Corporate Social Responsibility and Sustainable Development

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Executive Summary

The research report is prepared to elucidate corporate social responsibility and sustainable development practices in cobalt mining activities in the Democratic Republic of Congo. Instead of focusing on CSR activities and sustainable development initiatives of any one particular business organisations. This report paints a broader picture brought by the effect of CSR and sustainability practices on Congo's small scale artisan cobalt mining industry. The effects are explained with the help of evidence-based social and environmental impacts. The reasons for such accelerated impact are also covered in the same section. To help the reader understand the sustainability model under which these effects have occurred two theoretical frameworks are presented, ethics of rights and the triple bottom line model. The former model upholds the importance of respecting another individual's human rights, while the latter focuses on value creation. The next section covers the initiatives taken to reduce the damage done, socially and environmentally on a holistic scale. A case study of the sustainability practices of Alcoa and its effectiveness is also prepared to draw an analogy from the mining industry. Lastly, the conclusion and recommendation section reiterate the findings of the research report with suggestions on improving the social and environmental dynamics of the mining industry of Congo.

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Introduction

The research report focuses on the issue of corporate social responsibility and sustainable development practices that led to the rampant increase in cobalt mining in the Democratic Republic of Congo (DRC) region of Africa and the consequent impact on the environment, and society particularly the use of child labour. To give a meaningful approach to the research paper, it is structured into four parts. The first one gives a detailed examination of the problems arising due to the excessive cobalt mining operations in the Democratic Republic of Congo. It is supplemented with facts and justifications about its impact on the environment of the Democratic Republic of Congo, and how it degrades the natural reservoir and adds to the already pre-existing environmental problems of the region (Hale, 2020). It also elucidates the social suffering from cobalt mining, particularly on the children. The second part of the paper details the theoretical concepts behind the corporate social responsibility followed by corporations pursuing cobalt mining and the conflicts arising from such practices impacting both environment and people. The third part details some of the initiatives followed by local and international groups to safeguard against human rights and child exploitation arising out of cobalt mining. It is also supplemented with evidence of the impact of such initiatives. The fourth part includes a case study that showcases how other organisations uphold the importance of sustainable development practices as part of their corporate social responsibility goals to bring meaningful social and environmental impacts in other mining regions of the world. The last part provides a conclusion that links the first three parts of the discussion with that of the fourth one, the case study and ends with a recommendation

I. Examination of the topic

A) Reasons why cobalt exploitation increased in the past decade

As the supply of natural oil and gas dwindles slowly over time, it became increasingly more important to depend upon the alternative source of energy. This began in an era of chargeable batteries innovation that can power electrical appliances. As demand for more heavy-duty batteries soared, companies started to look for ways to cater to this demand. In this regard, cobalt became an essential item in building car batteries. Cobalt is a rare earth metal present in large quantities in DRC. Cobalt mining accounts for 32% of DRC's national output (Adihe, 2020). The huge presence of cobalt supplemented with very cheap labour cost, and poor government regulations provided ample grounds for cobalt mining exploitation. Cobalt mining operations skyrocketed from 60000 metric tonnes in 2010 to 120000 metric tonnes in 2021, almost twice (Statista, 2022). The need for cobalt is not only limited to batteries but also in

superalloy, carbides, magnets and catalysts. Countries such as USA and China have led the technological race in the past decade and demand for cobalt supply in these regions is higher than in other countries and is expected to rise. The diagram Fig 1 in the appendix gives a brief overview of the hazards and issues that arise from cobalt exploitation in areas such as human rights violations, security risks, and unsafe working conditions.

B) Environmental Impact

Cobalt mining has increased human toxicity in mining workers, especially among children. The diesel-operated machines contributed to ozone depletion. Ozone depletion is a major cause of concern as a compromise in ozone protection will cause harmful effects on humans, especially skin cancer. The toxic waste produced as a by-product of cobalt production is not properly stored, transported or disposed of. This causes eutrophication of the natural water bodies in regions of DRC surrounding the factories. Eutrophication damages the water bodies and causes ecological imbalance. Sometimes, waste handling is so inefficient and unethical that it is dumped and realised in local rivers and ponds, causing toxicity. The environmental impact is not only related to above the ground problems. In some cases, the factories and mining houses will use the available groundwater as a cheap source for water replenishment in their production facilities (Hisan Farjana et al., 2019). This causes depletion in the groundwater level and causes water scarcity in regions heavily dependent on groundwater availability. Studies carried out by researchers related to children's health are more alarming as there are indications of oxidative DNA damage due to pronged exposure to toxins associated with cobalt mining (Banza Lubaba Nkulu et al., 2018)

C) Social impact

The heavy demand for cobalt in major industrial appliances and the constant need to cut down production costs have led to resorting to tactics based on unethical grounds. A direct implication of production cost reduction is the use of dirt-cheap child labourers. Out of the total 255000 mining units in DRC, there are 40,00 children at work. Some of these children are as young as 6 years old. Many child labourers work in informal small mining camps that earn less than $2 per day. Most of the working tools used by children are bare hands and rudimentary tools (Fabiola Lawson, 2021). Apart from child exploitation, other social impacts include increased violence and lawlessness, people resorting to substance use as means of relief and euphoria, and certain regions witnessing prolonged food and water insecurity (Science Daily, 2021). Mining workers also reported deteriorating physical and mental health. Dependency on cobalt as mining and extraction has led to increased selling of community land, farmlands and

homes. Loss in farmlands made people dependent upon produce from other communities and villages for food supply.

II—Theoretical Framework

A) Triple Bottom Line Model

The sustainability of organisations is prolonged when their actions are in sync and aligned in the three dimensions of environmental, social, and economic value. The value generated from the 3 dimensions should benefit the organisation and the environment in which it is thriving, which includes all living and non-living objects (Braccini and Margherita, 2019). The value generated is important for the present participants in the process and important for the sustenance and survivability of the ones that will come in the future. On the environmental front, the key factors that add value are renewable energy, low emission, low wastage, maintaining biodiversity, and pollution prevention. Cobalt mining has led to increased pollution, poor waste management, high greenhouse gas emissions, and biodiversity loss. The key factors that add to the social value generation are equality and diversity, well-being, community development, improved labour standard, health and safety (Braccini and Margherita, 2018). DRC witnessed some of the longest-running civil wars in human history, which led to the country's poor economic stability, which is compounded even more by poor governance. Thus, the labour laws and standards are not resilient enough to withstand the foreign onslaught. This is aggravated even further when foreign organisations indulge in mining exploitation.

Thus, there are very poor standards to maintain equality and diversity in the workforce. The community development programs are very few and the importance of workers' health and safety in working environments is kept on the back burner. Apart from the social and environmental aspects of value generation, the economic value, that forms the heartland of organizations' survivability is also discussed. Some of the key factors of economic value are profit generation capacity, business stability, financial resilience and return on investment. Without enough profit, the survivability of an organization becomes a question (Müller and Voigt, 2018). The heavy demand for cobalt from the USA and China and new business contracts with existing and new mining companies point to no run up on profits in the immediate future in the mining business. As the energy demand is supposed to increase at a steeper rate in future, there is no danger to the long-term viability of the business, as there will always be an equivalent increase in cobalt demand.

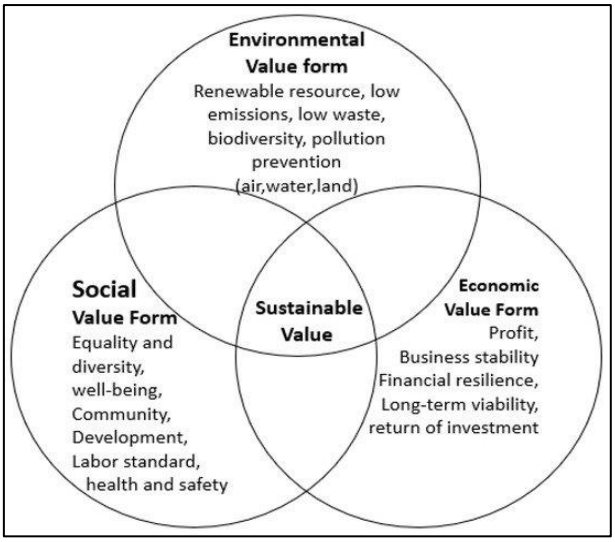

Fig 3: Triple bottom line model in sustainability

Source: (Braccini and Margherita, 2019)

B) The Ethics of Rights

The factors that help in the sustainability of a business are important to understand how it interacts with the present environment and the future. But the ways, means, guidelines and policies and actions that are carried out for its sustainability are based on certain rights (Penn, 2021). The business has bestowed rights upon itself within the scope and limitations of its environment. This begs the question of the legitimacy of rights. Regarding the answer to this question, the ethics of rights need to be understood. There are three approaches to the right formulation. One approach is based on claims made, the second one is rights formulated on facets of morality, and the third one is rights based upon moral pride and political theory (Kapoor, 2019). The three different approaches present a conflict of interest. This can be explained in the present context. The right a business organization owns is driven by the principles it chooses to focus on. That is why the three value generation sections are explained in the previous section. A business choosing to focus on what is beneficial solely for its own sake is in direct conflict with the environment as the latter can choose to safeguard its interest (KSL, 2019). Thus, both parties can agree that their rights are based on ethical grounds based on individual needs. That is why the ethics of rights states that every individual through his or her existence has inherited fundamental rights on their own and others should respect these rights as part of their duty. Such fundamental rights need to be respected in a business relationship also. Some of the basis of fundamental rights stated in the Declaration of Universal

Human Rights need to be respected by both businesses and individuals. The case of mining exploitation in DRC is riddled with mass violations of human rights.

III – Initiatives

A) Formalization of artisanal small-scale mining

The artisanal small scale mining industry that employs children to a large extent to carry out its manual tasks saw some major improvements. To support safe and ethical practices, 'Cobalt For 2019' was launched in 2019. This initiative involves a planned process to create more sustainability in the artisanal small scale mining belt regions. This project ran for an initial period of 3 years. During this period, a detailed analysis was carried out on ways to improve the lives of the workers, improve the working environment, and overall development of the community (Fabiola Lawson, 2021). Any improvement without input from the local community is not sustainable. This problem was understood. So, the 3 years initial analysis gave special weightage to inputs in form of a suggestion from local people. This also increased the sense of local ownership and responsibility. As local individuals found their suggestions being put into action, they were able to bond with the efforts of the development program. Some of its planned activities led to the development of over 1800 community members, especially around the Kisote and neighbouring regions of the Democratic Republic of Congo. These developments included affordable and easier access to education, conducting training programs and workshops on various ranges of topics such as the production of bread, resolution of conflicts, upholding women's rights and positive parenting. Due to a lack of education and no knowledge of the merits of positive parenting the families used to depend upon children as another source of income. These initiatives helped the parents realize the dependency on child income can be decreased and even eliminated through diversification of their income sources.

B) Fair Cobalt Alliance

The mass human rights violations in mines of the Democratic Republic of Congo generated huge worldwide public condemnation for unjust business practices by foreign organisations. In the wake of such condemnation, a program called 'Fair Cobalt Alliance' was launched in the year 2020 (Fabiola Lawson, 2021). This new initiative was aimed to provide support for artisanal miners. The support namely came in the promise of overall improvement of the condition of the workers and complete cessation of children as labourers in the mines of DRC. UNICEF collaborated with the Global battery Alliance to raise US$ 21 for 'Fund For Prevention of Child Labour in Mining Companies' for DRC (Unicef.org., 2020).

C) Creation of the first modern cobalt mining cooperative

To create a fresh image of Congo devoid of such deplorable working conditions in mines, some of the big technology companies have completely severed ties with small artisanal mining companies. This presented an opportunity to set up a modern cobalt mining cooperative in the country. China recognised this opportunity and formed a partnership with the provincial government of the Lualaba region to form the country's first model cobalt mining cooperative (Edition.cnn.com., 2022).

IV – Case study

A) Sustainability initiative of Alcoa

The case study presents a brief presentation of a company or business that faced similar issues in the creation of sustainability and strategies used to alleviate such issues. Alco, which is a Fortune 500 Company depended highly on bauxite mining and its operations as such were highly exposed to the political turmoil. It always emphasised the adoption of sustainable business practices (Vidhi and Shrivastava, 2020). This was evident in its annual sustainability report that indicated Alco's focus areas as climate change, air quality and waste management. Alco based its mining operation out of developing countries where employee welfare and development were never put on the backburner. So, Alco understood the importance of local community development. Some of the main factors on which Alco developed its sustainability strategy are

1. Creation of sustainable value for the local communities in places of mining activities. This addressed the social value creation of the triple bottom line model as presented in section II.

2. Increase product differentiation to increase its value and subsequently its profitability. This fulfilled the requirement of economic value creation of the triple bottom line model.

3. Minimizing the negative impacts on the environment and improving the safety and health performance to bring down long term exposure. This aptly addressed the environmental value creation of the triple bottom model.

B) Effectiveness of Alcoa's Sustainability Practices

Alcoa was able to increase its customer loyalty, and loyal employee base as well as increases its supply chain base by working towards local community development. Product differentiation helped Alcoa develop new technologies, which in turn helped it gain a long-term competitive advantage. By minimizing negative environmental impacts and long-term risk exposures, Alcoa became more resilient to external shocks. This way Alcoa achieved

growth in profitability by increased community engagement (Vidhi and Shrivastava, 2020). There are still few incidents of greenwashing involved. Greenwashing arises when an organisation deliberately hides evidence of environmental and social malpractice through the purported adoption of sustainable practices.

C) Unethical practice

Alcoa decided to expand its residual storage area which is highly toxic. This area came within proximity of only 1.5 km away from the residential area. This move was termed an unethical practice by residents of that area in Australia (Vidhi and Shrivastava, 2020).

Conclusion and Recommendations

Conclusion

Artisanal small-scale mining is spread throughout the Democratic Republic of Congo. Over the years the mining industry expanded and inducted residents into its workforce including small children. As there is a relatively fewer alternative sources of income, the residents and children are forced to work in such mines. Due to a lack of proper safeguards against human rights violations and child protection, these mines have become a breeding ground for exploitation by large technology firms. These firms have conducted an innumerable number of greenwashing activities, where they took part in downright social and environmental malpractice under the garb of sustainability practice. The environmental impacts are already evident in the drying up of ponds, lakes, rivers and small water bodies in Congo. Farmlands used for agriculture are giving way to mining, leading to food scarcity. Due to unsustainable practices, there are no concerns and safety for employees' physical and mental health. Toxins from mines have even damaged DNA in children. The theoretical concepts of the triple bottom line model show how to generate value from the ground up, encompassing social, economic and environmental aspects. While ethics of right shows the need of respecting human rights. Through a case study, it is shown how Alcoa aimed to follow sustainable business practices in the three areas of social, economic and environmental but failed to do the same in a few cases.

Recommendations

As long as small-scale artisan mining companies exist, human exploitation will continue. So the first step is the formalization of all such small companies. Instead of keeping too many small mining companies, the number can be reduced to fewer through subsequent consolidation and mergers. This way no one will lose livelihood. Through formalization, guidelines and policies regarding employee welfare in areas of physical, mental health, future opportunities and human rights safeguarding can be ensured. In the process of such formalization, locals

have to be taken into confidence, because without their wholehearted willingness, the process of formalization will not be sustainable. Companies should focus on community development, through women empowerment programs, encouraging education for all ages of men and women and responding to local needs and demands of infrastructure developments. On the environmental front, there is ample need for transparency. International environmental watchdogs should be granted free and unrestricted access to conduct periodic checking into sustainable environmental practices. The readings and reports of such watchdogs can serve as yardsticks for checking the sustainability reports of large tech companies involved in the supply and use of cobalt. This way any activity of greenwashing will come forth. Through blockchain technology companies can track individual batches of cobalt extracted from the mines, right to its end product application and user. This will greatly improve the transparency in the supply chain.

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Appendix

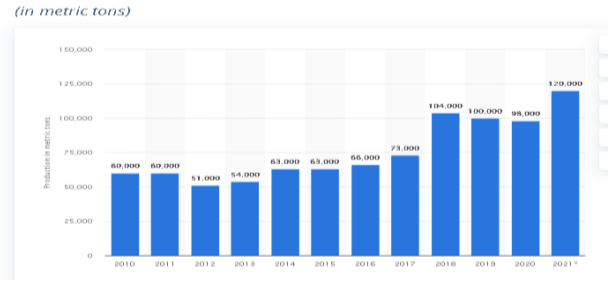

Fig 1: Congo cobalt production

(Source: Statista, 2022)

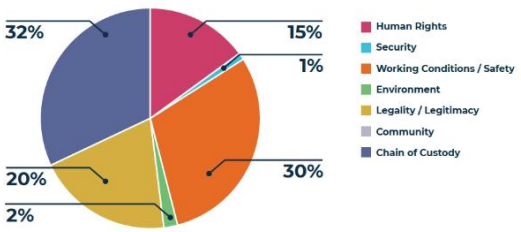

Fig 2: Proportions of registered incidents

(Source: MINING.COM., 2022)

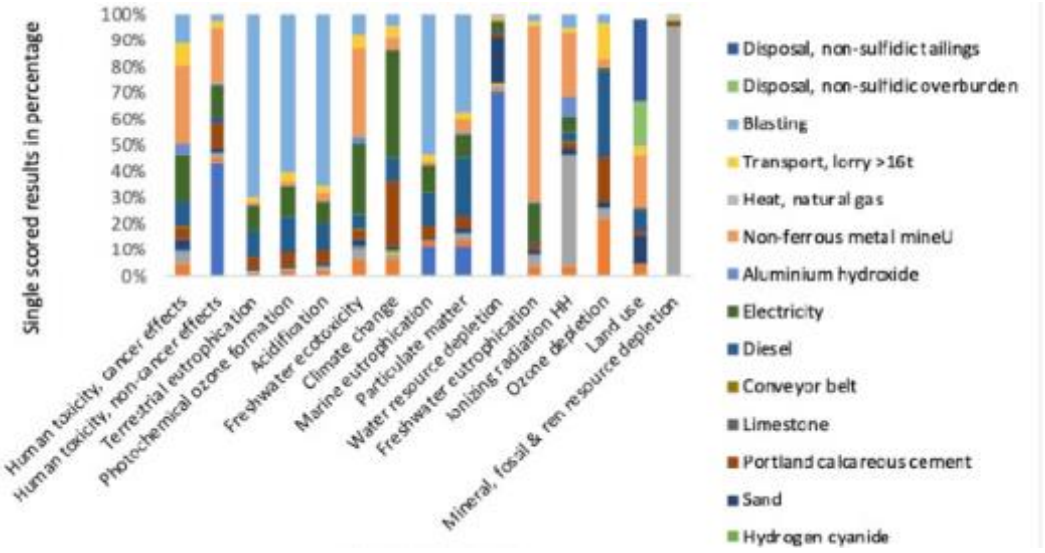

Fig 3: Cobalt mining and extraction impacts on the environment

(Source: Hisan et al., 2019)

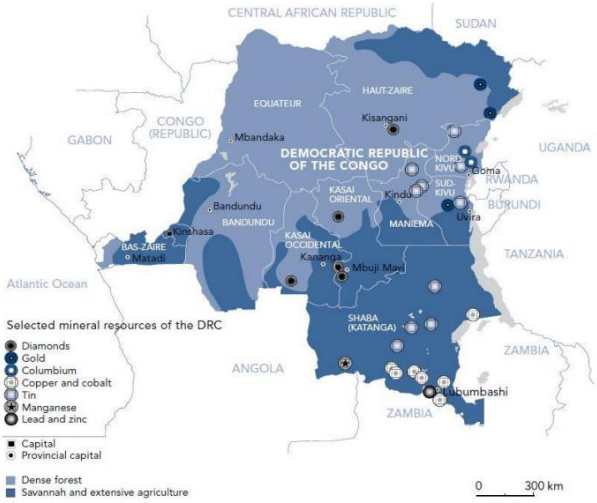

Fig 4: Cobalt mining and extraction impacts on the environment

(Source: Transportenvironment.org., 2022)

Fig 5: evolution of artisanal and industrial cobalt supply in the DRC

(Source: Transportenvironment.org., 2022).