

Centre for Social Responsibility in Mining

Measuring what matters: Monitoring the contribution of a new mining project to community sustainability

David Brereton & Catherine Pattenden

SDIMI 2007

Project Location















Shire of Ravensthorpe

- Sparsely populated (1500 people in 2001) mostly living in two small towns: Ravensthorpe and Hopetoun
- Ageing population; loss of young people to the city
- Limited services
- Economy largely based on agriculture
- Pristine, ecologically-sensitive, coast

Ravensthorpe Nickel Operations

- Large nickel mine and processing plant
- US\$ 2 billion investment
- Construction workforce 1500; permanent workforce 650
- Life of operation: 25 years +
- Most of the workforce will live locally



The Sustainability Challenge

To capitalize on the opportunities that the RNO development presents to deliver long term benefits to the region while minimizing the disruption and distortions than are often associated with large-scale resource developments.



Project Objectives

- Identify potential impacts (both positive and negative) that RNO could have on regional sustainability.
- Recommend actions that RNO could take to manage these impacts.
- Design a strategy for monitoring the contribution of RNO to the sustainable development of the region.
- Help RNO to implement this strategy.
- Prepare an initial baseline report.



Our Approach

- Utilised the 5 capitals framework to provide structure and focus
- Community input and endorsement a key part of the process
- Aimed to embed the strategy into RNO management systems.



Why 5 Capitals?

- Strong intellectual pedigree
- Promotes consideration of the full range of potential impacts and linkages
- Encourages companies to think more broadly about their potential contribution to regions and communities
- Provides a framework for addressing trade-off issues
- A good reference point for the development of metrics.



The 5 Forms of Capital

- Human capital: the skill, knowledge and good health that enables people to work and earn a living
- Social capital: networks and relationships of trust and reciprocity that enable people to cooperate
- Built capital: physical infrastructure such as buildings, transport and communications
- Natural capital: access to key natural resources, such as water, land, clean air, fisheries, forests etc.
- Economic capital: income and financial resources.



The 5 Capitals and Sustainable Development: Key Propositions

- Communities and regions need to preserve and build all five forms of capital if they are to prosper and grow over time.
- Development is sustainable if it adds to, rather than diminishes, the capital stocks of a region/community.
- Development is unsustainable if it involves depleting capital that cannot be replaced.
- Some substitutability is acceptable within specific capital categories, but not across them.

Community input

- Consultation with a broad range of community stakeholders to identify issues, concerns and aspirations.
- Workshop with RNO's community liaison committee (CLC) to identify key risks & opportunities in each of the 5 capitals areas.
- Monitoring strategy signed-off by CLC and RNO management.







Components of Strategy

For each of the 5 capital areas the strategy:

- Identifies key risks and opportunities
- Sets minimum and 'stretch' targets
- Defines 'lead' and 'lag' indicators
- Identifies actions required to protect and build the capital stock.

An Example: Social Capital

Aspect	Social Capital
Risks	Influx of new people creates distrust; some groups seen as benefiting more than others from RNO.
	Established residents exit from the area and existing networks are weakened.
Opportunities	New people coming in to town re-invigorate community organisations.
	New facilities (e.g. school) facilitate social interaction.
Targets	Minimum: Local people accept new arrivals
	Stretch : Community networks and capacity strengthened

Indicators for Social Capital

Indicator	Social Capital
Lead	Participation of employees & families in community welcome programs
	Employee and CLC feedback on community response to new arrivals
	Level of workforce participation in local community.
Lag	Depth and complexity of social networks
	Levels of community trust
	Number and range of community organisations in the region.

Actions for Social Capital

In place	Development of a 'welcome pack' and induction process for new arrivals.
	Provision of financial and in-kind support to local organisations.
	PhotoVoice project to document community history and culture.
	 Government funding secured for a school in Hopetoun.
Going forward	Implement measures to encourage community involvement by employees (e.g. 'matched giving' program).
	 Support community capacity building initiatives (e.g. assist Shire to employ a community development officer).
	 Ensure that funding of community programs and activities is equitably shared between Ravensthorpe and Hopetoun.



Key Project Learnings

- The 5 capitals model works well as an organising framework and is transferable to other contexts.
- Input and endorsement from both internal and external stakeholders is essential.
- To be effective and useful, monitoring processes must:
 - focus on what is important locally
 - have clear reference points
 - provide regular feedback on progress
 - be linked to broader management systems.