SMI CSRM
Centre for Social Responsibility in Mining

SMI CWiMI
Centre for Water in the Minerals Industry

SMI CMLR
Centre for Mined Land Rehabilitation

The University of Queensland Australia | QAAFI Queensland Alliance for Agriculture and Food Innovation

The University of Queensland Australia | School of Agriculture and Food Sciences

Beyond science and engineering: Tackling socio-environmental issues in the resources industry.

J. Everingham, N. Collins, T. Baumgartl, S. Vink, D. Mulligan, W. Rifkin, D Rodriguez & J. Cavaye

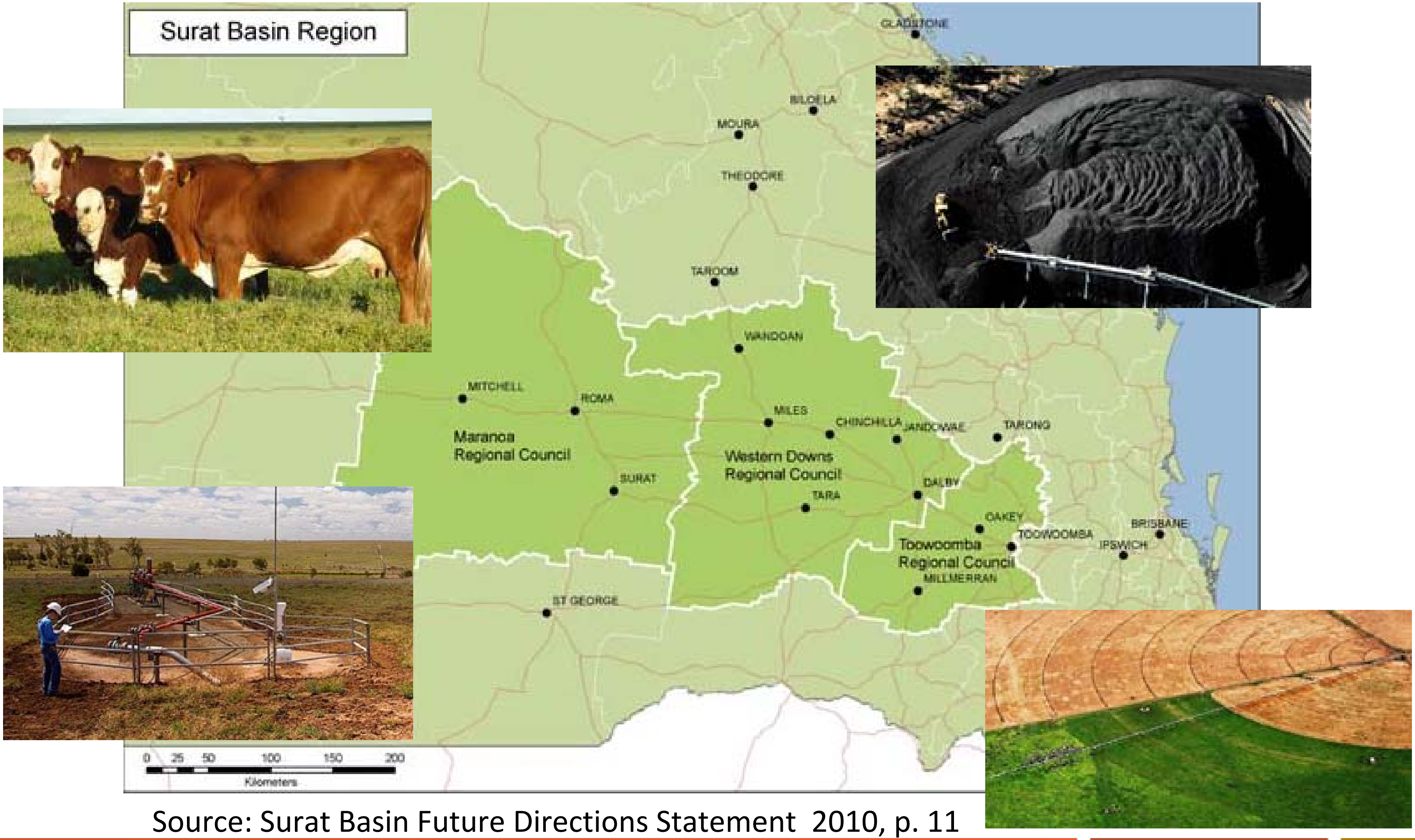
SDIMI 2013

The University of Queensland Australia

OVERVIEW

- Background: developing energy resources in predominantly agricultural regions
- Perceptions of various stakeholder groups of the impacts
- Consequent challenges for resource companies in earning a social licence to operate

The study area: two local governments in SE Qld

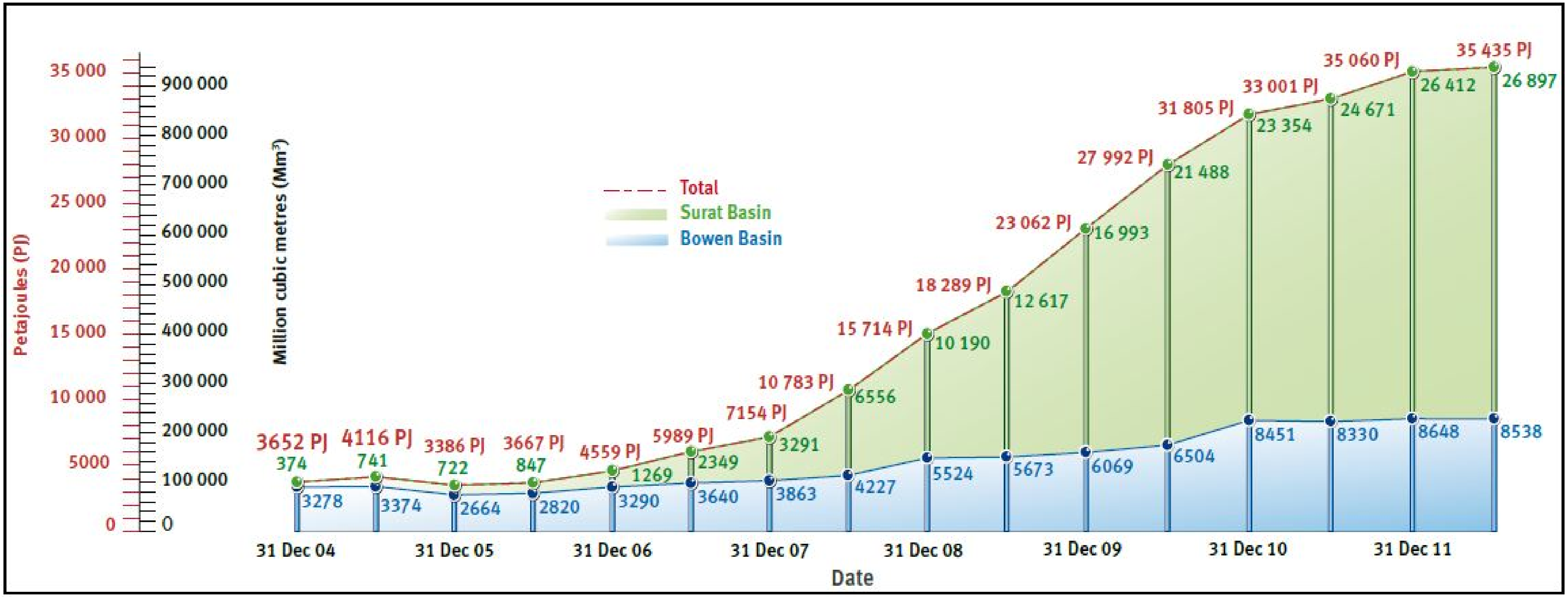


Source: Surat Basin Future Directions Statement 2010, p. 11

Expanding coal mining and coal seam-gas production

Coal production from five operating coal mines, one expansion project and proposed 'mega-mine' to increase tenfold 2006-2031

CSG expanding also with extensive 2P Reserves:

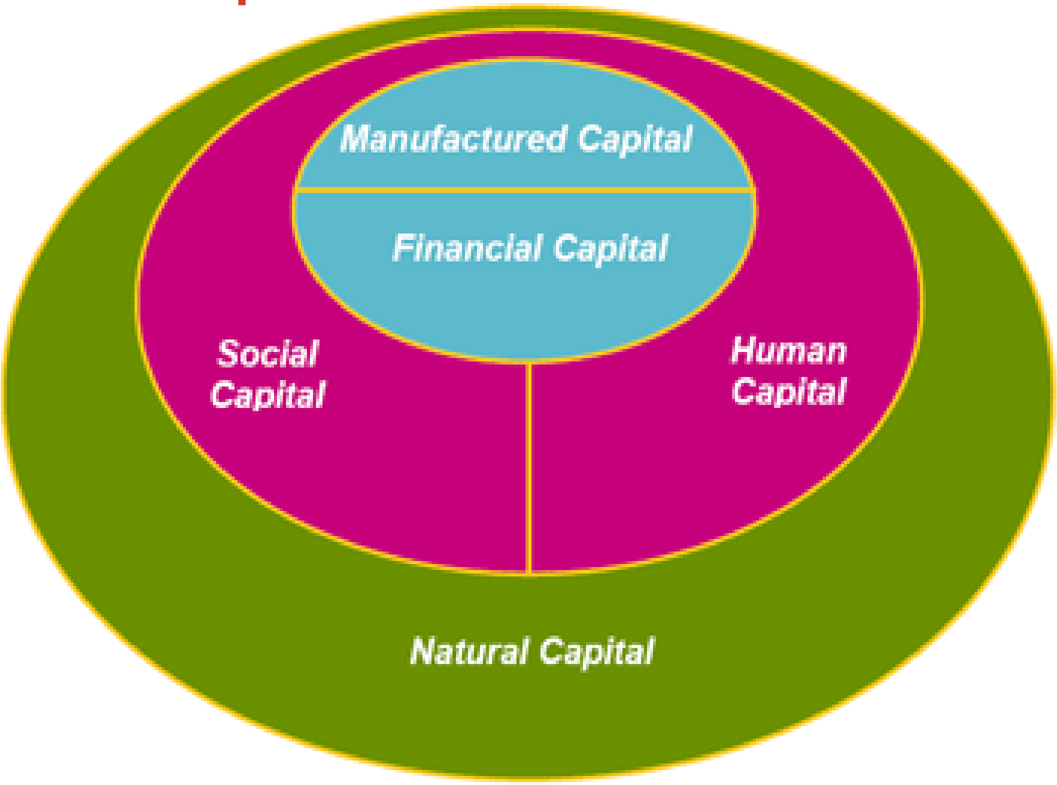


Source: DNRM 2013 p. 5

Impacts on agriculture, communities & environment?

Methodology for Perceptions Scale

Based on the **Five Capitals**:



- 42 **positive statements** grouped into the above categories
- Five point **Likert scale** (strongly agree to strongly disagree)
- Asked to record perception of **current state and 5 years ago**.

Stakeholders completing the scale

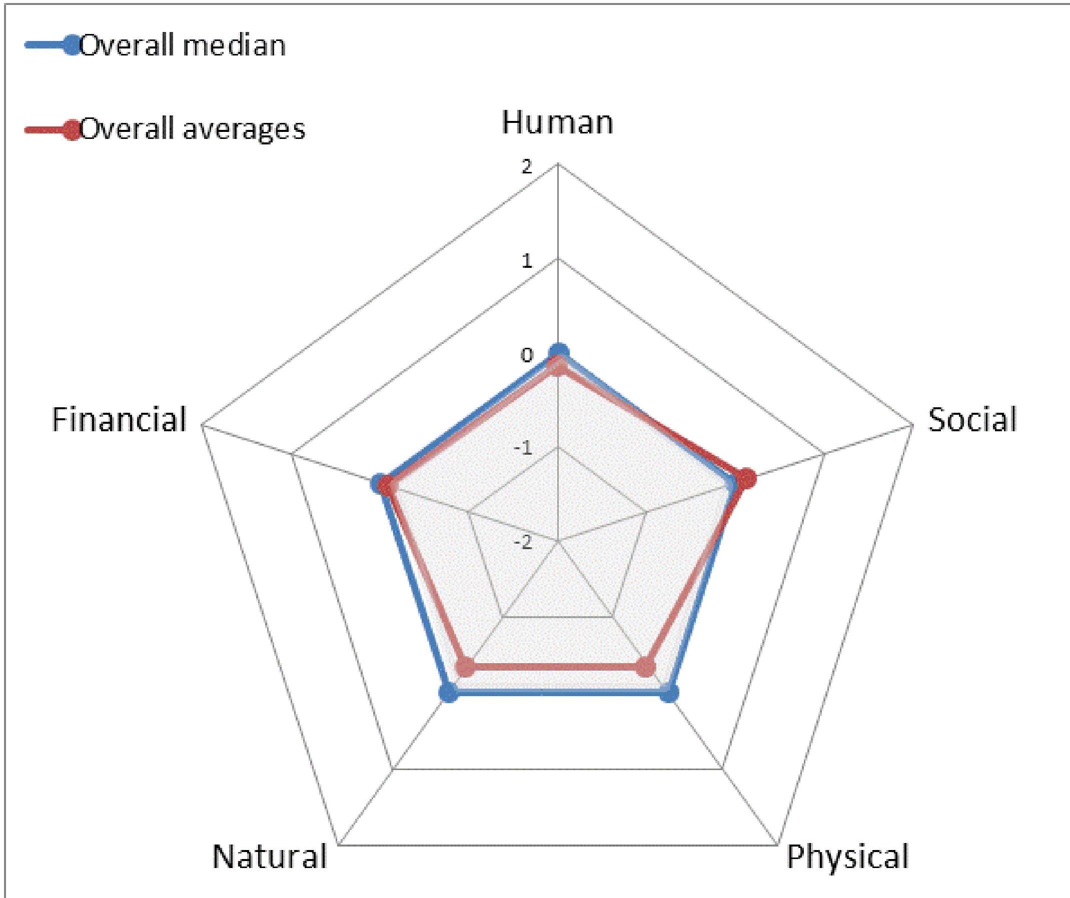
Stakeholder groups that completed perception scales = 21

Total number of attitude scales = 26

Sector	Total
Government	1
Mining sector	3
CSG sector	6
Agriculture sector	4
Community organisation	2
Advocacy group	4
Business network	4
Environmental network	2
	26

Net change as a result of the resources boom neither positive nor negative overall

"The last few years, the amount of discussion amongst landholders and local government people and others around how big an impact - the assumption is - the coal seam gas and energy sector will have on the region [has increased]"
~Environmental Network 2.

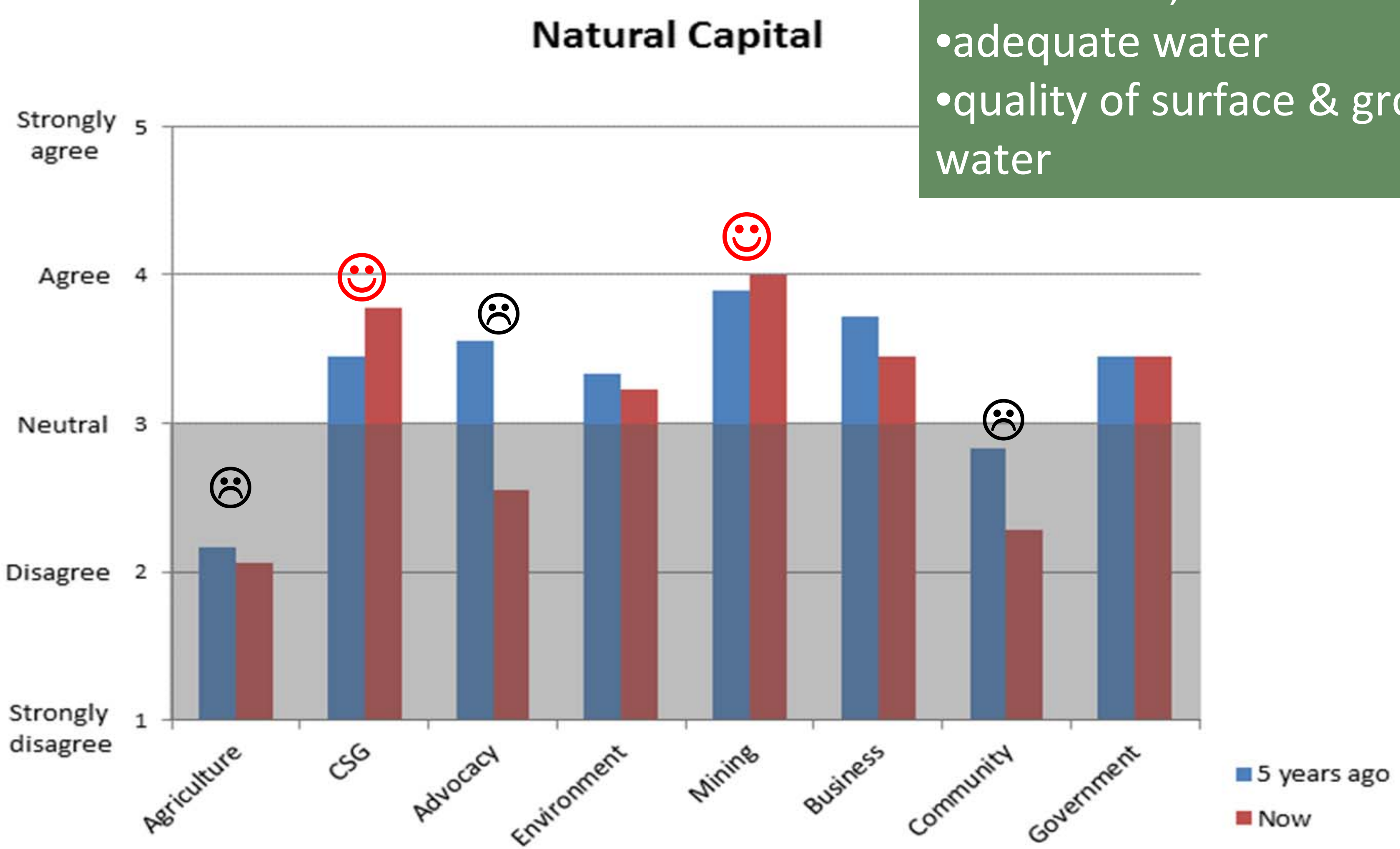


0 = no change registered
> 0 = positive change registered
< 0 = negative change registered
(Line in the the shaded area indicates that a negative change was registered)

RESULTS: CHANGES IN THE LAST FIVE YEARS – THE VIEWS OF DIFFERENT SECTORS

Different sectors' perceptions of change in Natural Capital

Perceived deterioration in:
•fertile soils,
•adequate water
•quality of surface & ground water



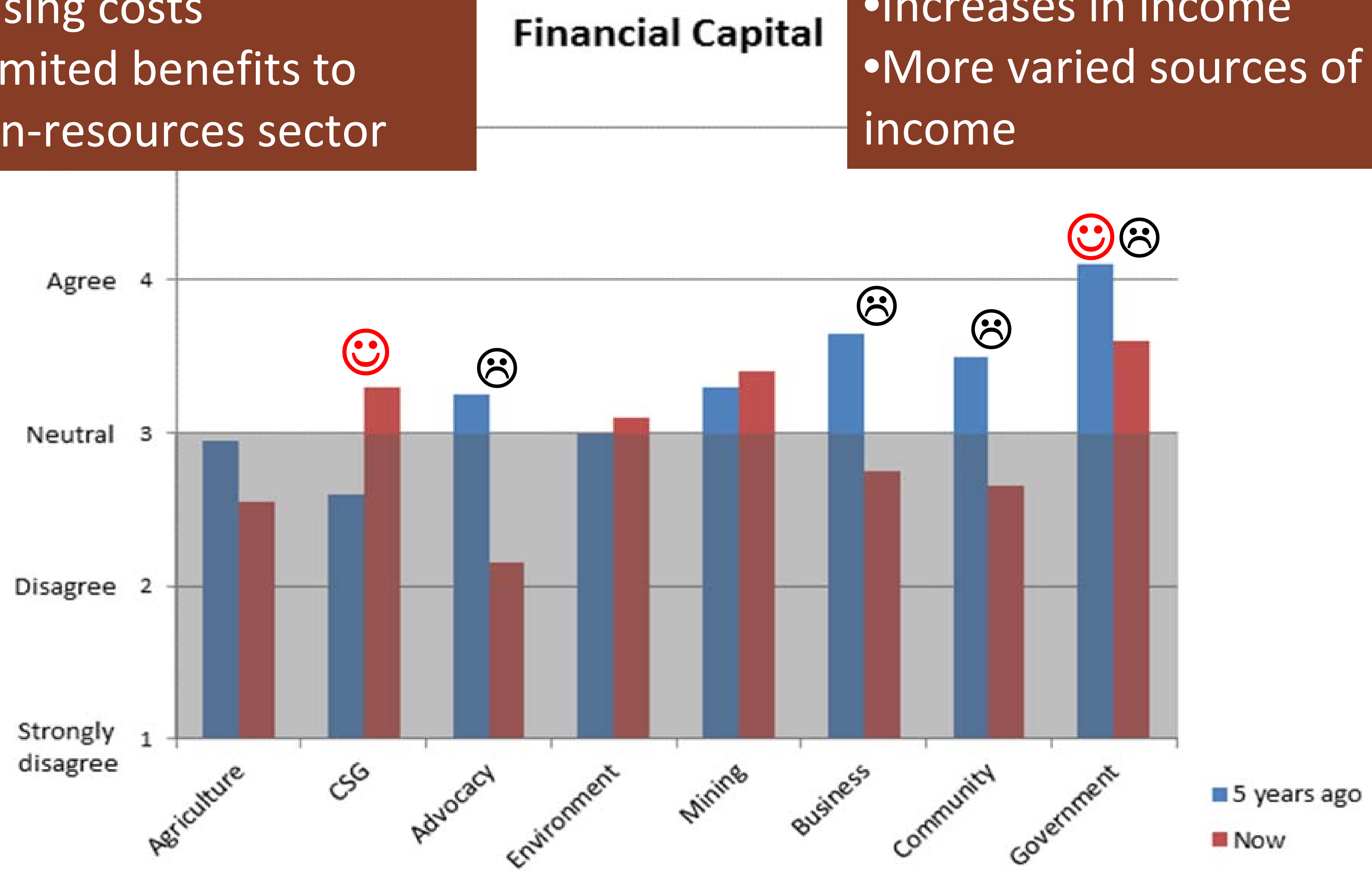
Different sectors' perceptions of change in Financial Capital

Negatives :

- Rising costs
- Limited benefits to non-resources sector

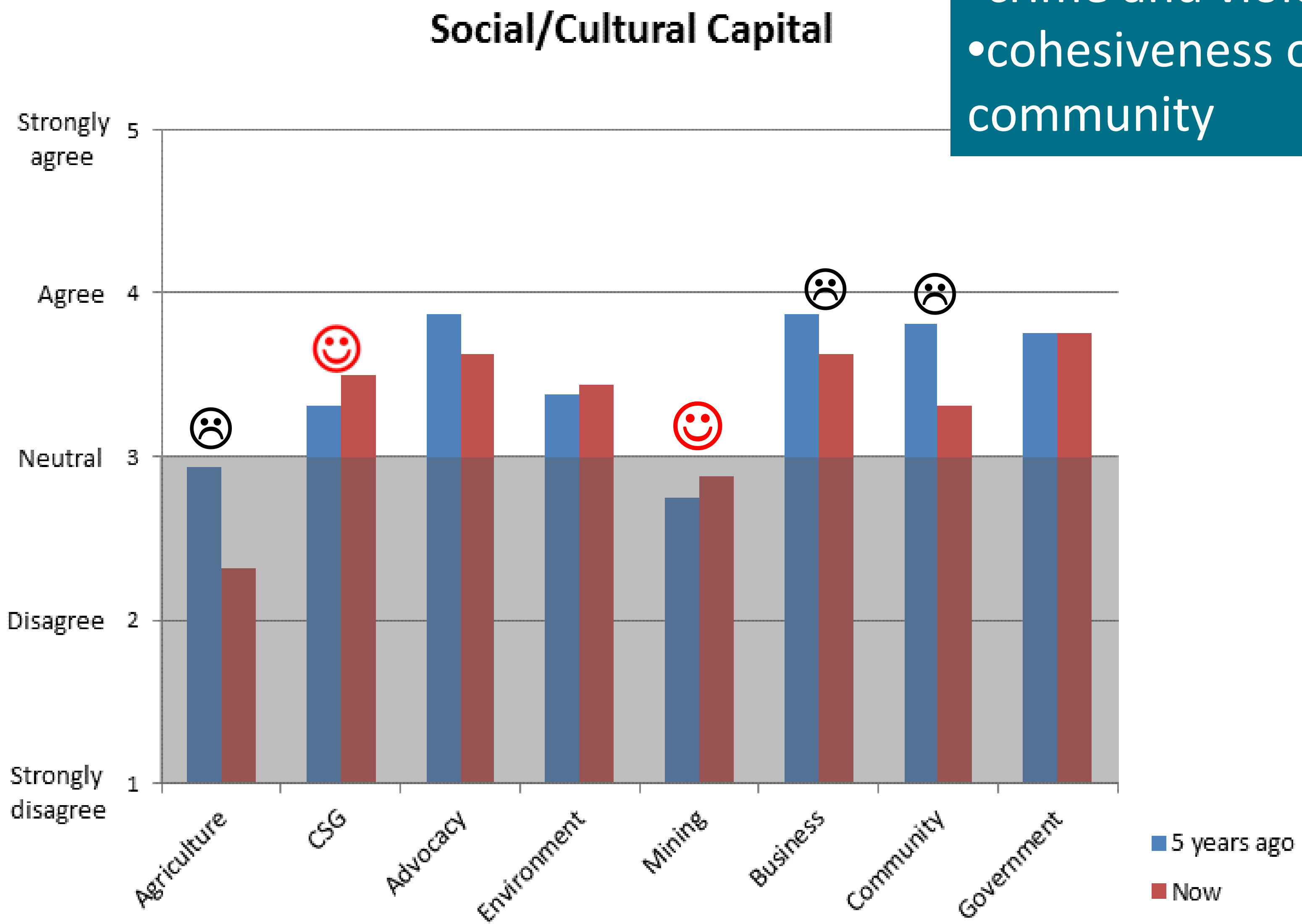
Positives for some residents:

- Increases in income
- More varied sources of income



Different sectors' perceptions of change in Socio-cultural Capital

Areas of concern:
- crime and violence
- cohesiveness of the community

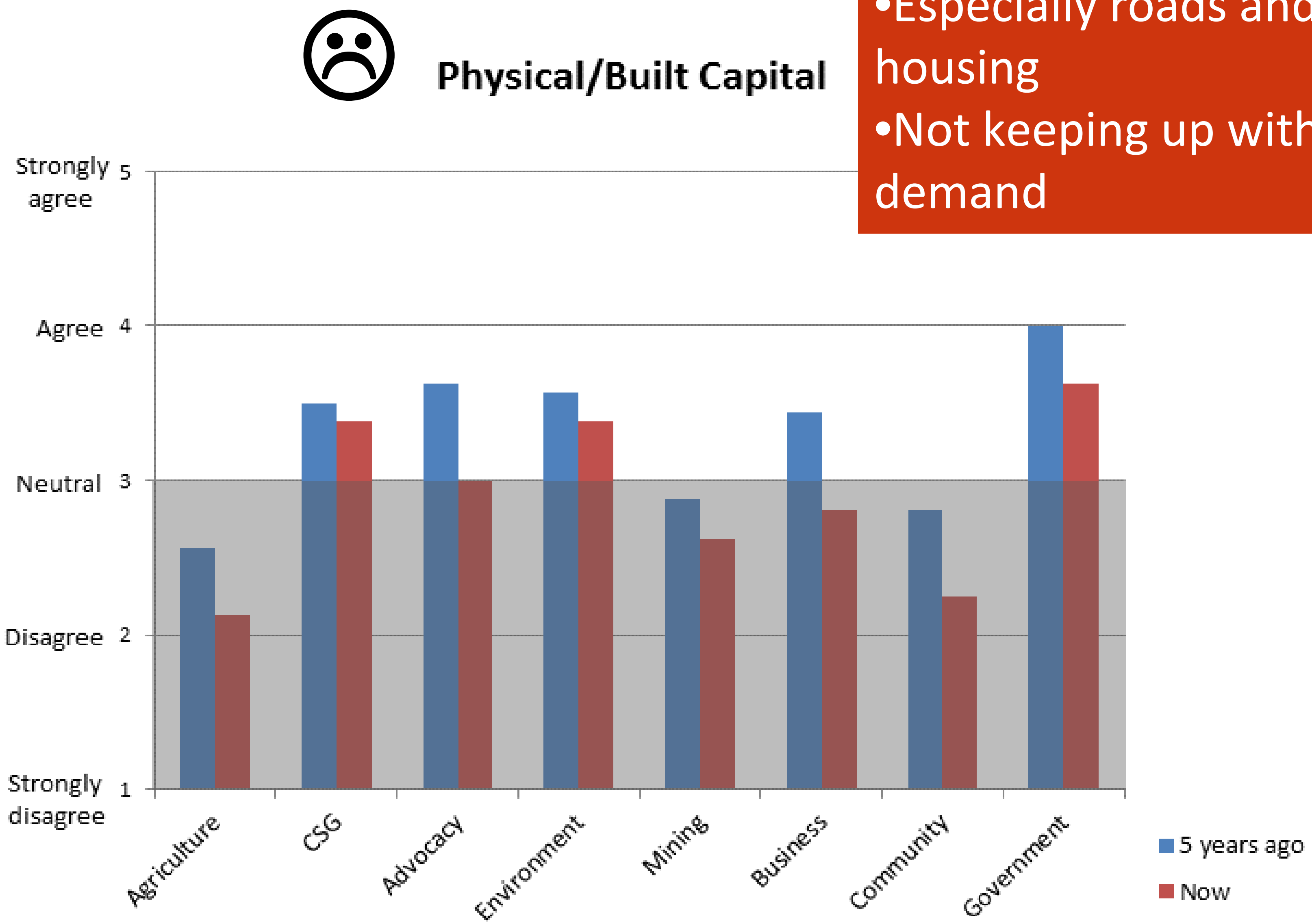


Different sectors' perceptions of change in Physical/ Built Capital

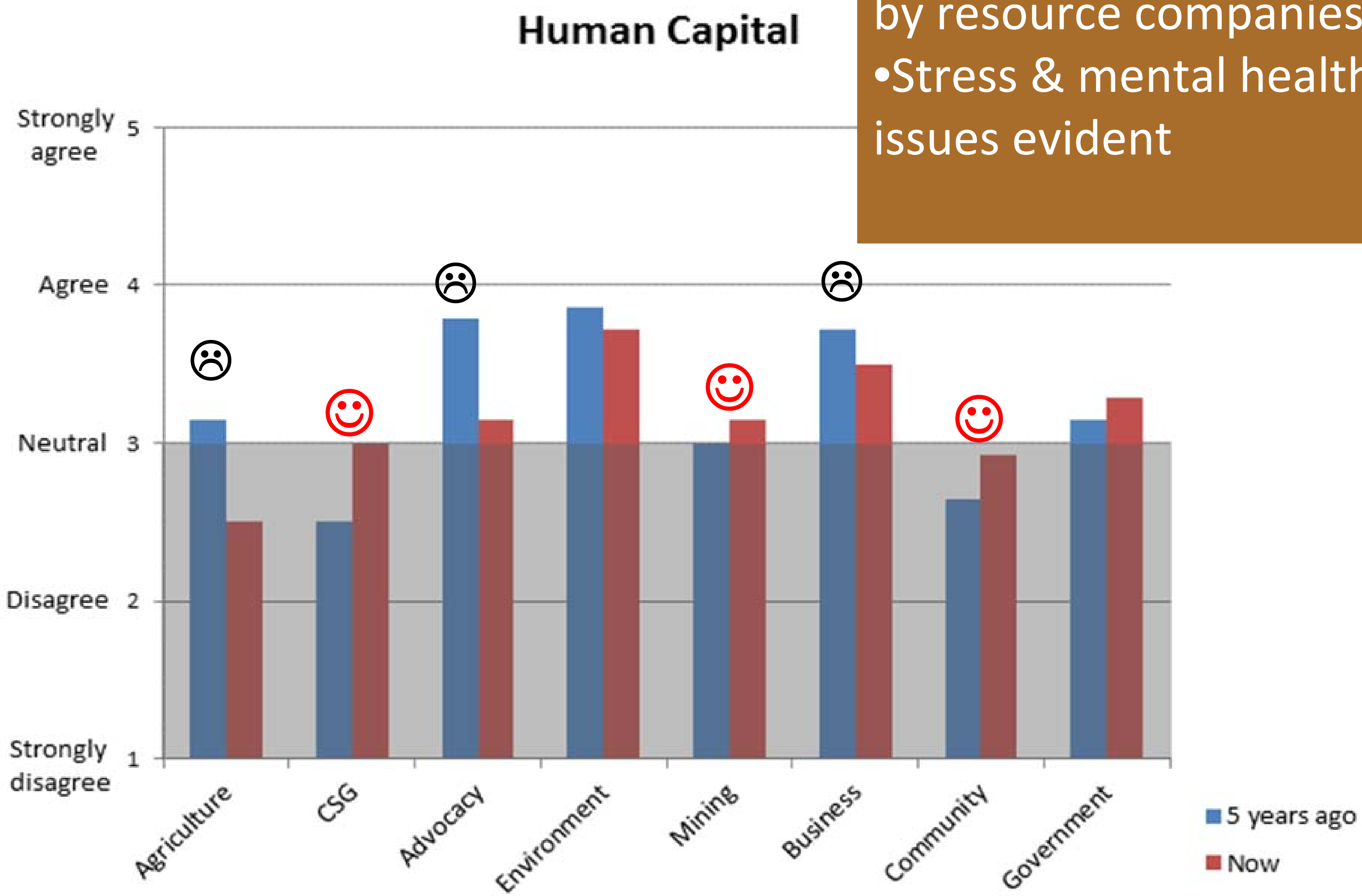
☺

A perceived negative trend

- Especially roads and housing
- Not keeping up with demand



Different sectors' perceptions of change in Human Capital



Perceived mixed impacts:

- Skilled workforce depleted by resource companies
- Stress & mental health issues evident

Challenges for energy resources companies

- Disparate perceptions of different sectors
- Different assets valued to different extents by different groups
- Subjective views not readily resolved by ‘objective’ data
- Broad consensus on poor state of some regional assets suggests limited capacity or resources to maintain or enhance these assets

Solutions?

- Minimise distortion of the local economy
- Minimise negative off-site impacts on the regional asset base
- Seek broad and fair distribution of benefits

Thank you

QUESTIONS?

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