

CORPORATE SOCIAL RESPONSIBILITY IN MINING INDUSTRY

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Abstract

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This paper focuses on the comparison of corporate social responsibility in mining industry. It compares specific territorial areas of two different countries – one of them country that could be called as semi-periphery or even core country and the second one a periphery country. The first one is Czech Republic (Northern Bohemia area) and the second one is Zambia (Copperbelt area). CSR activities in Copperbelt have played primarily an ameliorative role in the context of significant social disruption and uncertainty in the wake of privatization. Some experts say there are still important gaps between mining companies' CSR activities, on the one hand, and accountability and fairness, on the other. The CSR concept is relatively new in the Czech Republic – but more and more discussed and interesting for many firms. The Czech company “Severočeské doly” was one of the finalists of the national round of the competition “The European Corporate (Social) Responsibility Award” in 2007. The aim of this paper is to find the opportunities the companies working in this industry use, and how the system of CSR is developed. It analysis the areas they concentrate on in their CSR activities and compares it with theoretical concept. The comparison is based on secondary data as well as on personal experience of visiting both of these areas and companies.

corporate social responsibility, mining industry, triple bottom line

Corporate social responsibility went through a big development and we can find many definitions that share in common the belief that companies have responsibility for the public good – but they emphasize different elements of this. The ISO 26000 draft, the most recent of these definitions, refers to what companies are responsible for, reiterates the importance of stakeholder involvement and accountability, and adds that responsibility should be integrated into organizational practices. (Blowfield, Murray, 2011) On the other hand there are some critics of CSR and some of them are among the famous economists in the world. Milton Friedman considered corporate social responsibility activities to be useless ballast that is conducting the companies away from the profit. (Ekonom.cz) Nowadays we can't agree with this statement. Many companies are profiting from the CSR activities and they know how to do it. This paper focuses on two different countries, Czech Republic, often called core or semi-periphery country, and Zambia, periphery country with the

rural population living on the breadline. So one would expect the corporate social responsibility concept is something natural and well developed in such a country as Czech Republic. Despite this fact, it is not true. The CSR in this state is in many cases on the interest borderline. Some companies donate other communities, organizations or are part of charity programs. Invested money in these cases is certainly on the right place – in that moment – but it has nothing to do with the sustainable development and creating a shared value for both the company and the community (Kortířová, 2012). According to some researches 76% of the interviewed Czech firms declared they care about their employees, they also try to focus on their transparency. Positive steps in ecology are seen mostly by companies their effect on the environment is direct. The low number of ecologically active companies (44%) is in contrast with the number of firms who think the care of environment is important (Gurská, 2012).

CSR is playing an increasingly significant role in companies' narratives and practices also in

southern Africa, particularly in the case of mining. The international prominence of CSR in mining can be traced to mining's potentially significant negative social and environmental impacts, and the related criticism levied at mining companies from governments, NGOs, and local community organizations (Hamann, Kapelus, 2004). The aim of this paper is to find out how the system of CSR in the chosen mining companies operating in not just geographically different areas is developed.

METHODS AND RESOURCES

The research is focused on two companies from totally different areas. For the comparison with Czech Republic the African Zambia was chosen. The hypothesis could be that the well developed Czech Republic has also better developed concept of CSR. After the pre research in Copperbelt area (Zambia), the result of the own research was not so sure. During the research an analysis of both companies is done. The analysis is based on the basic concept of CSR – so called “triple bottom line” (TBL), coined and vigorously advocated by John Elkington. It represents the idea that business does not have just one single goal – namely adding economic value – but that it has an extended goal set which necessitates adding environmental and social value too (Elkington, 1998 in Crane, Matten, 2010). The triple bottom line represents the economical, social and environmental components of sustainability. All three dimensions are interdependent and mutually reinforcing and need to be addressed at the same time in order to make progress. They need to be integrated. Economic activity should conform with social progress and this should be achieved within limitations posed by natural environment (Madu, Kuei, 2012). The triple bottom line principle is used to analyze the current CSR activities in both mining companies – Severočeské doly, a. s. and Mopani Copper Mines PLC. The analyses is based on secondary data as well as on personal experience of visiting both of these areas and companies. The analysis is helpful to find out if the companies focus on all three pillar activities or just one or two of them. The results from each pillar are compared and evaluated. There is a discussion of the published information and the criticism of both companies by the society.

RESULTS

Czech Republic

“The energy supply in the 21st century is still secured by coal. According to estimates of the International Energy Agency (IEA), coal will have the same importance as oil for the world-wide supply of energy until 2030. The Czech Republic is poor in energy resources except for coal” (Tourek, 2010).

Severočeské doly, a. s.

Severočeské doly, a. s. is the largest producer of brown coal in the Czech Republic. The company was established by the Czech National Property Fund in 1994 by merging two major brown coal producers – the Bílina Mines and the Nástup Tušimice Mines. The company's line of business is mining, processing and selling brown coal and its by-products. Its mining activity is done in the lignite basin on the two separate areas Tušimice and Bílina. The company produces annually around 20 million tons of lignite and possesses the leading position of the market.

The biggest subscriber is the power plant company ČEZ, a. s., which is the only shareholder since 2006. ČEZ is a strong and vertically integrated player. ČEZ Group ranks among the top 10 largest utility companies in Europe. (ČEZ investment in cleaner electricity production from brown coal, 2007), (Item 5 Improving Efficiency of Coal-fired Electricity Production, 2011)

Economic pillar

The company publishes some basic economy data on their website.

Severočeské doly, a. s. is one of the Czech companies which have been enjoying a long-term financial stability. Together with its subsidiaries, the corporation offers secure employment with all related good social welfare benefits, primarily to the population of the Chomutov, Teplice and Most regions, all suffering from high unemployment. By its economic power, the company constitutes a stabilising element in the region and helps to resolve the problems of local urban and rural communities. From the time of its inception, SD has contributed to government budgets in the form of taxes in excess of CZK 3 billion, and paid out to its majority shareholder, the National Property

I: Basic Economy Data

Index	Unit	2007	2008	2009	2010	2011
Market share	%	47.82	46.87	48.61	49.42	53.73
Coarse lignite mining	ths.ton	23 803	22 453	22 364	21 629	25 211
Sales	mill.CZK	10 467	10 702	11 130	11 353	11 231
Ecology expenses	mill.CZK	268,92	308,56	178,37	359,37	546,12
Number of staff to 31. 12.	Quantity	4 878	4 965	5 037	4 999	5 065

Source: (Vybrané ekonomické, provozní a finanční ukazatele, 2013)

II: Social pillar activities

Activities
Support of publishing books that introduce the history and modern coal mining in the region, mainly focusing on promotion of responsible treatment of the nature after the mines closing.
Multimedia presentation with the title "Land Reclamation" was awarded with several awards on national level.
In the long run the grant „Grant Severočeských dolů Chomutov“ should help to support education in the area Ústecký kraj in terms of positive change to the "area with better prospect".
The highest priority is friendly communication with the neighborhood towns. They actively cooperate with the regional office and chambers.

Source: *Severočeské doly, a. s. (2013)*

Fund almost CZK 1 billion after tax. Apart from paid taxes and dividends, the region's local councils have received tens of millions of crowns in the form of mandatory levies from the mined mineral (Severočeské doly, a. s.).

Social pillar

Severočeské doly, a. s., as a member of the Group ČEZ, states they regularly inform about profits and economy data, about internal events and about all facts influencing the environment. Part of the company's strategy is the communication with towns and community in the mining area, creating positive image of the company and keeping the sustainable position of the subject which is influencing the life in its area by its activities.

Between 1994 and 2001, the corporation distributed more than CZK 390 million. Major beneficiaries were local councils, which received 56% of the total amount, mostly for developing infrastructures. Most of these monies are used by local councils to finance the construction of new, or reconstructions of existing roads, pavements, power distribution systems, etc. In the areas of sports, free time and developing talents of children and youth, distributed to sports clubs in the Chomutov and Teplice regions was more than 18% of the total amount, and to health and social welfare 13% (the assistance went among other facilities to NsP Kadaň, Chomutov, Teplice and Masaryk's Hospital in Ústí nad Labem), to education and science 7%, schools of various tiers obtained funds for modern teaching aids such as computers. To institutions of culture and environment was distributed 5% of the total amount and the remaining 1% to other areas. They focus on the areas of donorship and sponsorship and try to spread their activities into geology and archeology area as well. (Severočeské doly, a. s.)

Environmental pillar

The company's mission is not just the excavation of coal for the energy sector. The company is fully aware of the need to compensate for the natural sources it exploits by cleaning up the consequences of its mining activities. The thorough preparation and implementation of re-landscaping and restoring environmental stability on completion of brown-coal mining is one of the company's basic areas of activity. To this end, the company creates

financial reserves for cleanup and reclamation and provisions to settle mining damage. The company invests resources from these reserves into financial instruments in accordance with a suitably conservative risk policy.

In the environmental pillar they have two objectives: striving to minimize negative impacts of mining and processing coal on the environment, striving to maximize rapid rectification of the negative impacts if they have already taken place.

Coal Accounts for 44% of primary energy consumption in 2010. Coal production 2010: brown coal 43.8 million tones, hard coal 11.7 million tones.

„Environmental program and future strategy ČEZ Group: 1992–1998 ČEZ has implemented the broad environmental program (EUR 1.5 billion) in the fleet of coal-fired power plants: 28 desulphurization equipments + 7 fluidized-bed boilers installed. Ash precipitators reconstructed. Control system modernized.” ČEZ Group emission change 2006/1993 represents: -92% SO₂, -95% dust, -77% CO and -50% NO_x. The fleet of coal-fired plants is renewed by new units' construction and by refurbishment of existing units. Project Tušimice: Enhancing net efficiency from 33% to 38%, lifetime extension till 2035.

Zambia

For almost a century, Kabwe, a city of 300,000 in Zambia, has been highly contaminated with lead from a government-owned lead mine and smelter, Zambia Consolidated Copper Mines (ZCCM). Although the mine has been closed since 1994, residents continue to get sick and die from the contamination due to a lack of cleanup efforts on the part of the company and the government.

The World Bank and the government of Zambia have taken notice of this human health tragedy. In 2003, the World Bank approved a \$15 million grant and loan to clean up this city as part of the larger Zambian Copperbelt Environment Project (CEP) (Blacksmith Institute, 2013).

But this would not be necessary if the mining companies behave responsibly to the environment and the community. To avoid such problems, those companies, which became aware of the situation, try to implement the CSR system in their operations. One of them is the joint venture Mopani Copper Mines.

III: *Environmental pillar activities*

Interest areas in environmental pillar	Activities
Air protection	<p>Dust on mines is generated by coal mining operations and overburden stripping, as well as by their transportation. In practice, dust generation on both mines is reduced by:</p> <ul style="list-style-type: none"> ● Building dust-free roads and sprinkling dusty roads ● Covering conveyor belt transfer points ● Installing wet surface separators and steam sprinklers in coal processing plants ● Deploying industrial vacuum cleaners ● Putting all coal-fired boilers on both mines out of operation ● Two types of measures are deployed to reduce gas emissions
Water	<ul style="list-style-type: none"> ● Nástup Tušimice Mines: modernization of mine water treatment plant and wastewater treatment plant ● Treated and certified products of coal burning are used on the mines for instance for land reclamation purposes or as a stabilizing material in building dumps. Treatment and use of building wastes: At Bílina Mines and Nástup Tušimice Mines are in operation crushers and a building waste sorting line; the products are used for internal needs of the mines in the construction of mine roads and drainage systems. Equipment for biodegradation of substances contaminated by petroleum products has been built using state-of-the-arts technologies and meeting all legislative requirements. ● Quality of water discharged is controlled by own certified laboratory.
Noise	<ul style="list-style-type: none"> ● Special events carried out to protect the inhabitants from excessive noise from engines and exhaust gasses emissions ● Noise monitoring in all residential communities which are affected by the mining operations is done monthly on a regular basis by an independent laboratory accredited for noise measurements, and the results are sent also at monthly intervals to the affected communities. If they wish, council representatives can be present at these measurements. ● using balanced conveyor belt rollers ● using better quality, less noisy transmissions ● covering conveyor belt drives ● building acoustic screens around certain conveyor drives and central components ● building protective earth bulwarks and forest strips in advance.
Waste management	Decreasing amount of waste: in Nástup Tušimice mines in total produced 2 780 tons of waste in 2011, this is by 641 tons less than in 2010. In Bílina mines in total produced 3 583 tons of waste, 808 tons less than in 2010.

Source: Skupina Severočeské doly, Výroční zpráva 2011

IV: *Basic information*

Basic Information	
Owner	Glencore International (73,1%), First Quantum Minerals (16,9%) and ZCCM (10%)
Mine type	Underground copper
Locations	Mufulira and Kitwe
Founded	Mufulira 1933Nkana 1932
Current mine life	20 years
Output	161 000 t/y
Employees	16 000
CEO	Tim Henderson

Source: Mopani spending \$560 m to triple production (2013)

Mopani Copper Mines

Mopani Copper Mine PLC is an integrated copper and cobalt producer located in the Copperbelt of Zambia. Mopani's operations consist of four underground mines, a concentrator and a cobalt plant in the town of Kitwe and an underground mine, concentrator, smelter and refinery in the town of Mufulira. The capacity of the Mufulira Copper Smelter is being expanded in a phased approach to 870,000 tons of concentrate by the end of 2010. The

current capacity with the new Isa smelt furnace is 650,000 tons of concentrate (Mopani, 2013).

Mission statement

Mopani creates wealth honestly and responsibly from the production of copper and cobalt metals. It achieves this by balancing – in a socially responsible manner – the factors of economic growth, profitability and shareholder satisfaction, with the

V: *Economic pillar activities*

Activities
Provide adequate and appropriately trained resources to ensure the successful implementation of their policy
Measure success by achieving targets toward their goal of zero harm
Produces on average 113,000 Metric Tonnes of finished copper per annum
Has invested close to US \$2 billion since privatization in 2000
Is extending the life of Nkana mine by 25 years by investing US\$320 million in the Nkana Synclinorium Shaft project
Spends on average K3.8 trillion on local suppliers per annum
Provides employment for over 16,000 people – 8,000 direct employees with a complement contract labour of more than 7800; has created more than 7,200 additional jobs since (according to Henderson, at present, MCM is the largest and the most profitable employer in Zambia)
Pays on average K282 billion in taxes to government per annum

Source: Mopani materials, European Investment Bank, Mining Weekly

protection of human safety, health and the natural environment.

Core Objective

Mopani has established a competitive advantage in its core business to create wealth for its stakeholders. Mopani's core objective is to achieve unit costs for copper in the second lowest quartile on the international cost production curve

Mopani is presenting itself as a sustainable employer and reliable business partner which creates wealth honestly and responsibly from the production of copper and cobalt metals by balancing – in a socially responsible manner – the factors of economic growth, profitability and shareholder satisfaction, with the protection of human safety, health and the natural environment (MOPANI materials and leaflets).

We can divide the activities in three areas according to the triple bottom line:

Economic pillar

On 25 February 2005, the European Investment Bank (EIB) signed a Finance Contract with Mopani Copper Mines Plc (MCM) – ultimately majority owned(1) by the Swiss group 'Glencore' – for an amount of USD 50 million under the ACP-Investment Facility (using EDF) to partially fund the first phase of the renovation and modernisation of the Mufulira copper smelter to reduce the emissions of sulphur dioxide (SO₂). Total project costs were USD 130 million and the remaining USD 80 million were financed from own funds of the borrower. The EIB loan was fully disbursed in April/August 2005. The project was successfully completed by mid 2007, and is effectively eliminating half of the SO₂ emissions of the smelter. A further and final reduction of SO₂ and dust emissions is planned for latest 2015, when MCM will have completed the construction of the second acid plant without co-financing by the Bank. This will render the smelter compliant with local and World Bank emission regulations. MCM's debt service to the Bank has always been excellent and the loan is expected to be fully reimbursed by end 2016.

In Zambia the copper industry, estimated to represent more than half of the country's GDP, plays a crucial role in enabling economic development. The Cotonou mandate, under which the Bank has financed the Mopani project, refers specifically to mining as one of the sectors eligible for funding, while environmental protection remains an explicit priority of all EIB lending, inside and outside the EU. The Mopani operation has generated over \$380 million in tax payments to the Zambian government since privatization in 2000 through royalties, import/customs duties and income taxes. (Mopani materials, European Investment Bank)

Social pillar

Activities done in social pillar could be summarized in the following table.

Environmental pillar

Mopani focuses on the environmental activities too. The most important are introduced in the Tab. VII.

DISCUSSION

When reading the paper the reader could get a really good impression about the activities done by mining companies in both countries. Still some irregularities could be observed. For example, Severočeské doly, a. s. state on the webpage that the environmental protection is for this company one of the major priorities and the costs on the environmental protection annually reach almost 500 mill. CZK. This is slightly in opposition to the results written in the Tab. I (Těžba uhlí a její vliv na živ. prostředí, 2013). The problem could lie in the fact that the webpage is not continuously innovated since 2006. Another not very positive argument is that the strategy and communication director, Vladimír Budínský, said they do not publish the amount of money expended on CSR activities. The reason is that there could be "not healthy" competition among the support recipients. (Státní sponzoři Kovarčickovy konference: Budvar a Severočeské doly, 2013). But is it really what transparency means? The only shareholder of this

VI: *Social pillar activities*

Activities
Identifies, assesses and manages risks associated with their operation to employees, contractors, visitors and the environment
Comply with all Zambian statutory requirements and apply pertinent international health, safety and environmental standards reflecting Mopani's commitment to continual improvement achieving leading industry practice
Communicate with and engage all employees and affected parties to build relationships on honesty, openness, mutual trust and involvement
Ensure that contractors and visitors are aware of the health, safety and environmental aspects of their activities on site
Regularly review and report publicly on progress and HSE performance outcomes
The company operates on a policy of "Meritocracy" which means that the right people are employed with the right skills in the right jobs, irrespective of race, gender or creed.
Support services include Engineering Workshops, both surface and underground, Supply Chain activities, Training and Administration, Finance and IT, Employee Relations, Quality assurance and Analytical Services, Safety and Environment, Corporate Affairs and medical Care
Advise on the responsible use of their products
Running two primary and two secondary schools at each site
Building road infrastructure
Mopani spends about K85 billion per annum on Corporate Social Responsibility
Has constructed over 1600 individual sanitation units to replace communal toilets in Wusakile Township at a cost of US\$4.5 million
Is supporting the development of both major and minor sports in Zambia and spends about US\$ 320,000 annually
Is supporting 14,000 people on HIV/AIDS care and ART
Has provided free VCT services to over 45,000 since 2003
Runs two ISO certified hospitals in southern Africa – Malcolm Watson and Wusakile Hospitals
Is improving road infrastructure in Kitwe at a cost of US\$ 10.5 million
Is spending over K1.2 billion on staff training and development annually
Is protecting over 30,000 households from malaria annually through IRS

Source: (MOPANI materials and leaflets)

VII: *Activities done in environmental pillar by Mopani*

Activities
Set and achieve targets that include sustainable use of natural resources, minimizing pollution and care for their environmental and cultural practice
Mopani has invested US\$450 million in the upgrade of the Mufulira smelter to end the 70-year old problem of sulphur dioxide emissions by 2013
The new oxygen plants for the copper and the cobalt operations are now being built, as well as the new roaster in the cobalt plant.
Along with these upgrades, SMS Demag is busy installing a matte-settling furnace, which will remove a significant portion of any copper remaining trapped in the slag. This project is a new departure for MCM and promises to recover about 30 000 t of copper a year that otherwise would have been discarded.
MCM is also busy erecting a sulphuric acid plant, which is being constructed by Grinaker LTA. The acid plant will serve to capture a large percentage of the SO ₂ gases currently being emitted into the atmosphere, and will fulfill what was one of the provisions of MCM's agreement with the government. Importantly, the sulphuric acid plant will supply MCM's latest endeavour, which is the onsite leaching project at Mufulira mine, which will take up 400 t to 550 t of acid a day.
Improve water sanitation in the community

Source: Mopani materials, Mining Weekly, European Investment Bank

company, ČEZ is often criticized for the fact, that they are actually a monopoly and the high price of energy is through the dividends an state budget income, so it's something like a hidden tax. The company ČEZ is mostly criticized by the ecologic organizations and the political party Strana Zelených (Úspěch ČEZu platí lidé zdravím, 2013). They argue that there was the free competition suppressed when selling some companies owned by the state to the ČEZ company (including the mining companies). The critics also say that there is a small support of the so called ecologically more friendly sources of energy and preferring the production from non-renewable resources (Problém ekologizace, 2013).

Also Mopany has some problems with the CSR defense. Not just them but all companies in Zambia are criticized that companies' reports are still primarily about public relations and are not comparable. Another fact is that the privatization of the mines involved significant downscaling of the labor force and increasing mechanization, which has resulted in large scale retrenchments. This has impact on the lives of thousands of families in both urban and rural environments, as well as on organizations involved in local government and service provision. National infrastructure support programs followed, however, though these CSR initiatives are commendable, they have not been able to fundamentally introduce accountability and fairness into the development process. According to Humann and Kapelus (2004) it is possible to state that there are still important gaps between mining companies' CSR activities, on the one hand, and accountability and fairness on the other. On the Zambian Copperbelt, CSR activities have played primarily an ameliorative role in the context of significant social disruption and uncertainty in the wake of privatization (Humann, Kapelus, 2004). To conclude this paper, it is possible to state, that both companies, Severočeské doly, a. s. and Mopany Cooper Mine PLC found opportunities

in all three areas of CSR – economical, social and environmental. They use it very well to promote the company as social responsible. They have no financial problems, employ many workers and contribute to government budget by paying taxes. They have good social policy where both of these companies help educate people, openly communicate, support children. All the activities are done according to the current needs in the country/area. It is logical to develop a program oriented on HIV positive people in Zambia as well as supporting and building new hospitals. It doesn't have so much sense in the Czech Republic where aren't so many HIV infected people and some hospitals were discussed to be closed. But some other needs in terms of healthcare could be satisfied and supported by the Czech enterprises. Both companies focus on modernization and protection of the environment. On the other hand, as the common problem of both companies seems to be the transparency. So this is the field were both of them and many other companies trying to implement and develop the CSR concept should focus on. Another important thing is the relationship between corporate social responsibility and public relation. As mentioned in this paper the companies PRESENT them as responsible. The other side of this topic is how they really behave. And it is not just a problem of these companies but the problem generally in all industries. Many firms want to be modern and under the influence of globalization try to make the customers see them as responsible company. It is just their PR activity in fact. And this is the difference. If they want to be responsible they have to involve the CSR in all their activities and mainly their corporate strategy. It could be described as Daniela Červenclová from the Bayer Company said. The relationship between CSR and PR is about creating shared values and not about sharing created values! (Petříčková, 2012).

SUMMARY

The aim of this paper is to find out how the system of CSR in the mining companies Severočeské doly, a. s. (Czech Republic) and the Mopany Copper Mine (Zambia) is developed. The triple bottom line principle is used to analyze the current CSR activities in both mining companies. The analysis was helpful to find out if the companies focus on all three pillar activities or just one or two of them. According to the results both companies do activities in all three pillars but despite this fact both of them are criticized by other subjects. The criticism identifies the same problem in both areas – the concordance between the information published and the activities really done. Some facts aren't published at all. So the missing part of the CSR concept in both companies is the transparency and the coherence between CSR and PR activities. This is the area they should focus in the near future.

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