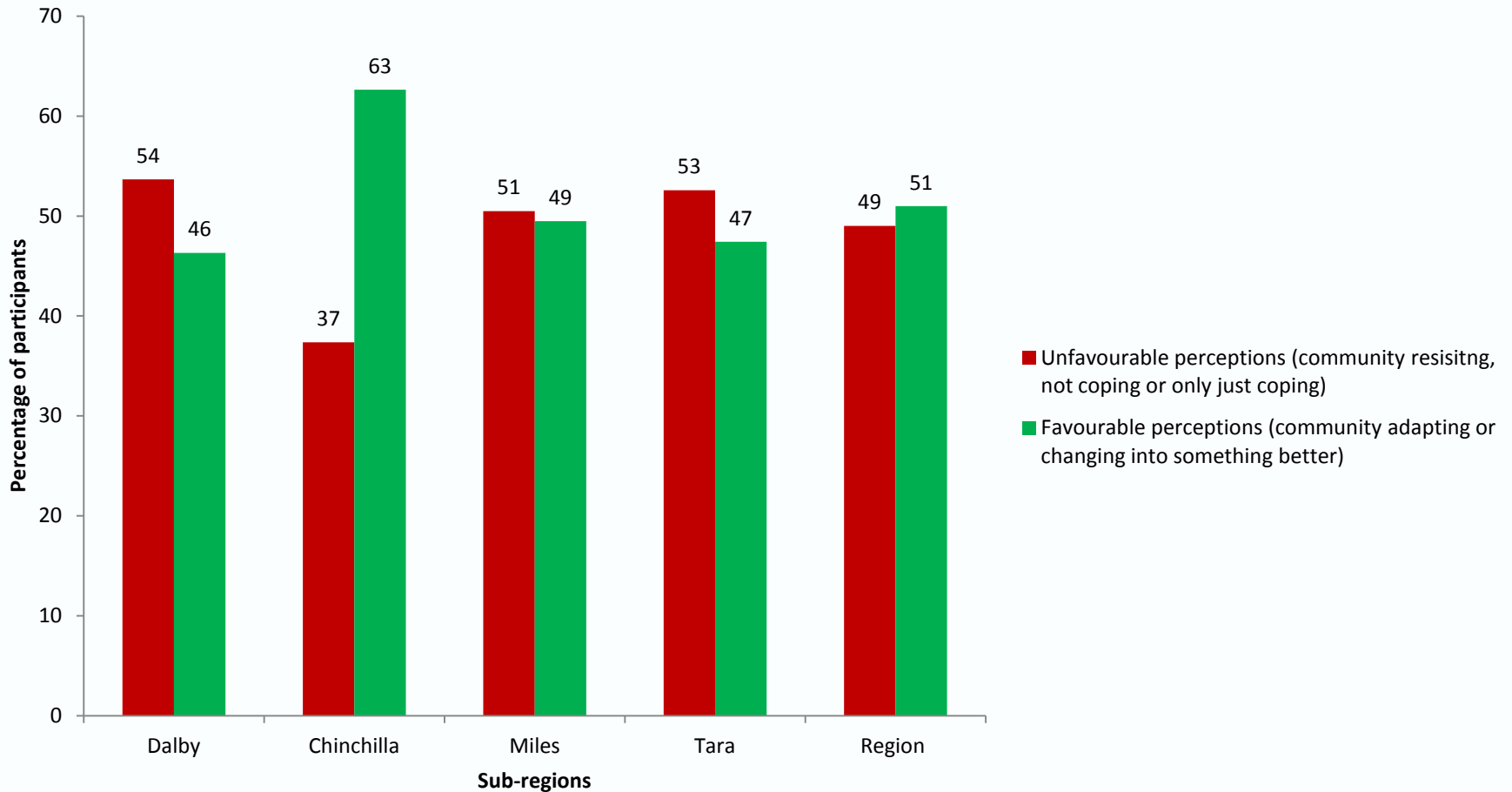
Adj $R^2 = .62$

RESULTS: Community Adaptation

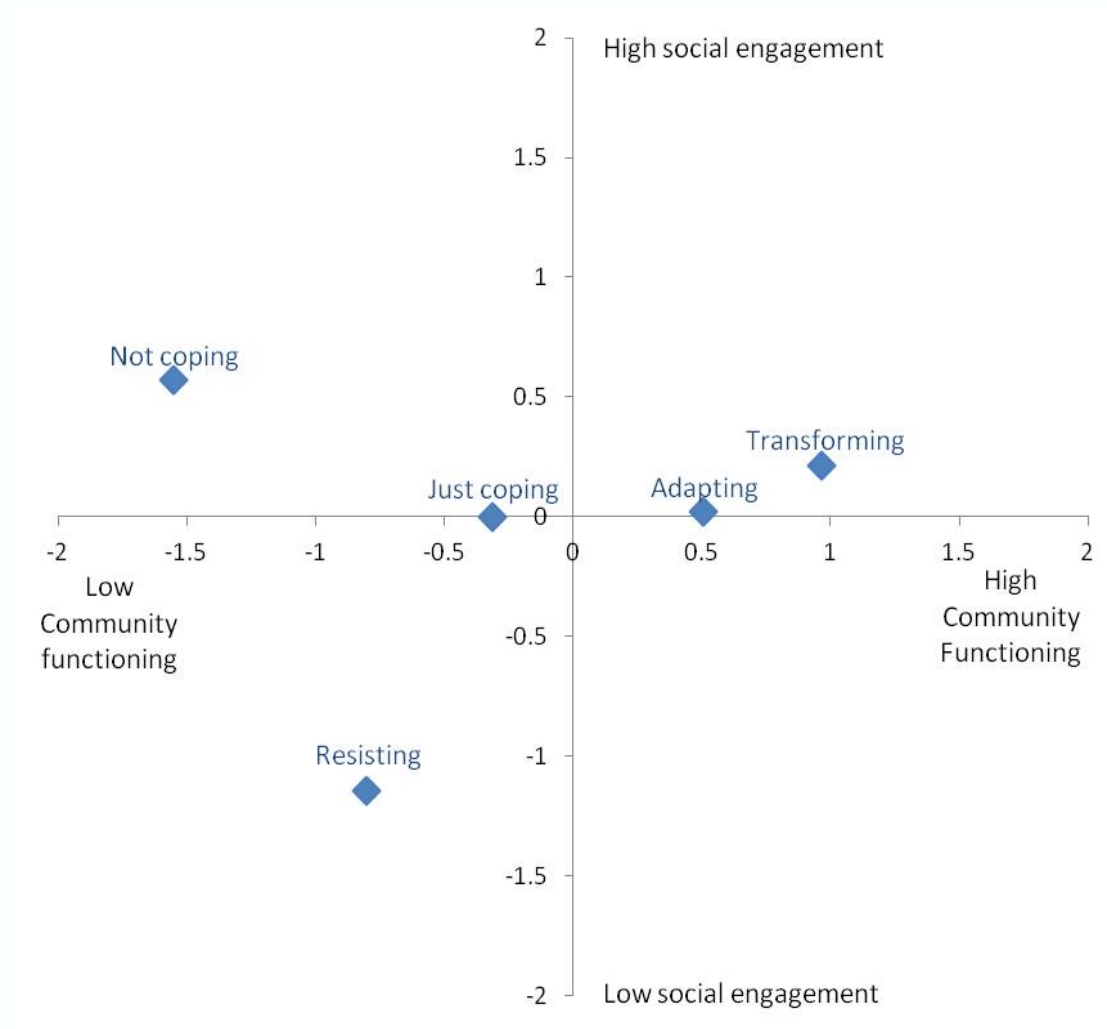
How is [community] dealing with CSG developments?



RESULTS: Community Adaptation



RESULTS: Community Adaptation



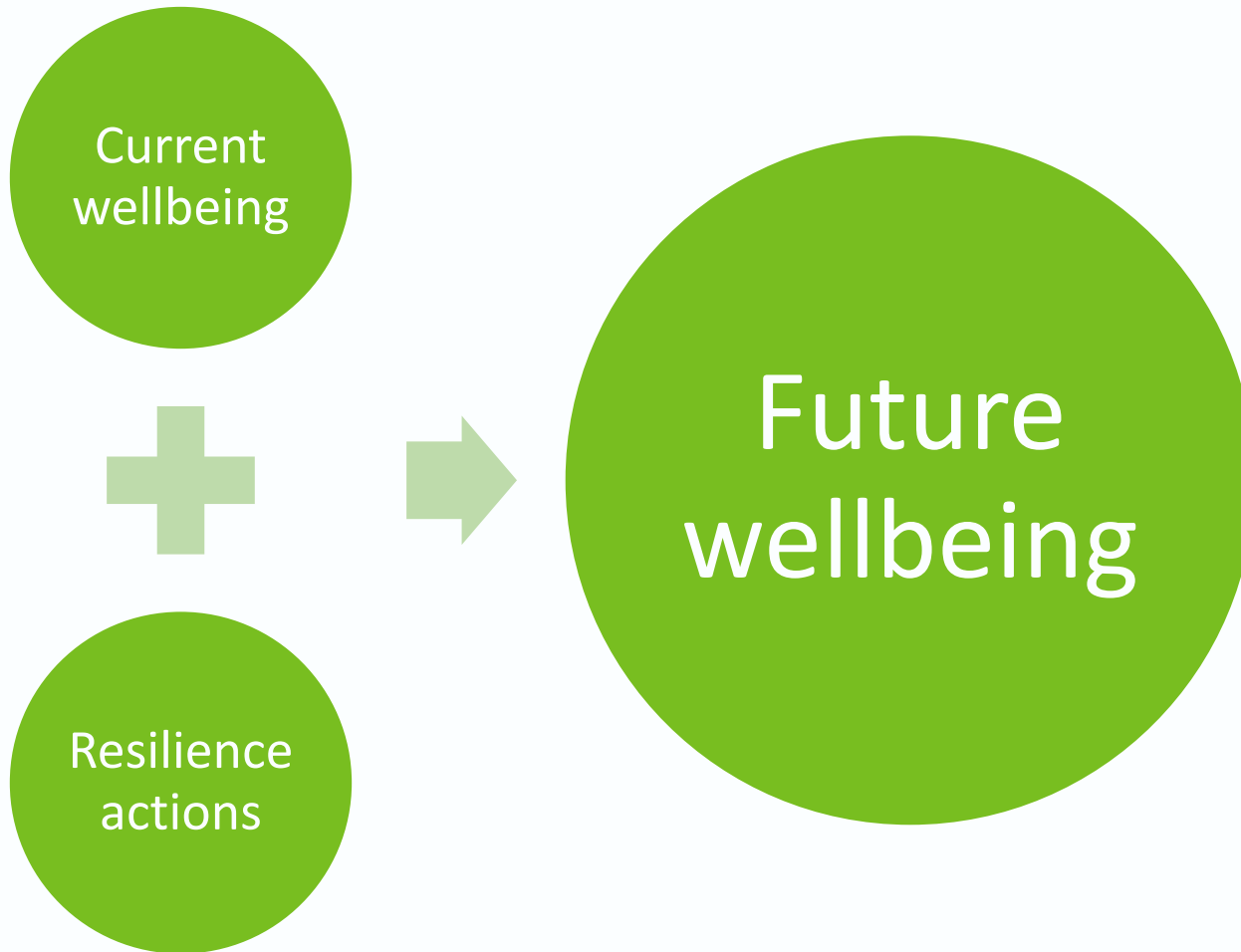
Community functioning

- Resilience actions
- Trust
- Employment & business
- Decision making & citizen voice

RESULTS: Future Community Wellbeing

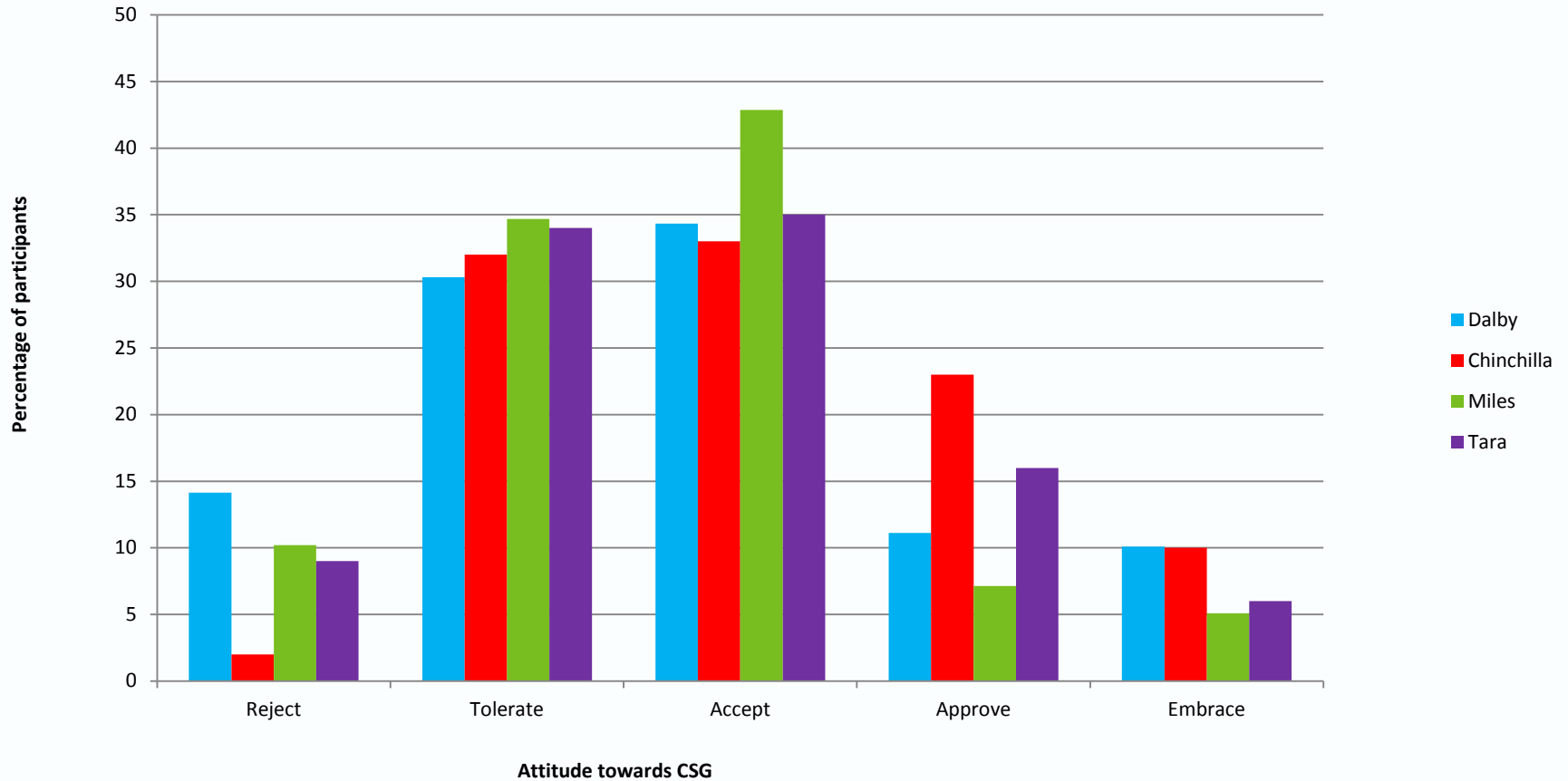
**50 % of residents expect their wellbeing to decline,
41% expect their wellbeing to stay the same, and
9% expect their wellbeing to improve**

	WD region	Sub-regions				Place of residence	
		Dalby	Chinchilla	Miles	Tara	Out of town	In Town
Future community wellbeing (expected)	3.62 [^]	3.82 ^H	3.76	3.38 ^L	3.54	3.46*	3.80
Overall community wellbeing (current)	3.82	4.00 ^H	3.99 ^H	3.79 ^H	3.48 ^L	3.70*	3.93



RESULTS: Community Attitudes & Feelings towards CSG

Which best describes your attitude to CSG in this region?



RESULTS: Community Feelings

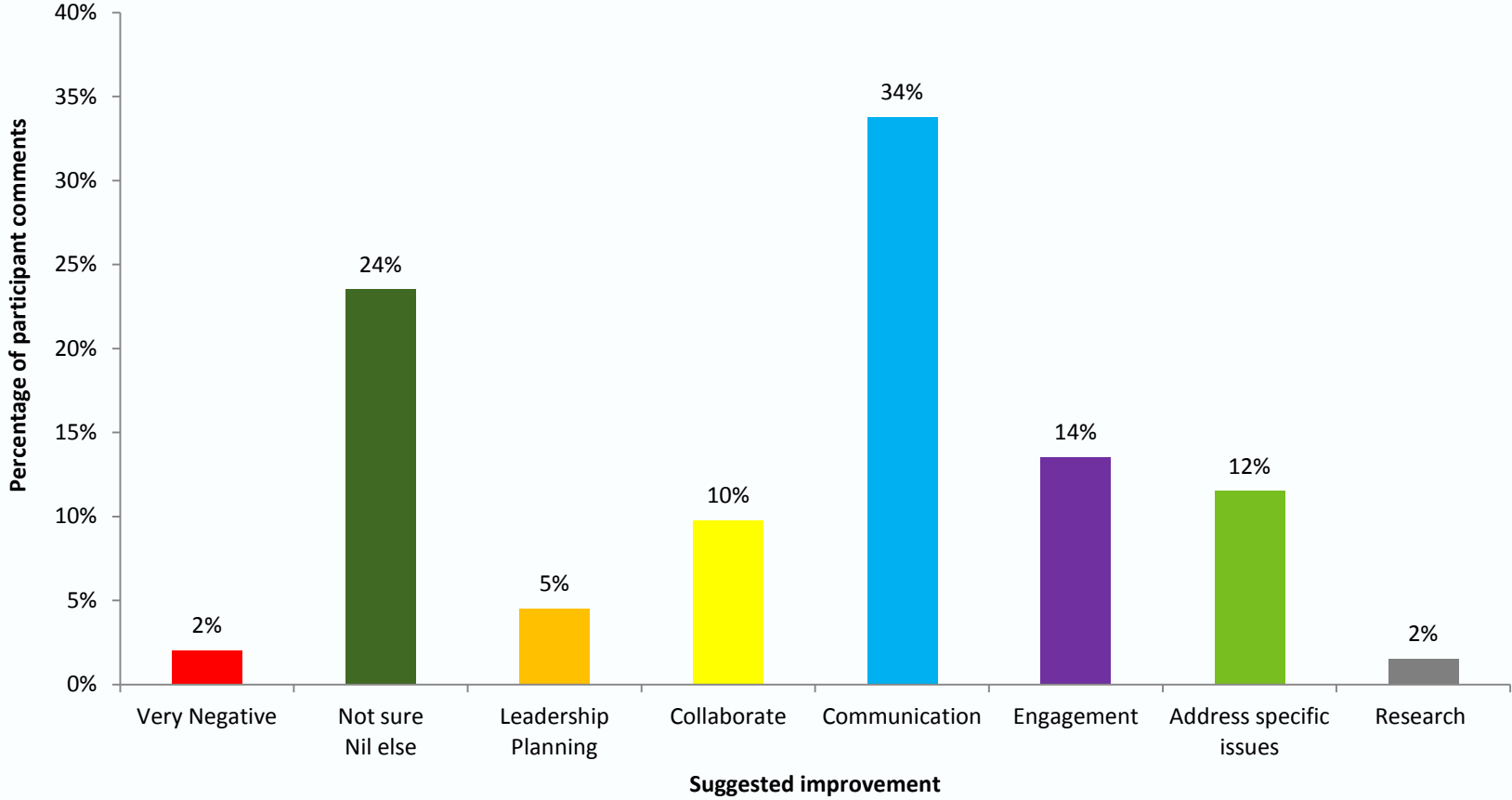
	WD region	Sub-regions				Place of residence	
		Dalby	Chinchilla	Miles	Tara	Out of town	In Town
Feelings	3.00	2.90	3.24 ^H	2.81 ^L	3.05	2.83*	3.18

RESULTS: Community Acceptance

Five factors linked to community acceptance

- Resilience actions
- Environmental management for the future
- Employment and business opportunities
- Services and Facilities
- Community trust

What would be one improvement you would like to see in the way these groups (residents, government, business and resource companies) are handling things?



Examples of suggested improvements

Communication:

- honesty,
- transparency,
- timeliness of information
- suggestions for different modes of communicating

Engagement: being 'listened to'

- address “power” inequality,
- consider the perspectives of the different parts of the community

Implications of the research

1. Current wellbeing is robust but there are concerns for the future
2. People are 'lukewarm' about coal seam gas
3. Differences across the region
4. Opportunities to invest in aspects of wellbeing and resilience
 - Areas of CWB and CR that are viewed as 'unsatisfactory' (some areas are process related)
 - The most 'important factors'
 - Pockets of need and areas of strength
5. Baseline data / goal setting / monitoring over time
6. Theory building: Model of wellbeing, resilience actions & future wellbeing

Output to date

Journal publication

Walton, A. McCrea, R., Leonard, R., & Williams, R. (2013). Resilience in a changing community landscape of coal seam gas: Chinchilla in southern Queensland. *Journal of Economic and Social Policy*, 15 (3), 2.

McCrea, R., Walton, A., & Leonard, R. (2014). A conceptual framework for investigating community wellbeing and resilience. *Rural Society*, 23(3) (see following slide).

Leonard, R., McCrea, R., & Walton, A. (2014). The role of community agency and social relational measures in distinguishing amongst five community resilience responses [in csiro e-publish]

Report

Walton, A., McCrea, R., & Leonard, R. (2014). CSIRO survey of community wellbeing and responding to change: Western Downs region in Queensland. *CSIRO Technical Report*: CSIRO, Australia

Fact Sheet: *Community Resilience*. GISERA website

Article for The Conversation

Interviews: radio and print media

Feedback to the Community underway: community comments – benefits of the data, benefits of repeating the survey; minor improvements to measures

A CONCEPTUAL MODEL FOR COMMUNITY WELLBEING AND RESILIENCE



(McCrea, Walton & Leonard, 2014)

Thank you

Nineteen research projects in GISERA

- Social and economic
- Surface and groundwater
- Agricultural land management
- Terrestrial biodiversity
- Marine environment

