Balancing Sustainable Global Mining Business with Social Good: The Rio Tinto Alcan Venture in Northern Australia

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Abstract

Global mining corporations have contributed significantly to Australian economic development and national infrastructure, and it is touted they are one of the few organisations delivering training and employment opportunities for Indigenous people in the remote mining areas. Persistently advanced is globalisation will enable these marginalised people to substantially reduce their socio economic disadvantage, but the evidence is they continue to have unsuitable housing, poorer health status and lesser life expectancy, while greater access to wealth is linked to substance abuse, which manifests as heightened violence, greater incarceration, and more suicides than experienced in the non Indigenous population. In this paper is reported findings from a four year study with Indigenous people, who have exercised an opportunity for engagement in an educational programme and employment in a mainstream job in a remote Australian mining operation. The results demonstrate allowing global mining corporations to operate in remote regions of Australia may lead to a resurgence of interest in Indigenous employment, but an expectation their representation in the mining workforce will increase and/or their social disadvantage will be significantly reduced is worthy of revisitation.

Keywords: Australian, Mining, Indigenous, Social Good, Business

Introduction

Australia is an ancient geographical continent with an abundant supply of minerals. These minerals, and the associated exploration and processing industry, account for eight per cent of the Australian gross domestic product (Martinez-Fernandez, 2010; Roarty, 2010). The abundance of minerals has led to national prosperity, and from exporting these resources has substantially contributed to satisfying the international demand for metal based (i.e., bauxite, iron ore, manganese) and energy (e.g., coal, gas, uranium) commodities. Nevertheless, the Australian governments and the resource industries have long been criticised for failing to positively engage with Indigenous people on whose land the mining operations are conducted (Buultjens et al. 2010, Lockie et al. 2008). Indeed, Australian Indigenous people unfavourably present against the social indicators of a developed society compared to the non Indigenous population.

Australian legal developments have underpinned a resurgence of interest in improving the socio economic status of Indigenous people in remote regions where mining operates. Following the 1992 Mabo decision, which gave Indigenous people a legitimate claim to land ownership (Crawley & Sinclair, 2003), the 1993 Native Title legislation was enacted with a feature the Traditional Land Owners were able to negotiate land usage with the miners. A common thread of these land use agreements, in addition to the financial dimensions, is the provision of education and vocational training for Australian Indigenous people (Barker, 2006; Tiplady & Barclay, 2007). Despite the opportunity for involvement in these work integrated learning schemes the majority of the Indigenous population has a preference for welfare or government subsidised work systems (Altman, 2009; Altman & Gray, 2005), and few Australian Aboriginals are employed in mainstream mining jobs (Brereton & Parmenter, 2008; Pearson & Daff, 2010a).

Aspirations of the mining industry, the Australian governments, and Indigenous people lack consensus. The mining companies argue that Indigenous people can acquire personal wealth and better social conditions by working
in the industry, but the lack of coherent policy by governments for the engagement of Australian Aboriginals ignores inter cultural identities of these people (Dillon & Westbury, 2007; Trudgen, 2000). Australian Indigenous people have strong spiritual and religious connections with the country and would prefer to live on their ancestral land in the hybrid economies, that include wildlife harvesting (Altman, 2003; Foley, 2006). In short, many Indigenous people in remote areas, where resource extraction is undertaken, find the prospect of mining operations unattractive (Pearson & Daff, 2010a). These conflicting ideologies have spawned considerable public debate focusing on Australian government pragmatic initiatives, such as welfare or subsidised paid work schemes, for improving the well being of Indigenous Australians (Anderson, 2007; Hunter, 2007). Arguably these imposed systems have not necessarily led to favourable outcomes. The imbalances are demonstrated as gross Indigenous inequalities in economic, health and social issues, which abound in remote communities where mining is being undertaken (McDonal et al. 2008: Pholi, Black & Richards, 2009; Rowley et al. 2000).

This paper reports on these notions to demonstrate the disadvantage of Australian Indigenous people in mining contexts. Paradoxically, while the Australian government expresses an enthusiastic commitment to improving the socio economic status of Indigenous people, substantial imbalance exists compared to non Indigenous people. And the mining and mineral sector, which generates enormous revenues, contributes to the paradox as the rhetoric from some of the world’s largest resource companies has not led to equality for Indigenous Australians.

**Australian Resources Sector Contribution**

The Australian minerals industry makes a significant contribution to the economic growth of the nation. From 2006 the minerals industry in the domains of exploration, extraction, and processing has accounted for eight percent of the Australian gross domestic product (ABS, 2009; Martinez-Fernandez, 2010). In fact, the Australian minerals sector is in the top five world producers of most key mineral commodities (e.g., bauxite, coal, iron ore), and this activity accounts for the direct employment of some 170,000 people, and nearly twice as many in indirect employment (Roarty, 2010). Undeniably, the mineral resources (including gas) are major contributors to the Australian economy, often demonstrated by reassessments of the brought revenues, economic developments and contribution to the mineral and energy needs of the contemporary world society. Nevertheless, negative criticisms of the impacts of mining are beginning to resonate in the wider community.

Mineral extraction projects and their associated activities have been the focus of international and national concern. A recent international crisis was the substantive oil spillage in the Gulf of Mexico. Similar in disaster type, but with lesser impact in the world media, was the Montara drilling rig explosion (with accompanying crude oil leakage) in the waters off the northwest coast of Australia. Both events generated strong negative perceptions of the petroleum industry. In addition to potential environmental degradation, and the gradual unsustainability of mining (as the resource is not renewable) assessments of mining operations have been undertaken to examine health, safety, and social impacts. These assessments, which are within the gambit of corporate social responsibility (Jones, Marshall & Mitchell, 2007; Lockie et al. 2009) “...are a means of integrating development into core business strategies and can assist in building the companies and the communities...” (Esteves & Vanclay, 2009, p. 137). However, there are emerging growing concerns that some of these assessments have insensitively failed to allow those people (often in Indigenous communities) who will be most affected by the mining operations in remote regions of Australia (Arbeláez-Ruiz, 2010; Harvey & Brereton, 2005; Lockie et al. 2008) to have a stake in the decision making.

A resurgence of interest in the engagement of Indigenous communities with the Australian mining industry has mainly been driven by legal developments. In 1788, when Captain Phillip sailed the First Fleet into Botany Bay in New South Wales of Australia, the British Crown acquired sovereignty over several parts of Australia under the notion of *terra nullius* (vacant land belonging to no one). This condition persisted until 1992, compelling Indigenous people, who had lived in the region of the mining operations to be displaced and excluded (Crawley & Sinclair, 2003), although some were employed in menial jobs (Barker, 2006). On the 3 June 1992 the notion of *terra nullius* was declared, by the High Court of Australia, to be irrelevant in a judgement commonly referred to as Mabo (*Mabo*, 2009). The action had been led by Eddie Mabo, David Passi and James Rice, all from the Meriam people of the
Murray Islands in the Torres Strait, who challenged the state of Queensland, which had annexed the islands in 1879. The Mabo decision provided underpinning for Native Title legislation that profoundly changed relationships between mining companies and Australian Indigenous people. By demonstrating that the Meriam people had lived on the Murray Islands in a subsistence economy prior to European contact the court accepted native title rights by reason of long possession.

In 1993, the Keating government introduced the Native Title Act (2009) to deal with implications of the Mabo decision. The Act set forth procedures for dealing with native title claims, and retrospectively validated the interests of non Indigenous Land Owners. In a historic compromise Australian Indigenous groups agreed to the validation feature of the Act in exchange for guaranteed rights of the Traditional Land Owners to negotiate land use agreements. Coupled with pressures from international groups (e.g., U.N.), peak industry bodies (e.g., International Council of Mining and Metals), and the Australian government has led to policy commitments by the miners to not only deliver direct financial benefits to the Traditional Land Owners, but also sponsorship of long term benefits to the Indigenous communities in the region of the mining operations. A common feature of the land use agreements is employment and training provisions with an assumption that there will be greater indigenous representation in mainstream community jobs and in the mining sector.

Economic Engagement and Impacts

In spite of the phenomenal economic contribution of the Australian resources sector, few Indigenous Australians benefit in the distribution of the wealth. The point was succinctly put by Muir and Evans (2005) when they wrote that mining operations generate massive revenues for governments yet little of the money is invested in improving the lives of the regional residents. More objective data show that Indigenous employment in the Australian mining industry is low (Brereton & Parmenter, 2008), often the enjoyed occupations are low skilled (Tiplady & Barclay, 2007), overall the Indigenous unemployment rate in Australia approaches 20 per cent with even higher values in remote regions (Altman, 2009; Gray & Hunter, 2005), and consequently, long term welfare dependency or government subsidised work schemes (e.g., Community Development Employment Programme) have become attractive to Indigenous people.

Despite the Australian government policy of social inclusion Indigenous people are the most disadvantaged minority group in the nation. The notion of social inclusion is a conviction held by the Federal government Australian citizens “...should have the opportunity to participate in economic, social and community life...” (Brown, 2009, p. 4). Yet there is widespread evidence that Indigenous Australians continue to experience low labour market participation (Daly & Hunter, 1999; Gray & Hunter, 2002; 2005), and this vulnerability to unemployment manifests as lower consumer spending capacity (Altman, 2009; Giddy, Lopez & Redman, 2009), poorer houses and unsanitary living conditions (Toohey, 2009; Tripcony, 2000), lower health status and life expectancy (McDonald et al. 2008; Rowley et al. 2000), educational disadvantage (Bradley et al. 2007; Hughes, 2008), higher levels of poverty (Cechanski, 2002; McGrath, Armstrong & Marinova, 2006), as well as, social disorganisation expressed as family violence, unacceptable incarceration rates and suicides (Anglicare, 2009; Edney, 2001; Krieg, 2006). Disturbingly, available wealth is being channelled into extensive substance abuse and the ill effects on health and social adjustment in Aboriginal communities.

Mitigating circumstances have been advanced for substance abuse by Indigenous people. The misuse of tobacco, alcohol, recreational drugs and petrol (Lee et al. 2008; 2009), by Indigenous Australians is believed to reflect their struggle from colonial times in the pursuit of self determination (Maddison, 2008). Prior to the 1967 Referendum (which introduced the Federal government affairs policy of self determination), Indigenous people were embedded in the colonising forces of assimilation, which restricted their movement from government centres and missions, and excluded them from mainstream services, and created a raft of socio economic disparities (Smith, 2006). The policy shift to self determination removed the strict restraints on Indigenous people, which led to a rural exodus back to their ancestral lands where they resided in small remote communities called outstations (Coombs, 1974). It has been estimated that 25 per cent of the 0.6 million Indigenous population live in 1200 of these relatively small centres across 86 per cent of Australia (McConvell & Thieberger, 2001). Living in these rural communities
enables reinvigoration of their customary sector of the economy, which is based on wildlife harvesting (Altman, 2002; 2003), in enduring spiritual relationships and religious connections with the ancestral land of some 50,000 years of heritage. However, an absence of meaningful jobs in the remote communities has compelled Australian governments (when endorsing the policy of social inclusion) to provide welfare, which some Indigenous leaders (Pearson, 2007) claim has led to the collapse of social norms, and the rise of violence, alcoholism, child abuse and suicide. Paradoxically, the provision of wealth from government subsidised work, welfare or in some instances paid employment, which is designed to improve the socio economic status of Indigenous people, when coupled with full citizenship rights (1967 Referendum) has provided a pathway to engage in substance abuse.

Methodology

Site

The study site was the Gove Peninsula and surrounding region in an area about 150km from Nhulunbuy. Included in this zone are a number of Indigenous outstations such as Dhalinbuy, Dhanaya, Garrathiya, Galupa, Gunyangara, and Yirrkala, which are shown on Figure 1. The populations of these outstations range from a nominal 20 people at Galupa to over 600 at Yirrkala, with some 100 inhabitants each at Dhalinbuy and Gunyangara. Population numbers are fluid as the Indigenous people frequently move about the Northern Territory (N.T.). Even Nhulunbuy, which is a ‘closed’ mining town of some 4000 people (mostly non Indigenous) has a transient population component of fly in fly out employees. The town of Nhulunbuy is 15km to the east of the largest bauxite refinery in the southern hemisphere, which is 20km north of the minesite crusher. Bauxite ore is transported from the crushing station to the refinery by a conveyer belt system. Nhulunbuy which has all the facilities and infrastructure of a contemporary Australian town (e.g., hospital, shopping complex, airport, water and drainage, electricity), is 680 km east of Darwin, the capital of the N.T.
FIGURE 1: REGION OF THE STUDY AND PLACES OF INTEREST
A unique feature of the Gove Peninsula is the recorded history. In the 1600s the Indigenous Yolngu people traded with the Macassans from Sulawesi (formerly Celebes), and other European seafares (e.g., Jan Van Corstens, 1623; Able Tasman, 1644; Matthew Flinders, 1803), until the trade was terminated in 1907 by the South Australian government. A Methodist Church Mission, which was established in 1934 by the Reverend Wilbur Chaseling, was closed in 1975 when the Yirrkala Dhanbul Community Association was founded. From 1942 to 1945 some 4000 military personnel (some were Indigenous Yolngu) were stationed in the region with a flotilla of PBY Catalina flying boats based in Melville Bay (adjacent to Gunyangara). During this period high grade bauxite ore was found at the now Gove airport, and during the 1960s a mine site and a refinery was established with the first consignment of alumina exported in 1972. The initial town for the construction workers was Birritjimi (Wallaby Beach) was built east of and adjacent to the refinery, but today only some 15 houses remain as the land has been transferred back to the Traditional Owners, the Rirritjingu clan of the Yolngu people. The town site of Nhulunbuy was designed in 1968 (Town, 1968), and progressively built to skirt Mount Nhulan (Mount Saunders).

Participants

The participants of the study are Indigenous Australians. More specifically, they are the Indigenous Yolngu people of East Arnhem Land of the N.T of Australia whose forbearers occupied the land 50,000 years earlier. The respondents are indentified as a cohort group as different samples been employed in a variety of studies and reports that are acknowledged in this paper.

Procedure

An array of literature was used to provide information about a range of Indigenous socio economic disadvantages. Some of this literature is about Indigenous people of the N.T, but most is about Yolngu who have lived on the Gove Peninsula.

Results

The results are presented in three parts. First, is the social problem of substance abuse, which is a notable contribution to the high levels of anti social behaviour in Nhulunbuy, Yirrkala and the smaller, closer outstations. Second, are the night patrols and the significant associated infrastructure that has been acquired to support the service necessary to alleviate the consequences of substance abuse. Third, is the central information of two confidential Nhulunbuy police reports, that delineate the numbers of suicides and attempts, which are persistent social dislocation behaviours in the region.

Substance Abuse

Indigenous substance abuse in East Arnhem Land has escalated since the establishment of the mining operations. Prior to the early 1960s the only non Indigenous founded settlements were Yirrkala Mission and the military facilities during the Second World War. With the construction of the minesite and refinery in the late 1960s a number of Indigenous Yolngu were employed in labouring type jobs, but without retail outlets and being prior to Indigenous rights, payment in money was unappealing. At the Yirrkala Art Centre old film can be viewed to show at the close of work many Indigenous people sitting on benches drinking alcohol (beer). Today there are a number of liquor outlets in Nhulunbuy, and also at the Gunyangara Yacht Club where both non Indigenous and Indigenous people can consume alcohol.

In addition to alcohol, substance abuse presents as misuse of social drugs (e.g., Cannabis), petrol, glue /paint, tobacco and Kava. Cannabis usage, which is prevalent in the Indigenous communities on the Gove Peninsula.
(Pearson & Daff, 2010b), can lead to mental disorders, psychotic illness, and depression (Degenhardt, Hall & Lynskey, 2003; Lee et al. 2008; Hall, Degenhardt & Teeson, 2004). In Nhulunbuy Opal fuel was introduced in February 2008 (Arafura Times, 2008) to replace 91 octane grade fuel, which has aromatics sought by hard core sniffers. In the one hardware store in Nhulunbuy all pressurised cans of paint are secured (by law) to deter purchase by juveniles. Yolngu people have a high smoking rate, which contributes to lung cancer and cardiovascular disease. Recently, the Chief Executive Officer of Miwatj Health Aboriginal Corporation stated the Yolngu on the Gove Peninsula have the highest rate of lung cancer of all Australian Indigenous groups, but it is unclear if the cause is from camp fire smoke or smoking of tobacco. In 2010 the Nhulunbuy shopping precinct was designated a non smoking area (Arafura Times, 2010a). The following year the Menzies School of Health was the recipient of a Federal grant of $761K to investigate how to reduce tobacco consumption among Indigenous people (Menzies, 2010). Kava is an illicit substance, registered as a dangerous drug that continues to be of concern to the Nhulunbuy police (Arafura Times, 2003; 2010b). Nevertheless, despite endeavours to control the abuse of alcohol with a permit system being introduced in 2008 (Arafura Times, 2008) it [alcohol] is a significant social problem.

**Night Patrol**

In 2004 the number of inebriated Indigenous men wandering the Nhulunbuy streets on a nightly basis was a community concern. Following a town meeting of the Combined Reference Groups (business, government and industry representatives) a social impact assessment was undertaken of the nightly Indigenous anti social behaviours. The problem was referred to an anti social behavioural committee, and the resolution was the notion of a night patrol service to provide appropriate cultural assistance to those Indigenous people who were at risk. The service was initiated by elder Indigenous ladies from Yirrkala in February 2005.

When the night patrol service began there was minimal infrastructure to ensure the safety of vulnerable Indigenous people. Those who were injured had to be taken to the hospital as they could not be taken home where there was a threat of physical violence. Delivering the client to the police was an unattractive strategy as when in custody constant surveillance was required and Nhulunbuy only had eight police staff. Consequently, suitable facilities were constructed, and operational frameworks have been developed to provide minimum requirements for the management of night patrol services in Nhulunbuy (Night Patrol Services, 2010).

Today Nhulunbuy has a special care centre that is administered by the N.T. government and the Nhulunbuy Corporation Limited. This facility, which cost of $1 million to establish (and operate), provides: 1) a safe haven for night patrol clients, and 2) a sobering up shelter. Residential rehabilitation provides treatment for alcohol or other drug abuse. The community patrol now operates from the special care centre.

**Suicide**

The current suicide rate for the N.T. is 66 per cent greater than the national rate. Table 1 presents a summary of actual and attempted suicide numbers for two confidential Nhulunbuy police reports (Fuller, 2005; Wurst, 2009), to show the trends are increasing. More disturbingly is the higher incidents of attempts and threatened. Trends are difficult to quantify because in periods of nil suicide reports were not prepared while latter reports are more comprehensive. Most (87%) of the attempted and actual suicides are from Indigenous Yolngu residents from Gunyangara, Nhulunbuy and Yirrkala. Hanging is the most prevalent method used.
### TABLE 1: SUICIDE DATA NORTH EAST ARNHEM LAND

<table>
<thead>
<tr>
<th>Year</th>
<th>Threatened</th>
<th>Attempted</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>N.R.</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>N.R.</td>
<td>23</td>
<td>7</td>
</tr>
<tr>
<td>2005</td>
<td>N.R.</td>
<td>N.R.</td>
<td>Nil</td>
</tr>
<tr>
<td>2006</td>
<td>N.R.</td>
<td>N.R.</td>
<td>Nil</td>
</tr>
<tr>
<td>2007</td>
<td>30</td>
<td>57</td>
<td>2</td>
</tr>
<tr>
<td>2008</td>
<td>41</td>
<td>77</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. N.R. = Not reported

#### Discussion

The literature linking Australian mining and Indigenous engagement is in two main streams. One stream promotes the commodity worth to an international mineral consuming marketplace; and the economic contributions in terms of earnings, government revenues, direct and indirect employment levels, rural and regional development as well as other associated financial benefits (*Australian Energy Statistics*, 2010; Roarty, 2010). The quantity of publications and enthusiasm for this literature far outweighs the ascribed negative outcomes of environmental degradation; health, safety, and social impacts; the fact mining is unsustainable as eventually the resource is depleted; or contribution of the product and operations to greenhouse gases (Esteves & Vanclay, 2009; Lockie et al. 2009). The second stream of the relevant literature is in terms of corporate social responsibility to better engage Indigenous communities (Barker, 2006; Harvey & Brereton, 2005), employment systems (Jones et al. 2007), and other social features to integrate sustainability into the mining operations (Brereton & Parmenter, 2008; Tiplady & Barclay, 2007). Despite several studies of major health and social problems common in Australian Indigenous populations researchers are yet to investigate connections between the low status of Aboriginal well being and their living in rural settings where mining operations are being conducted.

Nhulunbuy as a greenfield town provides opportunity to broadly present a historical account of Indigenous health and social issues after 38 years of mining operations. The documented history reveals a substantial feature of the rich heritage of the Indigenous Yolngu of East Arnhem Land is linked to their engagement with non Indigenous Australians. Early records show the Yolngu people traded with European and Asian seafarers (Berndt & Berndt, 1999; Worsely, 1955), from the 1860s to the early 1900s they had disastrous confrontations with the pastoral companies that occupied Yolngu land from 1861 to 1908 (Trudgen, 2000), and when a large group of Indigenous people from the Yirrkal Church Mission assembled at Gove airport to be told their land was to be used for mining (Yunupingu, 2009). There is no evidence in any of these accounts that alcohol consumption by Indigenous people was condoned by the church, or that substance abuse (i.e., cannabis, solvent sniffing) was a social issue prior to the arrival of mining personnel. Yet there is recent medical research (Lee et al. 2008; 2009), and mining data (Pearson & Daff, 2010b) to show heavy cannabis use and the depressive symptoms are common in the Aboriginal communities on the Gove Peninsula. And a recent report by Anglicare (*Anglicare*, 2009), compiled from the responses of a wide body of stakeholders, stated substance abuse (i.e., alcohol, cannabis and other drugs) was a significant concern for the Aboriginal communities on the Gove Peninsula.

Mining provides extensive wealth that attracts substance abuse, which is linked with social disorders. The annual revenue of the Nhulunbuy mining operations is constantly recorded to be about $1 billion (*East Arnhem*, 2010), and much of this money is distributed in the community as the town boasts the highest per capita income in the nation. At these mining towns relatively low skilled jobs can attract high remuneration rates. Taylor (2011) reports low skilled Indigenous people in Western Australian mining towns can earn $100,00 per annum in landscape work (e.g., lawn mowing, whipper snapping, mulching). A link with consumer spending capacity and dysfunctional
social activity is given by Mercer (2010) who reports people living in mining communities in Queensland and Western Australia are prone to violence and anti social behaviour that has been fuelled by alcohol and drugs. A claim wealth acquired by workers at Western Australian minesites appears to be linked to organised crime is supported by the police seizing large quantities of drugs from fly in employees (Eliot, 2010). More credible are the findings of medical studies demonstrating that heavy, persistent substance misuse in N.T. Indigenous communities is associated with mental and physical health as well as social problems (Lee et al. 2008; 2009; Rowley et al. 2008). Clearly, the isolated communities in remote Australia, many near mineral extraction facilities, are targets for suppliers of illicit substances, while alcohol is readily available at commercial outlets within the townsite shopping precincts.

Conclusion

Systematic longitudinal research to present links between living in Australian mining regions and experienced socio economic disadvantage by the inhabitants is lacking. Although there has been a number of recent co relational one shot designs of studies assessing physical and mental health problems, and social dislocations of people living in Australian mining contexts there has been a lack of enthusiasm for longitudinal causal investigations. Longitudinal evaluations can take a reasonably long time whereas academics, politicians, bureaucrats and the public in general have shorter attention spans. More often there is not any scientific original data. During the 1980s and the 1990s environmental and social agendas began to emerge hence, before these times the emphasis was on the commercial priorities, and today ‘lunar landscapes’ are a feature of defunct mining regions. Thus, greenfield towns like Nhulunbuy or revitalised towns to provide infrastructure and accommodation for the workforce were founded on commercial and technical priorities. Impact reviews are often undertaken a long time after the mining operations have been installed when the social problems manifest.

This paper has presented information about an Australian mining town and socio economic problems. A greater focus has been made on the Indigenous people who live in the remote Gove Peninsula of the N.T. of Australia where the mining operations have been conducted for 38 years. Employing an array of public literature an inescapable conclusion is that there are damaging social, mental and physical effects being experienced in the mining town and in the nearby regions. In particular the Indigenous people do not present favourably against any of the indicators of health, employment, housing, incarceration, poverty or longevity. Yet Australian mining is profiled by financial contributions to the international and national arenas rather than the equality of Indigenous Aboriginals on whose land the mining is conducted. Balancing economic and productivity arguments within a much broader ethical and moral interface with all stakeholders is a worthy visionary challenge.
References


For a full list of references, please contact the author(s)