Social impacts of mining at a local community level and the role of CSR for sustainability

Svetla Petrova, Curtin University Sustainability Policy (CUSP) Institute, Australia

Dora Marinova, Curtin University Sustainability Policy (CUSP) Institute, Australia

Introduction

Mining has had a considerable role in shaping human development not only from a technological perspective, but it has also significantly impacted on neighbouring and hosting communities where its operations have been carried out. When talking about social dimensions of mining various different perspectives that create and shape social landscapes need to be considered. The attention towards these issues increased significantly in the last 10 years with the way the mining industry impacts on local communities where it operates and how communities see these impacts being seriously challenged. Widespread community demands for relevant, direct and sustainable benefits from mineral wealth have been identified as a very recent phenomenon (MMSD 2002, p.xx) to which companies and governments have to respond in a suitable and satisfying fashion. The whole process of incorporating sustainability views into the development perspectives and companies' policies influenced a significant change in how the industry operates and impacts on local communities and respectively how social impacts are generated. By using a specific case study, this paper reflects on the social impacts of mining and the role of Corporate Social Responsibility (CSR) practices carried out by companies for the long-term sustainable development.

Social impacts of mining and CSR

Social impacts are in general understood as "the consequences to human populations from any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs and generally cope as members of society" (Burdge and Vanclay 1996, p. 59). They can be both positive and negative. Negative impacts are those that limit or retard human development (including long and healthy life, acquiring knowledge and sufficient access to resources to ensure a basic standard of living) while positive impacts are those that further social and sustainable development (Uglow 1998). Some impacts can be perceived or felt differently – they can be positive and negative at the same time, depending on which segment or aspect of the studied entity they refer to.

Social impacts occur throughout the entire lifespan of a mining project – from the time it is proposed, throughout its different phases and after its completion or the close down of any operations. Whereas ecological and physical impacts do not occur until there are any specific alternations of the environment, social impacts can be identified as soon as any new information, including very preliminary, is available (Gramling and Freudenburg 1992). These could involve speculations about property prices, formation of various groups of interests, opposition and protest concerns, investment and economic activities as well as rising unrealistic hopes and expectations. Social impacts evolve, change and transform further throughout the duration of project and continue long after the development or the activity has ended.

The CSR concept and associated actions have become a way to demonstrate a company's commitment to minimise the negative impacts associated with its business operations and processes, which could affect society and the environment (Colantonio 2007). Hamann and Acutt (2003) see private companies through their CSR as potentially important development agents, particularly in partnership with government and civil society groups. There is a wide acceptance that business should play its role within society not only by providing employment opportunities and paying taxes but also through contributing to social needs and meeting social expectations. Nowadays expectations about the contribution of mining are on the rise and communities demand higher levels of local investment outside the immediate sites of operations. This is further reinforced by the emergence of international standards and guidelines. The corporate response results in increasing interdependence between business and communities with companies made to pay more attention not only to mitigation processes but also to prioritizing the support (contribution) they provide to local communities through community development and investment mechanisms. However, although mitigation mechanisms are identified through social impact assessment (SIA) and management plans are put into place, it is very difficult for these plans take immediate effect. Therefore, the paper suggests that identifying community capacity in the initial SIA can help industry identify areas of CSR targeting that can help local community mobilise its own resources to cope with change, help managing the effects of emerging impacts and capitalise on any opportunities.

The case study

This paper is based on an exploratory study of the Boddington rural community located in the Peel region of Western Australia. In order to explore social impacts of mining and the role of CSR practices carried out by companies both qualitative and quantitative methods were used in the research. Information was gathered through a community survey, conducted in November-December 2009 (N=65), using a non-probability convenience sample, interviews with local government, company representatives, local opinion leaders, and analysis of secondary data sources, including company documents and sustainability reports.

The Shire of Boddington is located 130 km south-east from Perth, the capital city of Western Australia. Gazetted in 1912, the town of Boddington has been an agricultural community for decades, but is also now neighbours two mining operations – a small scale mine, active since the late 1970s, and a large scale mine which commenced in the mid 1980s, ceased in 2001, re-commenced a construction phase in 2007 and operation starting again in mid-2010 at a significantly larger scale. Such a mining community is quite rare in Western Australia where the majority of contemporary mining settlements have been established because of mining and are located in remote or very remote areas within the state. The development and community life in these mining towns have been closely associated with the availability of natural resources and commodity price fluctuations and mining has been a prerequisite for development. However, more recently after exhausting the easily available deposits and with further technological advancement, mining operations have started to appear closer to already established communities, traditionally engaged with industries other than mining.

1) Social capital and social inclusion in a time of social change

The sustainability of a community is considered to be its ability to sustain and reproduce itself at an acceptable level of functioning (Dempsey et al. 2011). This is normally associated with the concepts of social capital and social cohesion that encompass social networks, norms of reciprocity and features of social organisation (Coleman 1988).

The Boddington community has a high level of existing social capital. According to 2006 ABS census data (ABS, 2012), the Boddington residents rank among the top according to the

share of population participating in voluntary work for a group or an organisation within the community (35%) in comparison to other Western Australian (WA) mining communities (25% average for the State). However, in 2011 this percentage dropped to 20% (ABS, 2012). The reasons identified by the residents are cumulative resulting from an expanding population with changing structure, decrease in the amount of free time, as well as shift working hours. The number of active community groups and organisations in the town is also relatively high: more than 30 or one community group per 50 people (ABS, 2012). This large number is indicative of a vibrant and socially resilient community.

Even though the community is already familiar with the nature of the mining industry and has witnessed industry rise and decline cycles, it has never been exposed to such dramatic changes, affecting its structure and characteristics. Over the last 5 years between the 2006 and 2011 censuses, the population of the town more than doubled with the share of male population raising from 50% to 64% (ABS, 2012).

It is evident that social cohesiveness and inclusion, interactions and participation in community life are currently in a process of transformation. To respond to the rapidly emerging social changes, community members are putting effort into maintaining the existing level of community spirit and using various initiatives to adapt to the new environment. For example, the local mothers' group is actively applying strategies in resource sharing to help each other to compensate for the lack of baby-sitters and necessary child-care services, going beyond its initial function and turning into a self-sustained social network. According to Dale and Newman (2010, p. 8), social capital is not always sufficient to sustain a local community, but it can play a critical role in local community development initiatives. Hence, identifying community strengths that can influence coping, adaptation and transformation mechanisms is of crucial importance during the SIA process as it provides landmarks as to where is the community potential to develop mechanisms than can fill in the gap before the impact management plans undertaken by industry and government take effect.

2) The entrepreneurial spirit of the local community

Despite the pre-existing high level of social capital and community cohesion (a necessary pre-requisite for a socially sustainable community), the case study survey data reveals that the entrepreneurial spirit within the community is relatively low: 77.2% report that they do not have any intentions to start business activities. Those who thought about undertaking entrepreneurial activities see it to be dependent on the presence of mining. Moreover, people who considered starting businesses in the area, are not willing to commence any activities due to a variety of reasons, ranging from lack of funds, lack of critical mass of people to keep the business alive and many of them want to do this somewhere else, not in Boddington.

The secondary data analysis shows a reduction in the number of local shops due to the high turnover of small shops and the impacts of online shopping. The lack of competition, especially related to food and basic goods, drives the prices up and makes local business uncompetitive. At the same time locals want to see the main street more alive and identify the need for more services such as cafes, food stores and restaurants, operated by community members to keep the "community focus". Ironically, the new bakery business which started operation in town after the re-opening of the large scale mine is conducted by "outsiders".

The trailing development of the local business environment in terms of retail outlets, hospitality and related services results in disperse economic effect that does not directly benefit Boddington. One of the challenges the local community faces now is how to mobilise resources and capacities to be able to capitalise on opportunities created by the presence of

the large scale mining operation. However, one of the main reasons for the lagged business development is the limited availability of human resources. It appears that people moving within the area come mainly to serve the mining industry and this constrains the development of other industries. The appropriation of human resources by mining challenges local sustainable development, including the normal functioning of the social and business environment. Attracting new labour from outside is difficult when there are not enough facilities, housing and related infrastructure.

4) Corporate social responsibility and its contribution to a sustainable community

Community investment generally relates to contributing money, products, services and human resources such as time, skills and leadership to meet social and economic needs of a community in which the business operates. Both Boddington mining operations have already contributed towards various forms of capital: social (sponsorship of community events, initiatives and organisations), human (training programs for employees, graduate placements in industry and government), economic (jobs provision, hire local, buy local policies) and physical (supporting infrastructure development). Even though the two neighbouring mining companies have different CSR and community development approaches, community investments have been executed mainly "upon request", e.g. as sponsorship, direct financial and in-kind support for community events and other related initiatives. This type of charity/philanthropic practices are widely recognisable and highly acknowledged as contribution of mining to the community, they do not require much effort to be received.

One of the biggest contributions towards sustainable communities claimed by industry, namely providing local employment, turns to be the key challenge for this particular community. The significant in-migration resulting from the vast employment opportunities associated with the large scale mine, attracts a highly mobile and transient population. This provokes social dilution to emerge as newcomers and locals do not use the same social networks. The increase of population and associated consequences however, seem to be the key factor instigating qualitative changes within the local social landscape and respectively affecting the provision of services.

A key challenge, in this particular case, is the attraction of long-term residents and "domesticating" the transient population. As part of its CSR, the large scale mine has put in place policies encouraging people to live locally within a 50 km radius. However, some constrains to make this policy effective were identified by interviewees and examples were given outlining previous experience in other large scale operations in Western Australia (e.g. the Ravensthorpe nickel mine closure[1]); housing and local education. Efforts have been made from both mining companies to address in a timely manner the consequences of their operations in cooperation with local authorities, as targeted in Social Impact Management Plans (SIMP). Despite this, there appears to be a vacuum between the time of issue identification and the time when the planned mechanisms take effect. This requires complex cooperation and includes various actors representing different levels and institutions. More importantly, as part of a company's CSR, there should be efforts to facilitate community empowerment so that local people take ownership of the issues and opportunities as they emerge during the project life span and into the future.

[1] The Ravensthorpe nickel mine, located in south-west WA was announced by BHP Billiton in 2004 and opted for a residential workforce. Governmental and private investments were made in the area in expectance of a 'boom'. In 2009, a year after the mine commenced operation, BHP Billiton announced that it was going to be closed due to the falling nickel prices. The impact on the local community was immense (Browne et al. 2011; McDonald et al. 2012; Stelhik et al. 2011).

Conclusion

Even though the social impacts are identified and acknowledged in existing SIMPs, there appear to be a vacuum between the time of identification during SIAs and the time of effective SIMPs implementation. Determining community's strengths in regards to the local capacity to respond to change and develop its own mechanisms to bridge the gap could help companies contribute more strategically towards local community empowerment and its efforts to overcoming constraints and make use of opportunities associated with mining.

References

Australian Bureau of Statistics (ABS) (2012) QuickStats, http://www.abs.gov.au/websitedbs/censushome.nsf/home/Census (31.07.2012)

Browne, A. L., D. Stehlik and A. Buckley (2011). "Social licences to operate: for better not for worse; for richer not for poorer? The impacts of unplanned mining closure for "fence line" residential communities." Local Environment 16(7): 707-725.

Burdge, R. and Vanclay, F. (1996). "Social impact assessment: a contribution to the state of the art series." Impact Assessment 14(1): 59-86.

Colantonio, A. (2007). Social sustainability: an exploratory analysis of its definition, assessment methods metrics and tools. EIBURS Working Paper Series, Oxford Brooks University, Oxford Institute for Sustainable Development (OISD) - International Land Markets Group.

Coleman, J. S. (1988). "Social Capital in the Creation of Human Capital." American Journal of Sociology 94: S95-S120.

Dale, A. and L. Newman (2010). "Social capital: a necessary and sufficient condition for sustainable community development?" Community Development Journal 45(1): 5-21.

Dempsey, N., G. Bramley, Power, S., and Brown, C (2011). "The social dimension of sustainable development: Defining urban social sustainability." Sustainable Development 19(5): 289-300.

Gramling, R. and W. R. Freudenburg (1992). "Opportunity-Threat, Development, and Adaptation: Toward a Comprehensive Framework for Social Impact Assessment1." Rural Sociology 57(2): 216-234.

Hamann, R. and N. Acutt (2003). "How should civil society (and the government) respond to 'corporate social responsibility'? A critique of business motivations and the potential for partnerships." Development Southern Africa 20(2): 255-270.

Mining, Minerals and Sustainable Development (MMSD) Project (2002). Seven Questions to Sustainability - How to Assess the Contribution of Mining and Minerals Activities, International Institute for Sustainable Development

McDonald, P., R. Mayes and B. Pini (2012). "Mining Work, Family and Community: A Spatially-Oriented Approach to the Impact of the Ravensthorpe Nickel Mine Closure in Remote Australia." Journal of Industrial Relations 54(1): 22-40.

Stehlik, D., A.L. Browne and A. Buckley (2011). The contribution of rapid rural appraisal techniques to social impact assessment: the case of Ravensthorpe, Western Australia. Advances in social and economic impact assessment of mining activities. J. Rolfe, S. Lockie and G. Ivanova (eds). Canbera, Australia, ANU E Press.

Uglow, D. (1998). Social Performance Indicators. Mining and Energy Research Network, Corporate Citizenship Unit. Coventry: Warwick Business School, University of Warwick.