ARTICLE IN PRESS

The Extractive Industries and Society xxx (xxxx) xxx–xxx

Contents lists available at ScienceDirect

The Extractive Industries and Society

journal homepage: www.elsevier.com/locate/exis

Original article

Power and Accumulation Coal Mining, Water and Regulatory Failure

Kally Forrest[a,*], Lesego Loate[b]

[a] Society Work & Development Institute – University of the Witwatersrand, 1 Jan Smuts Ave Braamfontein, Johannesburg, 2000, South Africa
[b] School of Geography, Archaeology and Environmental Studies – University of the Witwatersrand, 1 Jan Smuts Ave Braamfontein, Johannesburg, 2000 South Africa

ARTICLE INFO

Keywords:
Coal mining and water
Black Economic Empowerment
Delmas coal mining
One Environmental System
Water regulatory failure

ABSTRACT

Coal mining companies in South Africa have evaded transformative water licencing laws. This article examines how and why South Africa's coal mining water regulatory systems have failed. In light of BEE (Black Economic Empowerment) policies it scrutinises contradictory state imperatives of black class formation versus the protection of water resources in a water scarce country. A case study of the maize farming area of Delmas in Mpumalanga province found that all coal mines transgress water laws through formal and 'grey zone' systems which legalise the illegal. This has consequences for water quality, agriculture and food security. This is compounded by the state's weak enforcement in which the department responsible for issuing licences dominates a crumbling cooperative governance regime. Farmers resist mining but their rights are trumped by the elevation of mining over the environment. The article contributes to international commentary on coal mining's impacts and regulation by demonstrating the importance of analysing underlying socio/political issues which engender environmental destruction. Unless this context is unpicked it will not be possible to understand why harmful environmental practices persist, or to advocate for change and make interventions to prevent the destruction of natural resources.

1. Introduction

In South Africa many failed regulatory systems exist which have implications for deepening democracy. Mining is an important industry where regulatory accountability has miscarried. This article seeks to understand how and why actors in coal mining have evaded transformative laws with reference to water management and the issuing of water licences by the state.

In the literature internationally the environmental impacts of carbon intensive energy and coal mining has been a focus. This has included examination of surface and groundwater pollution, acid mine drainage, surface water scarcity, aquifer destruction, and environmental degradation in places such as the USA, China, India, Indonesia and Australia (Straskaba, 1983; Olem, 1983; Peng, 2011; Mishra and Das, 2017; Merriam et al., 2013; Pimentel et al., 1982; Hota and Behera, 2015; Pimentel et al., 1982; Fatah, 2008; Scott et al., 2012; Colaguiri and Morrice, 2015; Mishra and Mishra, 2017).

Some studies highlight the economic impacts of coal related water pollution on the environment and agriculture and its socio-economic externalities. Others examine regulatory tensions around the water-energy-food nexus that drive competing water demands in the USA and China. They also examine the impact of competing interests and legislative frameworks on water regulation, challenges of cooperative governance in federalist mining and water laws, post-mining rehabilitation and its impacts on water, the shifting importance of water due to mine pollution, and the implications for the water-energy-food nexus in economic development (Israel, 1981; Rapp, 2011; Sangi, 2010; Casey and Mitchell, 2013; Tan et al., 2015).

Related literature on environmental justice with a mining focus examines the way politics intersects with economics in countries like Brazil, Chile, and Peru in relation to natural resources, resulting in the marginalisation of poor and indigenous communities. It assesses how economic liberalisation and booms in mining have affected water availability and rights of the rural poor, the extension of extractivism into water resources, poor regulation of mining's effects on water, conflicts between mining and other economic sectors over water resources, and the way foreign mining capital's investment in water-stressed areas foments conflict. (Dupuits and Garcia, 2016; Delmote, 2016; Rodriguez-Labajos and Martinez-Alier, 2015; Bebbington and Williams, 2008). Yet other investigations approach environmental impacts and regulation of coal mining from the perspective of low-carbon energy transitions geared to avert ecological crises (Wishart, 2012; Roger et al., 2008).

Examinations of coal mining and water regulatory failure in Africa are almost non-existent. Much South African research highlights coal mining's environmental damage and deals with the socio-economic

* Corresponding author.
E-mail addresses: info@swop.org.za (K. Forrest), 1476811@students.wits.ac.za (L. Loate).

https://doi.org/10.1016/j.exis.2017.12.007
Received 30 August 2017; Received in revised form 14 December 2017; Accepted 14 December 2017
2214-790X/

Please cite this article as: Forrest, K., The Extractive Industries and Society (2018), https://doi.org/10.1016/j.exis.2017.12.007

impacts on health, human settlements, land degradation, agricultural land loss and water pollution (Hallowes and Munnik, 2016; Centre for Environmental Rights, 2016; Groenewald, 2012; McCarthy and Pretorius, 2009). This article references literature on environmental regulatory failure in South Africa (Hallowes and Munnik, 2016; Centre for Environmental Rights, 2016; McCarthy and Pretorius, 2009) but concentrates on the neglected area of coal mining water regulatory failure and the dangers this holds for the commercial agricultural sector and food security. It complements South American writing on mining water regulatory failure although such literature does not analyse the relationship between political economies and mining's broken regulations.

In South Africa coal has been entrenched in the political economy through the Minerals Energy Complex which has driven industrialization. It includes a network of relationships between the private sector in fields such as mining, manufacturing, finance and state owned enterprises (SOEs). (Baker et al., 2015, 8). Under apartheid the MEC was owned and managed by white mining corporates with strong ties to Western markets. Corporates depended on cheap, low-skilled black labour which manifested in high levels of black poverty and racially based inequality which continues today. (Altieri et al., 2015; Eberhard, 2011; Baker et al., 2015; Burton and Winkler, 2014; Creamer Media Coal Report, 2015). The MEC has been historically dominated by a small number of white owned major mining companies and currently five produce 85% of the country's coal (Burton and Winkler, 2014, 2). White mining corporates have also more recently become global players on international markets.

Coal is strategic to South Africa's economy in the export trade as well as for domestic energy feedstock. Development in the Global South has increased coal demand from which South Africa has benefited (Creamer Media Coal Report, 2015). Coal is the largest mining revenue generator, contributing 1% to GDP, employing 90 000 people, paying R19 billion in wages in 2014 and is a vital source of foreign exchange[1] (PriceWaterhouseCoopers, 2016; Baker et al., 2015). The state's energy utility, Eskom is responsible for 90% of electricity generation and buys 53% of coal for its 13 power stations (Altieri et al., 2015). Water regulation thus sits at the centre of important economic and policy issues.

The state has restructured ownership in the industry historically dominated by white corporates to make space for black junior miners. This it does through transformative laws, as well as through Eskom providing black companies with coal supply contracts (CSAs) which now account for 30% of its supply although it still depends on a few large mainly white corporations (Eberhard, 2011).

This article examines how and why South Africa's coal mining water regulatory systems have failed. In the light of BEE (Black Economic Empowerment) policies it also examines whether a dual water regulatory system operates favouring junior black companies over coal majors. Does the first tier operate at a visible level with formal standards of reporting and accountability, while a second tier functions in a 'grey zone'[2] of formal and informal practices? The article scrutinises the contradictory state imperatives of black class formation versus the protection of water resources in a water scarce country.

In addition it examines, through a case study in Delmas in Mpumalanga Province, if a bias exists in the way laws have been framed and applied by the state. Does mining trump other water interests and what are the implications for water supply and food security? And further is this peculiar to the Delmas area in South Africa and also to the international experience of coal mining?

The Case Study was chief in informing our findings. However a triangulation of methods was used which included interviewing stakeholders and accessing commentary and policy documents.

2. Black miners emerge, white majors thrive

The coal industry is dominated by large corporations – Exxaro, Glencore Xstrata, Anglo American, South 32 and Sasol Mining[3] which hold a monopoly on the profitable export market (Eberhard, 2011). However as Mitchell from The Chamber of Mines (CoM) comments, 'It's no longer six companies running the country, now it's 75. There's a move away from monopolies and it's a broader ownership base.'[4]

The passing of the MPRDA (Mineral Petroleum Resources Development Act) aimed to weaken corporates' and their hoarding of rights to facilitate the entry of BEE entrepreneurs. The MPRDA articulated with the Broad Based Black Economic Empowerment Act expressed through the Mining Charter. Under the Charter corporations must guarantee 26% black ownership. Also from 1996 the ANC government reduced capital and exchange controls allowing corporates to unbundle domestically and move listings abroad. This often involved selling assets to the aspirant black bourgeoisie (Ashman and Fine, 2015).

Black entrepreneurs entered the industry in various ways as the sector developed. The immediate post-1994 period was associated with political patronage as relations of mutual benefit developed between white corporates and the ANC political establishment. White companies approached politically connected BEE partners to favourably position them with the ANC government to ensure access to contracts and mining rights where delays were common (Cargill, 2010, p 88). Thus the black elite's entry into mining was mediated by white corporations. At times BEE companies became wholly owned black enterprises with some like Exxaro, Shanduka and African Rainbow Minerals becoming significant players. However some BEE activity was naked rent seeking involving little productive investment. By the 2000s in some cases 'legal' corrupt activity had slid into political cronyism defined by Transparency International as 'the manipulation of policies, institutions, and rules of procedure in the allocation of resources and financing by decision-makers who abuse their position to sustain power, status and wealth' (Transparency International, 2009, p14).

It was in this context that the DMR, tasked with distributing mining licenses, was drawn into promoting influential ANC networks whose business interests were conjoined with BEE as a tool of wealth redistribution. Licences were allocated liberally but selectively to powerful black actors. The DMR as broker acted on a political mandate in the guise of an economic one allocating licences to politically connected black business who donated to the ANC. This was not unlawful but indicated that the DMR was overreaching its mandate. Companies wishing to object to individuals getting special treatment held back for fear of DMR officials denying access to resources (Cargill, 2010, pp 98–99).

The next generation of black junior miners struggled to enter the industry. Juniors in coal are small/medium registered operations generally involving opencast activity, with about 200 employees in one or two mines and an annual turnover of about R30 million, and total assets of between 18-100 million (Mitchell and Granville, 2002; Mitchell and Sakoane, 2002). They may be foreign owned; BEE companies attached to corporates to fulfil 26% black ownership; independent black companies; or black companies contracting to larger mines. BEE companies have seen the most growth and are the focus in this article.

Obtaining mining licences involves costly studies. The lack of loan finance is an obstacle for junior black miners who are perceived as risky by the investment community (Mitchell and Granville, 2002). Ayanda

[1] http://chamberofmines.org.za/sa-mining/coal accessed 19 February 2016

[2] The grey zone is 'a murky area where normative boundaries dissolve, where state actors and political elites promote or actively tolerate and/or participate in damage making.' Auyero, 2007. *Routine politics and violence in Argentina* Cambridge University Press. New York, p32

[3] Anglo recently sold its Eskom mines to Seriti Resources Holdings which could become a large player

[4] Interview Grant Mitchell Chamber of Mines Emerging Miners with K. Forrest 7.7.2016