

# Corporate Social and Environmental Responsibility in the Diamond Supply Chain



Nicola Cucari, Ewa Wankowicz and Mario Calabrese

## 1 Introduction

For a long time, the mining sector and its operations have been widely recognized as strongly influencing the natural environment. Therefore, the discussion about corporate social responsibility (CSR) and sustainability has started to consider the mining sector with the aim of improving its environmental and social footprint and responding to the multiple challenges of sustainable development (Azapagic, 2004; Hilson & Murck, 2000; Mudd, 2010). This growing need to integrate environmental and social interests into the business models of the industry is guided by several factors. Firstly, we are witnessing the transformation of the structure of the world mining industry (Szablowki, 2002). Secondly, consumers' demand for luxury goods has been rising noticeably, and transnational mining companies have opened up new regions for mineral exploration and development, particularly in the sector of diamond. The mined diamond production in 2017 is estimated to be 142.3 million carats, worth \$15.6 billion, which would be an 11.5% increase in the carat volume produced over 2016 and a 9.9% increase in the total value produced. The diamond production data, collected by the Kimberley Process Certification Scheme (KPCS) in volume (carats) and US dollar value, show that South Africa occupies an important position. South Africa is endowed with large amounts of mineral wealth and is a global player with regard to the production of minerals and mineral-related products (Mutemeri & Petersen, 2002). Historically, South Africa's mining industry has been a major employer and contributed 7.7% to the gross domestic product in 2016. The sector also accounts for 25% of the exports in Africa's most industrialized economy.

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N. Cucari (✉)  
University of Salerno, Salerno, Italy  
e-mail: [ncucari@unisa.it](mailto:ncucari@unisa.it)

E. Wankowicz · M. Calabrese  
Sapienza University of Rome, Rome, Italy

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While it may no longer dominate the South African economy to the same extent that it did a few decades ago, the mining industry remains a key source of direct and indirect employment, export earnings, and tax revenues (FTI Consulting, 2017).

Zimbabwe is among the top diamond producers, and mining has spawned urbanization, economic growth, and prosperity (Kamete, 2012), but many mining companies have closed their operations in recent years. As Muchadenyika (2015, p. 714) stated, many of “these once vibrant mining towns degenerated into ghost towns, closures which have adversely affected communities which have traditionally relied on the industry for their livelihoods”. Zimbabwe is also a member of the Kimberley Process (KP), a government-to-government certification scheme for rough diamonds set up in 2003 to prevent diamond-fuelled conflict and human rights violations. It is possible to distinguish four districts where diamonds are mined: Marange, Buhera, Chipinge, and Chimanimani. Zimbabwe received Kimberley Process certification to sell Marange diamonds in March 2011, despite contestations among other Kimberley Process members. Whilst much of the research work in the diamond literature has focused on transparency, human rights, and resource flows, this chapter examines the sustainability of the supply chain applied in the diamond sector. In recent years, there has been a growing emphasis among government organizations (i.e. the US-based Sustainable Minerals Roundtable, the Canadian Minerals and Metals initiative, and the European Industrial Minerals Association) on sustainability-related aspects. In the mining industry, for example, the Global Mining Initiative (GMI) brought together many of the world’s largest mining, metals, and minerals companies, showing the importance of creating an industry association that could focus on sustainable development in the sector and an independent analysis of the key issues facing these industries. This progress has been accompanied by conflicts with local communities (Mugova, Mudenda, & Sachs, 2017) as well as a new challenge in the supply chain operations management in the diamond sector to implement sustainability issues in traditional supply chain management. Alongside this, a plethora of CSR principles, codes of conduct, and reporting guidelines have been developed, and more companies are signing up to such codes, indicating their commitment to meeting certain standards and principles regarding their behaviour in the marketplace. The Kimberly Process, African Diamond Producers Association (ADPA), International Diamond Manufacturers Association (IDMA), and Responsible Jewellery Council (RJC) may constitute evidence of the progress.

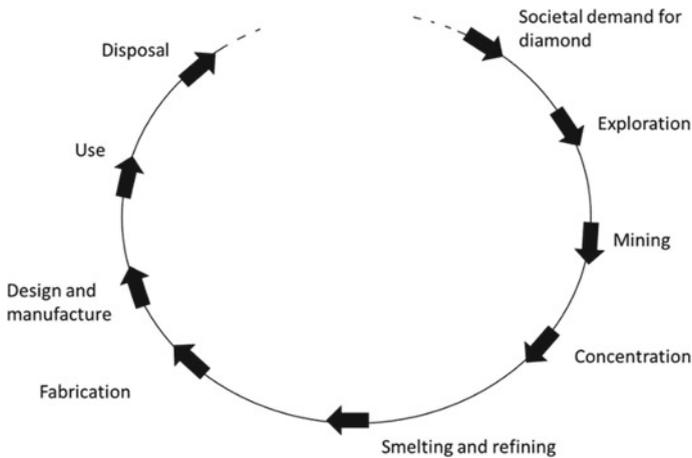
The paper attempts to bridge a gap in the sustainable development and mining literature by clarifying exactly how a sustainable supply chain can be applied in the diamond sector. In this context, this paper aims to illustrate and conceptualize a phenomenon so that appropriate theorizing and the development of further areas can be advanced. Our research question is: “*how can diamond companies manage sustainability internally and within their supply chain?*” We explore the sustainable practices promoted by the mining companies to offer a guide for those interested in improving the sustainability of their supply chain. Although the literature has focused on analysing sustainable practices, it has hardly managed to identify the influential sustainable supply chain management practices of producers. In the next sections, the paper introduces a brief description of the current debates on sustain-

ability in the mining industry. The research methodology is then introduced. Next, the results obtained from a descriptive statistical analysis are presented. Discussions and conclusions follow.

## 2 Literature Review

### 2.1 CSR in the Mining Industry

The study of CSR in the mining industry has gained importance within the academic community during the last few years (Govindan, Kannan, & Shankar, 2014; Solomon, Katz, & Lovel, 2008; Cowell, Wehrmeyer, Argust, & Robertson, 1999). Several studies have investigated the strategies of companies regarding sustainable issues (Dutta, Lawson, & Marcinko, 2012; Hassan & Ibrahim, 2012), the effect on local communities (Hilson & Murck, 2000; Jenkins & Yakovleva, 2006), sustainable reporting and environmental disclosures (Fonseca, McAllister, & Fitzpatrick, 2014), the mechanisms that stakeholder groups use to influence corporate social responsibility (Viveros, 2017), and governance factors, codes of conduct, and policy reforms (Campbell, 2012, 2003). More generally, the literature seems to indicate that mining companies have increased their environmental consciousness (Hilson & Murck, 2000; Vintró, Sanmiquel, & Freijo, 2014; Zhu, Geng, Fujita, & Hashimoto, 2010). Mining activities mainly consist of the extraction, processing, and transportation of minerals from mining sites to the marketplace. Figure 1 depicts a typical mineral life cycle and highlights the key operations and activities from material production through product design/use to end-of-life recycling and disposal.



**Fig. 1** Typical mineral life cycle. *Source* adapted from Fleury and Davies (2012)

Different authors have conducted case studies of mining companies in different countries. For instance, Vintró et al. (2014) examined the adoption of environmental practices in small and medium-sized companies in the surface mining industry in Catalonia (Spain). Macedo, De Freive, Jose, and Akimoto (2003) provided an overview of the historical and present conditions of the Brazilian non-metallic small-scale mining industry, together with the efforts made by governmental and non-governmental organizations to improve mining technology and the environmental management of resident operations.

Ghose (2003) focused on some of the key environmental issues in the Indian small-scale mining industry (in particular the environmental management plan (EMP) adopted for small-scale mines in India). Evangelinos and Oku (2006) analysed the mining operations of the Cyclades, examining the regulatory and environmental problems of mining operations and the process of obtaining a “social licence to operate” in the mining operations. Nikolaou and Evangelinos (2010) conducted a strengths, weaknesses, opportunities, and threats analysis of the Greek mining and mineral industry’s implementation of environmental management strategies.

Solomon et al. (2008) explored the Australian mineral industry since the pivotal 2002 Mining and Minerals Sustainable Development (MMSD) project. They identified the current themes, the diversity of mining stakeholder views, and the different ways in which resource policy challenges are articulated based on values, drivers, and interpretations. Viveros (2016) revealed that stakeholders perceive mining impacts on social and environmental domains negatively in contrast to their positive perception of economic impacts. He studied the way in which stakeholder groups in Chile perceive CSR and its impacts on the mining industry through 51 semi-structured interviews. The findings show that CSR is addressed in terms of social and environmental responsibilities but is also perceived negatively as mere rhetoric or simply as a marketing campaign.

Specifically, in Africa, the mining and extractive sector constitutes a significant and increasingly important share of exports and tax revenues (Besada & Martin, 2015), and many unique challenges to and opportunities for CSR in mining are presented in South Africa (Adler, Claassen, Godfrey, & Turton, 2007; Hamann, 2004, 2003; Mutemeri & Petersen, 2002). However, in recent years, the impact of regulations, rising costs, falling productivity, industrial unrest, an unreliable electricity supply, and political uncertainty in South Africa have frequently been cited as the reasons for other locations in Africa and globally now being more attractive destinations for direct investment in the sector (FTI Consulting, 2017). These problems demonstrate the challenge of CSR for companies while considering the needs of a developing nation, environmental protection, community involvement, and international business.

There are several reasons for the importance of CSR and other voluntary initiatives for mining companies: first to “demonstrate that it contributes to the welfare and wellbeing of the current generation” (WCED, 1987) but also to contribute in a meaningful way to sustainable development and add value not just for shareholders (Frynas, 2005; Walker & Howard, 2002).

Indeed, as stated by Jenkins and Yakovleva (2006, p. 272), one outcome of the CSR agenda is the increasing need for individual companies to justify their existence and document their performance through the disclosure of social and environmental information. CSR initiatives are important to obtain a competitive advantage, to achieve and maintain a stable working environment, or to manage external perceptions and maintain a good reputation (Frynas, 2005).

Sustainable development in the corporate mining context requires commitment to continuous environmental and socioeconomic improvement, from mineral exploration through operation to closure (Hilson & Murck, 2000; Jenkins & Yakovleva, 2006). Therefore, mining and mineral industries face challenges in their attempts to implement sustainability developments into the traditional supply chain management.

## ***2.2 Sustainable and Green Supply Chain Management in the Mining Industry***

The link between sustainable development and the mining sector still seems to be somewhat uncharted with reference to supply chains. Managing a supply chain sustainably means integrating sustainability into traditional supply chain management (Jia, Diabat, & Mathiyazhagan, 2015), and it could be the binding that combines the previously mentioned terms. The green supply chain management (GSCM) and sustainable supply chain management (SSCM) concepts are now receiving special attention from academics, practitioners, and researchers (Kusi-Sarpong, Bai, Sarkis, & Wang, 2015; Kusi-Sarpong, Sarkis, & Wang, 2016; Mathiyazhagan, Diabat, Al-Refaie, & Xu, 2015). As perhaps already noted, in many papers on GSCM topics, several authors have defined GSCM as a sustainable supply chain (Jayaraman, Klassen, & Linton, 2007; Linton, Klassen, & Jayaraman, 2007; Muduli, Govindan, Barve, & Geng, 2013; Piplani, Pujawan, & Ray, 2008; Seuring, Sarkis, Muller, & Rao, 2008), although it is argued that SSCM is essentially an extension of GSCM (Ahi & Searcy, 2013).

For our purposes, we adopt the following definition of SSCM: “The creation of coordinated supply chains through the voluntary integration of economic, environmental, and social considerations with key inter-organizational business systems designed to efficiently and effectively manage the material, information, and capital flows associated with the procurement, production, and distribution of products or services in order to meet stakeholder requirements and improve the profitability, competitiveness, and resilience of the organization over the short- and long-term” (Ahi & Searcy, 2013, p. 339). GSCM focuses on the reduction of the adverse impacts of supply chain activities (Muduli et al., 2013); it helps organizations, among others, to optimize the use of resources, to achieve green products, to introduce recycling practices, and to become energy efficient (Govindan, Muduli, Devika, & Barve, 2016; Rostamzadeh, Govindan, Esmaeili, & Sabaghi, 2015; Van Hoek, 1999), thus empha-

sizing environmental issues in the upstream and downstream business enterprises in a supply chain (Govindan et al., 2016).

The growing importance of GSCM has motivated various researchers to discover the factors that influence GSCM implementation (Diabat & Govindan, 2011; Holt & Ghobadian, 2009; Mathiyazhagan & Haq, 2013; Mohanty & Prakash, 2014; Mudgal, Shankar, Talib, & Raj, 2009; Xu et al., 2013; Walker, Di Sisto, & McBain, 2008). More recently, Mathiyazhagan et al. (2015) analysed the pressures for GSCM adoption in the mining and mineral industries, and, from the literature review and a discussion with academics and practitioners from the mining and mineral industry, they identified four groups of pressures: regulations, external sources, financial factors, and production and operation factors. Furthermore, Kusi-Sarpong et al. (2015) proposed a comprehensive and integrative framework of green supply chain practices and sub-practices for the mining industry. They identified six distinctive GSCM practices (factors) and sub-practices (factors), which include green information technology and systems (GITS), strategic supplier partnership (SSP), operations and logistics integration (OLI), internal environmental management (IEM), eco-innovation practices (ECO), and end-of-life practices (EOL).

A few studies have examined SSCM practices, but every negative and positive action affecting both environmental and human health should be evaluated from a supply chain perspective (Massaroni, Cozzolino, & Wankowicz, 2015; Wankowicz, 2016). Sauer and Seuring (2017) found that, although there is an increasing demand for sustainability-related actions within the supply chains that are connected with mineral extraction, there seem to be only a few scientific articles related to minerals that are produced in a sustainable manner.

However, considering the growing trend in recent years of ethical and political movements for conflict-free diamonds, the analysis of initiatives that could support social justice and create a licence to operate for companies is required.

### 2.3 Gap

The mining sector faces some challenging environmental issues in its supply chain (Sivakumar, Kannan, & Murugesan, 2015). Following Azapagic (2004) and a widely accepted categorization of sustainability concerns, CSR is usually addressed by taking a triple-bottom-line (TBL) approach considering three dimensions: social, environmental, and economic (Elkington, 1997).

When trying to explain events, people speculate on cause-effect relationships to validate their hypotheses statistically. People can have different visions while analysing the same case, which is why the interpretation of the facts becomes essentially subjective and often discordant (Von Glasersfeld, 1988). For this purpose, it is relevant to understand whether there is a prospect of producers according to which we can justify the trend, finding consistency in the observed evolution (Baccarani & Golinelli, 2003) to obtain a positive explanation about systems and businesses.

In particular, this kind of study focuses on the dynamic interpretation of the three dimensions: social, environmental, and economic.

The hypothesis, although formulated in an abductive way, seems to be reflected in the mentioned studies but needs to be developed and argued. To this end, the paper will proceed as follows. After evaluating the TBL in the viable system view, we will reflect on the implications of this possible evolutionary principle, trying to abstract rules of general value and drawing possible forward indications.

Achieving this new goal requires a new approach, based on important premises such as: (i) the need for an extended representation, analysing the historical background and thinking about its future; (ii) an acquired consciousness, perfectly in line with the established and shared assumptions and growing in complexity, considering the high variability of interpretative schemes used in the past, from which a better understanding of the main purpose can be achieved.

Regarding sustainability, there are two categories of active forces: (a) the first type of force is connected to the actions of decision makers, which, through procedures of address (laws, rules, and provisions), affect the actions of the communities in the systemic context; (b) the second type of force, derived from a sense of belonging of the participants, inspired by a common purpose and shared rules, is linked to the forces of the first type. The inspiring principle of forces is excluded from the autonomy of action of the pro tempore decision makers engaged in the context; despite being derived from a common feeling, the action of the forces is revealed as an independent and autonomous flow. At this point, the concept of “resonance” is very important. When type 1 and type 2 forces cooperate in a crescendo of positive returns, a condition of alteration of individuality, in the end they proceed towards symbiotic behaviour. These last considerations allow us to affirm that sustainability is not an “absolute” concept; on the contrary, it is characterized by being “subjective”: the notion of context, that is, a portion of the more general environment, the boundaries of which are defined by the governing body and elected to the territory of the specific action of a viable system, implies that the prevalence of one of the three dimensions (environmental, social, and economic) that form sustainability depends on the decision maker. In particular, the favouring of one dimension rather than another, without prejudice to the coexistence of the other two, will depend on the specific context conditions and the orientation given in a specific instant.

### **3 Methodology**

#### ***3.1 Design***

The methodology used, although a heuristic type, refers to the positive method, as practices and occurrences are used to delineate a precise research path. In particular, in our work we intend to refer to the VSA (viable system approach), an interpretative model that was born and developed as explanatory support for the dynamics

of business organizations and that appears to be increasingly able to explain socio-cultural phenomena (Barile, Saviano, Iandolo, & Calabrese, 2014; Saviano, Bassano, & Calabrese, 2010). In the following, starting from the definition of sustainability with a broader scope, some initial critical positions are exposed, from which we then arrive at the prospect of useful elements leading to the introduction of a working hypothesis aimed at producing a possible itinerary for the development of our research project. Furthermore, with reference to sustainability, the critical nature of the relationship and the influence of the various “supra-systems” that populate the supply chain assume importance. In particular, the international strategies that can be implemented against the supra-systems can be as follows (Barile, Nigro, & Trumfio, 2006):

- (1) High influence + high criticality of the relationship: strategies for sharing values;
- (2) High influence + low criticality of the relationship: weighting strategy;
- (3) Low influence + high criticality of the relationship: co-evolution strategies;
- (4) Low influence + low criticality of the relationship: efficiency improvement strategies.

Nevertheless, the design and management of sustainability-oriented management systems must meet the following objectives:

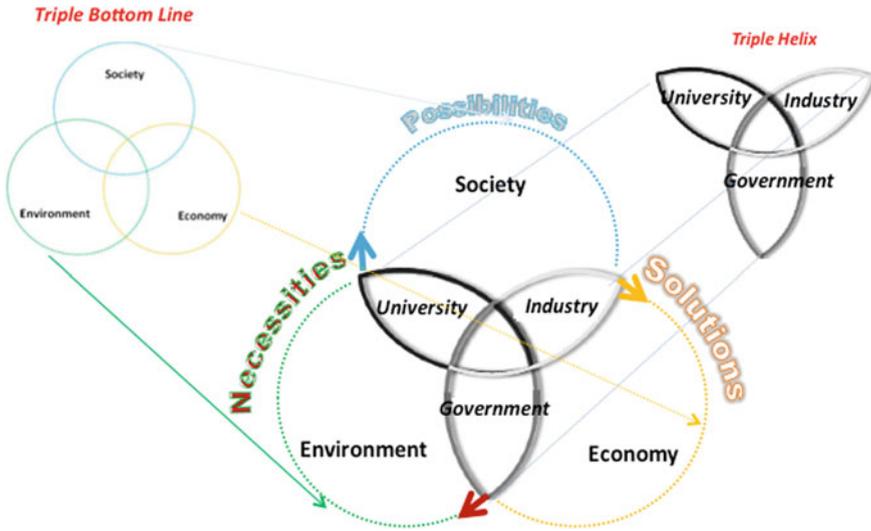
- Compliance with legislative and legislative restrictions: necessities;
- The choice to adhere to voluntary certifications and standards: possibilities;
- The push of the value categories linked to respect for the environment (resources), attention to the economic aspects (adherence to the rules), and attention to the social (results): solutions.

Figure 2 summarizes the conceptual analogies that allow us to identify one general scheme, making evident the mechanism of what we identify as the “triple propeller of change”.

Highlighted in the representation of Fig. 2 are the recognition of the scheme’s general principle underlying sustainability and the VSA, thus opening up further parallels and allowing a glimpse of another specific scheme that is hidden in the reported model: the model of the triple helix. Conceived as a model of innovation in the 1990s by Etzkowitz (1993) and Etzkowitz and Leydesdorff (1995), the triple propeller is actually based on the general scheme of the dynamics of change that unfolds between evolution, adaptation, and development, a pattern that clearly appears in the viable system perspective.

### 3.2 *Sample*

According to the World Diamond Council, CSR has been promoted by multiple associations, organizations, and NGOs: to mention a few, the African Diamond Producers Association (ADPA), the International Diamond Manufacturers Association



**Fig. 2** A scheme of synthesis of the triple helix of sustainability. *Source* Barile, Saviano, <http://www.asvsa.org>

(IDMA), the Diamond Development Initiative (DDI), and the Diamond Empowerment Fund. This research analyses the contribution of diamond producers, members of the Responsible Jewellery Council (RJS), to corporate social responsibility. The RJS has been selected for this research as it permits us to analyse the role of entire diamond supply chains in social and environmental sustainability. However, none of companies extracted from the RJC database were operating in the Marange. To assure the alignment with the call for papers, the research goal of the contribution, and the completeness of the research, we include the analysis of one producer in the Marange diamond fields.<sup>1</sup> The social dimension, which is related to social well-being (Hassini, Surti, & Searcy, 2012), is analysed through the impacts of business on communities. The integration of social sustainability into supply chain management is often seen through corporate social responsibility (Mani et al., 2016). The environmental aspects “measure evaluates the extent to which firms reduce their environmental impact through a reduction in hazardous materials, resource consumption, greenhouse gas emission, waste disposal and waste water drainage” (Massaroni et al., 2015; Wong, 2013, p. 125).

A general description of the sample is provided in the following Table 1.

<sup>1</sup>The territory of Zimbabwe presents particularly fertile ground for the extraction of gems and minerals. From the 1990s until 2006, De Beers was granted an exclusive prospective order (ETO) by the Zimbabwe Government. After 2006, the UK-based company African Consolidated Resources received the revocation of rights for diamond exploration and mining. Subsequently, the diamond fields have been operated under the government-affiliated Zimbabwe Mining Development Corporation.

**Table 1** General overview of the companies included in the research

Producer	Headquarter/year of establishment	Operations	Short description (focus)	Website
De Beers Group of Companies	London, United Kingdom, 1888	35 countries, mining takes place in Botswana, Namibia, South Africa and Canada	Diamond exploration, mining, retail, trading and industrial diamond manufacturing sectors (international corporation)	<a href="http://www.debeersgroup.com/">http://www.debeersgroup.com/</a>
Lucara Diamond Corp.	Canada, 2004	Operating in southern Africa 100% owns Karowe mine	Diamond exploration and mining	<a href="http://www.lucaradiamond.com">http://www.lucaradiamond.com</a>
Rio tinto Group	– London, United Kingdom (Global headquarters & Rio Tinto Plc) – Melbourne, Australia (Rio Tinto Limited) 1873	Operates 3 diamond mines: the Argyle Diamond Mine in Western Australia (100% ownership), the Diavik Diamond Mine in the Northwest Territories of Canada (60% ownership), and the Murowa Diamond Mine located in Zimbabwe (78% ownership)	One of the world's largest metals and mining multinational corporation	<a href="http://www.riotinto.com">http://www.riotinto.com</a>
Dominion Diamond Corporation	Canada, 1994	Own the world's highest rock value diamond mines—Diavik and Ekati	Diamond mining	<a href="http://www.ddcorp.ca">http://www.ddcorp.ca</a>

(continued)

Table 1 (continued)

Producer	Headquarter/year of establishment	Operations	Short description (focus)	Website
Alrosa	Russia, 1992	<p>Its main mining and processing operations are located in two Russian regions: The Republic of Sakha (Yakutia) and the Arkhangelsk region in the northwest of the Russian Federation. Alrosa is also launching prospecting and exploration works in Angola and Botswana. Alrosa operates in the Republic of Angola. Mining in the Luanda SulProvince on the basis of the Catoca kimberlite pipe takes place through Sociedade Mineira de Catoca (Catoca Ltd.), the largest diamond producer in Central Africa, 32.8% shares owned by Alrosa</p>	diamond exploration, mining, manufacture and sale	<a href="http://eng.alrosa.ru/">http://eng.alrosa.ru/</a>

(continued)

Table 1 (continued)

Producer	Headquarter/year of establishment	Operations	Short description (focus)	Website
Mbada Diamonds Ltd <sup>a</sup>	Harare, 2009	Its mines are located in the Marange area of Mutare in the Manicaland	Mbada diamonds Private Ltd was the first company to enter the joint venture with the government of Zimbabwe. Zimbabwe Mining Development Corporation (ZMDC) holds 50% of shares on behalf of government investor, the remaining 50% is held by the Grandwell Holdings (Mauritius). Mbada Diamonds had the highest exports shipments among the companies taken over by the ZMDC (Chimonyo, Mungure, & Scott, 2016). is the biggest company in the Marange area, and it holds the largest concession in Marange. The Mbada raised an interest among researchers (Mathende & Nhapi 2017; Maringira & Masiya, 2016; Muchadenyika, 2015; Kamhungira, Mugova, & Kachembere, Mutanda, 2014; Maguwu, 2013; Madebwe, Madebwe, & Mavusa, 2011). Kamhungira et al. (2014)	<a href="https://www.pindula.co.zw/Mbada_Diamonds_Private_Limited#Corporate_and_Social_Affairs">https://www.pindula.co.zw/Mbada_Diamonds_Private_Limited#Corporate_and_Social_Affairs</a> <a href="https://www.newzimbabwe.com/mbada-diamonds-ltd-revenues-top-1bln/">https://www.newzimbabwe.com/mbada-diamonds-ltd-revenues-top-1bln/</a>

Source Company websites/reports

<sup>a</sup>The data for the description of Mbada Diamonds were integrated with the scientific literature

## 4 Results

Table 2 explores how the analysed companies, members of the RJC, have integrated social and environmental issues into their business (economic interests are considered as *sine qua non* and as a driver for the promotion of any of the above-mentioned initiatives).

### 4.1 Discussion

The results show that the dominant paradigm for the various companies is the mechanistic one; in fact, the various projects and/or actions concerning sustainability are strongly specific and focus on a maximum of a triple-bottom-line dimension. In reality, the three dimensions must be understood through a circular relationship, whereby the environment represents all the resources, the economy represents the laws that tell us how to use the resources, and the society represents the result achieved by using the resources in compliance with the specific rules (Barile, Pels, Polese, & Saviano, 2012). This circular notion means that the local and global levels cannot be separated. The global tends to incorporate, and even to define, the local aspects; at the same time, the local agents are solely responsible for the emergence of the totality (Barile, Carrubbo, Iandolo, & Caputo, 2013).

Achieving sustainability across the supply chain is not an easy task, as it requires close cross-functional and inter-company cooperation to address issues such as the following: environmental protection, improved productivity, risk minimization, and innovation. Obviously, all actions must be aimed at satisfying the expectations of the relevant suprasystems (Golinelli, 2010), mapped according to the indications given in the methodology.

This reading facilitates the adoption of sustainability in a company as an intrinsic necessity of the system's survival conditions in its own viable context. In particular, it allows us to return to a unitary and broad perspective of sustainability and the conditions of equilibrium of the system at different levels of observation.

In the actions of the viable system, as we hoped, it becomes increasingly clear that the determinants of the processes are not only mechanistic but also of a finalistic type. In the succession of system-related events, considering the choices of the decision makers who govern the addresses, the identification of the goal and the tendency to achieve the same determine conditioning at least as important as that deriving from the choices made in the past.

In this representation, dynamically, the viable system seeks to preserve stability through phases of balancing and rebalancing (Table 3). In some cases, the solution can be found in a simple extension of the functional capacity of the component (elasticity). When the need for adaptation exceeds the specific role played by the components and concerns the function performed, the case of transformation arises. The intervention requires "flexibility", that is, the ability to revise the role on the basis

**Table 2** Initiatives for social and environmental sustainability

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
De Beers Group	<p>Corporate responsibility for the social sustainability</p> <ul style="list-style-type: none"> <li>- Developed 7 pillars for socio-economic development: (<i>local procurement, local employment, employ volunteering, external capacity development, enterprise development, synergies with infrastructure, corporate social investments</i>)</li> <li>- HIV/Aids programme</li> <li>- Member of the World Diamond Council delegation respects UN Guiding Principles on Business and Human Rights (GPBHR) and the Voluntary Principles on Security and Human Rights (VPSHR)</li> <li>- Internally integrated processes for human rights due diligence into the Social Way and BPPs</li> <li>- In 2016, in partnership with the Limpopo Department of Transport, launched a road safety campaign pilot called “Choose life”</li> <li>- They focus preventative efforts: Noise, airborne pollutants (Respirable Crystalline Silica, and coal dust), Musculoskeletal diseases (absenteeism related to ill health decreased to 1.91% compared with 2.18% in 2015)</li> <li>- In 2015, launched a “Leader as Coach” programme to help address areas identified for improvement, including communication and leadership</li> </ul>	<p>Corporate responsibility for the environmental sustainability</p> <ul style="list-style-type: none"> <li>- Launched the programme researching the potential of carbon-neutral mining</li> <li>- <i>Good to Great (G2G)</i> is an improvement plan, running from 2013 to 2018 (safety, occupational health, environmental and social performance disciplines)</li> <li>- Six’s Diamond waste water treatment system (<i>saved 0.3 billion liters of water, 0.8 million gigajoules of energy and 73,000 tonnes of CO<sub>2</sub> emissions since 2014</i>)</li> <li>- Cut energy usage (<i>saved US\$10.6 million</i>)</li> <li>- Signed a partnership agreement with #Oab Energy to install a wind farm (will provide 17% of Namdeb’s total electricity use)</li> <li>- Developed a native seed collection, propagation and planting partnership at Victor mine in Canada</li> <li>- “<i>Project Terra</i>”: addresses key water, energy and carbon emission challenges through a set of long-term impact reduction targets: by the 2020 to reduce water usage 20%, energy use 8% and carbon emissions 9%</li> <li>- “<i>Project Minera</i>”: favors the carbon neutral mining</li> <li>- Hosted or attended a number of forums for the Biodiversity and conservation (i.e. The Biodiversity Mitigation), Hierarchy Workshop. The IUCN World Conservation Conference ‘Planet at the crossroads’ (submitted an i-poster)</li> </ul>	<p>Source</p> <p>“Our economic and social Impact report Building forever”, 2016 available at <a href="https://www.debeersgroup.com/content/dam/de-beers/corporate/building-forever/RIS/DeBeers_RTS_2016.pdf">https://www.debeersgroup.com/content/dam/de-beers/corporate/building-forever/RIS/DeBeers_RTS_2016.pdf</a>. downloadasset.pdf</p>

(continued)

Table 2 (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
Lucara	<p>Corporate responsibility for the social sustainability</p> <ul style="list-style-type: none"> <li>- <i>Behaviour based safety</i> (BBS) program</li> <li>- Promote a “<i>Stop &amp; Fix</i>” policy to encourage the people to address or report risks as soon as they are spotted</li> <li>- Launched a campaign called “<i>Clean State</i>”: encourages employees to manage their lives in the areas of health, safety and wellbeing; it covers four main themes: (1) Stress-free environment (2) good state of mind (3) good financial wellness (4) zero harm</li> <li>- Developed (updated 2016): “<i>Karowe Diamond Mine Cardinal Sins</i>” (Reckless Driving, Overtaking on haul roads, Engaging in physical fighting, Rendering safety devices inoperable, Concealing an incident or injury on duty, Operating plant without authorization or failing to complete pre-start checklist, Working on equipment/machinery willfully without lockout or isolation, Coming to work under the influence of intoxicating substances)</li> <li>- Created a culture of health promotion for all employees and workers in an effort to prevent workplace injuries and occupational diseases. Topics covered include: HIV/AIDS, tuberculosis, diabetes, and hypertension (<i>No noise induced hearing loss or other occupational diseases cases were recorded in 2016</i>)</li> </ul>	<p>Corporate responsibility for the environmental sustainability</p> <ul style="list-style-type: none"> <li>- The environmental policy includes: conduct all activities in compliance with the <i>Environmental Management Plan</i>, applicable legislation and other requirements, apply international best practices in the absence of legislation (guided by the Equator Principles and International Finance Corporation Guidelines), integrate the management of environmental, social, cultural and economic issues into company business practices and planning, wise use of resources, prevention of environmental impacts, including pollution prevention, implement, maintain and improve environmental management systems, communicate openly with government authorities, employees, local communities and the public on our environmental commitments and performance</li> <li>- The environmental management plan is developed in accordance with Botswana’s Environmental Impact Assessment Act (2011) and EIA Regulations (2012) (updated in January 2016). The plan is aligned to ISO 14001</li> <li>- In 2005 founded, the Lundin foundation: strengthening resource governance, Education and skills training, Local procurement</li> </ul>	<p>Source</p> <p>“Lucara Diamond Sustainability Report”, 2016 available at <a href="https://www.lucaradiamond.com/assets/docs/responsibility/Lucara%20Diamond%202016%20Sustainability%20%20Report.pdf">https://www.lucaradiamond.com/assets/docs/responsibility/Lucara%20Diamond%202016%20Sustainability%20%20Report.pdf</a></p>

(continued)

**Table 2** (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
Rio Tinto Group	<ul style="list-style-type: none"> <li>- Invests in people throughout their careers, offering diverse and inclusive employment prospects, development opportunities and competitive benefits clearly linked to performance</li> <li>- <i>Critical risk management programme</i>- crucial to achieving fatality prevention goal</li> <li>- Work with local governments and health organisations to educate employees, contractors and communities surrounding our operations about vector-borne and infectious diseases such as tuberculosis, Ebola, malaria and HIV/AIDS and Zika</li> <li>- Implemented the code of conduct <i>"The way we work"</i></li> <li>- Their approach is consistent with the code of conduct, local laws and International Labour Organization standards.</li> <li>- The <i>Communities and Social Performance (CSP) standard</i> guides how they maintain their community relationships. These are aligned with international guidelines, such as the International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability and ICMIM's Position Statement on Indigenous peoples and mining.</li> <li>- Created <i>Developing East Arnhem Limited</i> DEAL to generate new economic activity in the East Arnhem region following curtailment of the Gove Alumina Refinery</li> <li>- Launched the second Reconciliation Action Plan (RAP): outlines how deeper engagement between Indigenous communities is built</li> <li>- They have our own human rights policy and have made voluntary commitments to the OECD Guidelines for Multinational Enterprises, the UN Global Compact and the Voluntary Principles on Security and Human Rights (VPSHR)</li> <li>- The human rights approach is consistent with the UN Guiding Principles on Business and Human Rights (UNGPs)</li> </ul>	<ul style="list-style-type: none"> <li>- In 2015, the GHG emissions intensity target was extended (<i>to a 24% reduction by 2020</i>)</li> <li>- Learns how to integrate renewable energy sources with small and remote power grids through the 1.7 MW Weipa solar farm project in Australia</li> <li>- Participates with the International Emissions Trading Association, ICMIM, the Minerals Council of Australia and the US-based Center for Climate and Energy Solutions (C2ES)</li> <li>- Support research into carbon capture and storage and low emissions technologies for coal by contributing to the Cooperative Research Centre for Greenhouse Gas Technology and the Australian COAL21 Fund</li> <li>- Contributes to the Australian Coal Association Research Program which conducts research into the production and use of black coal, including low-emissions coal use</li> <li>- During 2016 further improved the water governance and planning processes following a detailed analysis of the water-related risks</li> <li>- Minimizes the biodiversity impact through the approach which is consistent with the Cross-sector Biodiversity Initiative's (CSBI) guide for implementing the mitigation hierarchy of avoidance, minimisation, restoration, and offsets</li> <li>- Uses the Integrated Biodiversity Assessment Tool before seeking tenure for exploration</li> <li>- In collaboration with the International Union for Conservation of Nature (IUCN) they documented and shared the NPI learnings with past partners (will be soon available for wider communication)</li> </ul>	<p>Partnering for progress Sustainable development report, 2016 available at <a href="http://www.riotinto.com/documents/RT_SD2016.pdf">http://www.riotinto.com/documents/RT_SD2016.pdf</a></p>

(continued)

Table 2 (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
Dominion Diamond Mines	<ul style="list-style-type: none"> <li>- Upholds an integrated approach to corporate responsibility that encompasses all aspects of responsible business. The commitment is guided by the principles of social responsibility, environmental stewardship and economic sustainability</li> <li>- Every CanadaMark<sup>SM</sup> diamond is: Responsibly mined in Canada's Northwest Territories; Natural and untreated; Tracked through audited processes at every stage from country of origin to polished stone; and Meets specific quality standards</li> <li>- People are believed to be the most important asset (the company is fully committed to the health, safety and well-being of employees and to establishing strong, lasting and respectful relationships with the people and communities)</li> <li>- Works collaboratively with Aboriginal and local community leaders, stakeholder groups and governments by sharing information and engaging to better understand their needs and expectations</li> </ul>	<ul style="list-style-type: none"> <li>- The Company is fully committed to ensuring our northern mines continue to be an important cornerstone of the Northwest Territories economy</li> <li>- They report regularly on our progress in fulfilling our obligations to stakeholders</li> <li>- As part of the overall commitment to excellence, they set measurable goals, improve performance against those goals over time and report that performance in a transparent and timely manner</li> </ul>	<p><a href="https://www.ddmines.com/responsibility/">https://www.ddmines.com/responsibility/</a> Sustainability report n/a</p>
Alrosa	<ul style="list-style-type: none"> <li>- Contributes to the sustainable development of the regions where they operate, and to the wellbeing of their communities</li> <li>- Three key strategic sustainability goals, integrated into the business: minimizing the negative impact of industry on the environment; <i>rational use</i> of mineral resources; resource conservation; and compliance with international ecology and environmental protection standards, taking responsibility for social issues including safety, health, and professional staff development; the social and economic well-being of the population; and supporting local communities and charities</li> <li>- Social investments focus on providing targeted support for children's institutions, cultural and sports facilities, education and academic communities, and public health. (RUB 3,6 bn)</li> </ul>	<ul style="list-style-type: none"> <li>- Allocated over RUB 60 million to establish a protected territory, the Living Diamonds of Yakutia Natural Park</li> <li>- Under the "Restoration of Biological Diversity" program" introduced populations of beavers, musk oxen and buffalo into Yakutia</li> <li>- Long-term Development Program of ALROSA for 2012-2021 involves the following priorities of the Company's environmental activities: <i>development of projects</i> and construction of sites for the accumulation and storage of industrial and consumption waste in accordance with the environmental requirements in all subdivisions of the Company; <i>selection and implementation</i> of technologies for recycling and disposal of industrial and consumption waste; further large-scale implementation of schemes for dry stacking of concentration tailings</li> </ul>	<p><a href="http://eng.alrosa.ru/sustainability/">http://eng.alrosa.ru/sustainability/</a> Sustainability report n/a</p>

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Table 2 (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
<p>– Supports the “diamond province” in the performance of agricultural and traditional fishing and hunting activities aimed at the revival of national cultures and preservation of historical values</p> <p>– By providing financial assistance to municipalities, and by organizing charitable campaigns for the children in sponsored uluses, ALROSA promotes employment of the population and their higher earnings making a considerable contribution in improvement of the social stability in the whole rough diamond production region</p> <p>– Supports tribal communities of reindeer herders and fishermen: annual financial assistance is provided for agricultural activities, support and development of traditional fishing and hunting activities, procurement of off-road vehicles, fishing gear and hunting equipment</p> <p>– In 2016, for the purposes of charity ALROSA transferred RUB 20 mn to the Administration of Olenek Evenki national district municipality for construction of the Ethnocultural center in the villages of Olenek</p> <p>– In order to provide rational employment to indigenous rural residents (in the villages of Arylakh, Syuldyukar and Taas-Yurakh), the company structure includes a multipurpose farm—the “Sovkhoz Novy” that is engaged in production and supply of organic “live” milk, eggs and meat to kindergartens and schools, including free sale of the products to the population of the area</p> <p>– Developed a policy aimed at recruiting local personnel, programme of pre-university career guidance, training and re-training of employees in accordance with the company technical development programme</p> <p>– Continuously educate the personnel on the basis of a corporate staff training and education system</p>	<p>– In 2016 ALROSA signed an agreement with the Ministry of Natural Resources and Environment of the Russian Federation, the Federal Service for Supervision of Natural Resources and the Government of the Republic of Sakha (Yakutia) on collaboration in organizing and implementing the environmental measures associated with the Year of Ecology in 2017 in the Russian Federation (<i>the Company is planning to invest RUB 71.6 mn in the construction and reconstruction of water protection deposits</i>)</p> <p>– In 2016, the Company approved the <i>Energy Efficiency Improvement Program of PJSC ALROSA</i> for the period of 2016–2019 (<i>considerable reduction of fuel and energy resource consumption and the expected economic effect</i>)</p> <p>– At production sites of Mirny and Aikhal, automobile gas-filling compressor plants have been put into operation making it possible to fuel more than 1000 vehicles (which has a positive effect on the atmospheric air indicators in the region of the main production activities)</p> <p>– ALROSA participates in the activities aimed at preservation of the traditional lifestyle of the small-numbered indigenous peoples of the North and maintenance of biodiversity of local ecosystems</p> <p>– Near to the Company’s structural subdivisions, there is a Yakutia Diamonds Live natural park created as a result of an agreement with the Ministry of Nature Protection of the Republic of Sakha (Yakutia) (The Yakutia Diamonds Live is the main project aimed at preservation of the biological diversity in the region of main activities of the company)</p> <p>– In 2016, the Company provided financial assistance for preservation of biological diversity (amounting to RUB 6.3 mn, including RUB 3.7 mn for operation of the Yakutia Diamonds Live natural park and RUB 2.6 mn for reservoir fish stocking)</p>	<p>– Supports the “diamond province” in the performance of agricultural and traditional fishing and hunting activities aimed at the revival of national cultures and preservation of historical values</p> <p>– By providing financial assistance to municipalities, and by organizing charitable campaigns for the children in sponsored uluses, ALROSA promotes employment of the population and their higher earnings making a considerable 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policy aimed at recruiting local personnel, programme of pre-university career guidance, training and re-training of employees in accordance with the company technical development programme</p> <p>– Continuously educate the personnel on the basis of a corporate staff training and education system</p>	<p>– In 2016 ALROSA signed an agreement with the Ministry of Natural Resources and Environment of the Russian Federation, the Federal Service for Supervision of Natural Resources and the Government of the Republic of Sakha (Yakutia) on collaboration in organizing and implementing the environmental measures associated with the Year of Ecology in 2017 in the Russian Federation (<i>the Company is planning to invest RUB 71.6 mn in the construction and reconstruction of water protection deposits</i>)</p> <p>– In 2016, the Company approved the <i>Energy Efficiency Improvement Program of PJSC ALROSA</i> for the period of 2016–2019 (<i>considerable reduction of fuel and energy resource consumption 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RUB 6.3 mn, including RUB 3.7 mn for operation of the Yakutia Diamonds Live natural park and RUB 2.6 mn for reservoir fish stocking)</p>

(continued)

Table 2 (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
	<ul style="list-style-type: none"> <li>- Has an extensive social package including some benefits and privileges inscribed in the collective agreement, well beyond and above Russian laws</li> <li>- Works with young specialists, fringe benefits and privileges for young employees, which are inscribed in the collective agreement, and social programmes and infrastructure (kindergartens, cultural and sports facilities, etc.)</li> <li>- Since 2017, promotes the voluntary medical insurance of employees (<i>in 2016, 289 million rubles were allocated to finance the «Health» program</i>)</li> <li>- In accordance with the “<i>Wellness and Recreation of Employees and their Children</i>” program the employee has the opportunity to get a preferential ticket for health resort treatment and recreation in health institutions (<i>corporate vouchers for wellness and recreation were used by 14,350 people</i>), including fard children’s recreational outings to leisure resorts situated on the Black Sea coast (<i>more than 200 million rubles are allocated annually for organization children’s recreation</i>)</li> <li>- In 2016, social investments in personnel under the program “<i>Wellness and Recreation of Employees and their Children</i>” (<i>amounted to 1.018 billion rubles</i>)</li> <li>- In accordance with the Mortgage lending program for ALROSA (PJSC) employees for 2011–2018, employees who purchase housing at their own expense receive targeted corporate support which includes compensation for expenses related to payment of mortgage interest for acquisition of ownership living quarters. (<i>There are 476 participants in the mortgage lending program. In 2016, company’s employees were provided with expenses related to payment in the amount of 57.1 million rubles</i>)</li> <li>- The Cultural and Sports Complex of ALROSA includes 14 sports facilities, 8 cultural institutions, and 6 facilities for children and adolescents having a rest in summer (<i>in 2016, 146.9 million rubles were allocated to finance the “Culture and Sports” program</i>)</li> <li>- The Private Pension Plan program (<i>In 2016, 18,597 people received ALROSA’s non-state pension. The average monthly pension amounted to 5268 rubles</i>)</li> </ul>		

(continued)

**Table 2** (continued)

Firm	Corporate responsibility for the social sustainability	Corporate responsibility for the environmental sustainability	Source
Mbadadiamonds Ltd <sup>a</sup>	<ul style="list-style-type: none"> <li>- Distributed food to Chiadzwa and Mukwada Communities for \$500,000</li> <li>- Distributed farming inputs to the 7000 families in Chiadzwa &amp; Mukwada Wards to alleviate hunger for \$350,000</li> <li>- Installed 60 boreholes for the Chiadzwa/Mukwada Community for \$420,000</li> <li>- Constructed Mafarikwa School in Marange for \$200,000</li> <li>- Maintained and refurbished access roads for \$100,000</li> <li>- Offered schools supplementary feeding for \$100,000</li> <li>- Supported orphanages from Chiadzwa and Mukwada</li> <li>- Procured the company daily needs from suppliers in Manicaland</li> <li>- Employed all the unskilled labor from the local villages</li> <li>- Donated food and blankets for the disabled children at the school</li> </ul>	<p>- n/a</p>	<p><a href="http://www.reclam.co.za/pdf/mbadaa_csr_report.pdf">www.reclam.co.za/pdf/mbadaa_csr_report.pdf</a></p>

*Source* Our elaboration based on websites, sustainability reports and online researching

<sup>a</sup>The website of Mbadadiamonds Ltd. is not published online; neither domains registered Mbadadiamonds.co.za and Mbadaholdings.com) cited by the Global Witness (2017) are available nor the information about efforts towards environmental responsibility are evidenced. After the Zimbabwean government took over the operations, all mining operations were consolidated into one company called Zimbabwe Consolidated Diamond Mining around 2015/2016. The activities here reported are extracted from the online report. In the unique Mbadadiamonds CSR Report available (at [http://www.reclam.co.za/pdf/mbadaa\\_csr\\_report.pdf](http://www.reclam.co.za/pdf/mbadaa_csr_report.pdf)) the social aspects, that often lead to its philanthropic understanding, are extensively reported by Mbadadiamonds, it seems that the environmental aspects are the priority for Mbadadiamonds. Probably because, as shown by Chimeri (2016) they are not mandatory; however, the mismanagement of mineral resources, environmental degradation, pollution of water systems caused by the mining industry are known to all operators

**Table 3** The steps for the rebalancing of viable systems

Adaptation	<i>Elasticity</i> —Action on the specific structure
Transformation	<i>Flexibility</i> —Action on the expanded structure
Physiological restructuring	<i>Plasticity</i> —Action on the general organizational scheme
Pathological restructuring	<i>Conservability</i> —Action on the business idea

Source Barile, Saviano, Polese, & Caputo (2015)

of the function performed. It is important to note that interventions in flexibility, once they are experienced, create new patterns (new skills), and they tend to be counted among the “available benefits” arising from new features. These new features change the traditional design logic-specific structures aimed at obtaining a certain result and introduce new resolute methods (Saviano, 2015).

The rebalancing of the viable system can also be achieved by more drastic approaches than those of adjustments and transformations. In the case of physiological or pathological restructuring, the principles invoked are respectively those of plasticity and conservability.

We suggest interpreting SSCM as a pathological restructuring of firms because the idea of sustainability requires a profound change to allow a paradigmatic leap. Restructuring involves re-examining the strategic focus against the backdrop of a changing business environment. True long-term success depends on forging an approach that balances essence and power and acts as a scheme that reinterprets the triad proper into modal logic, necessity, possibility, and effectiveness. A review and possible refocusing of the supply chain will ensure that all the operational measures support the strategic goals. At the same time, flexibility and the ability to respond swiftly to new developments are essential for all business functions (i.e. for the accounting function, the necessity to adopt “integrated reporting”; see Cucari & Mugova, 2017). A good example of this kind of strategic refocus is also occurring at the board level with a greater awareness of environmental and social governance issues (Cucari, Esposito De Falco, & Orlando, 2018; Nielsen & Noergaard, 2011; Tang, Hull, & Rothenberg, 2012). The results confirm that the producers have understood the importance of this relevant change and interpreted the challenges as a strategic goal (i.e. Alrosa—“As a member of the international community, we understand that the assessment of the overall performance depends on the extent of our responsibility before society and the environment”).

The analysed companies participate in the relevant global, national, and regional organizations, initiatives, sustainability standards, and management approaches to improve the performance activities promoted by the industry as a whole (i.e. membership of the RJC and adherence to the Kimberley Process Certification Scheme), and they are among the founding members of the Diamond Producers Association (DPA). They communicate their engagement with the corporate citizenship and sus-

tainable development through the release of sustainability reports (De Beers, Lucara, and the Rio Tinto Group) or by creating sustainability sections on their websites (Alrosa and Dominion Diamond Mines). The efforts are implemented within the companies and in their supply chains. De Beers's "Best Practice Principles programme", based on partnership logic, permits it to benchmark activities across the value chain and ensure that the supply chain is free from diamond conflicts. Dominion Diamond Mines assures the integrity of the supply chain of Canadian diamonds from mine to retail through the CanadaMark™ ("Dominion Diamond Mines is committed to ensuring that all aspects of its business—including diamond mining and the sale of rough diamonds—reflect the highest standards of conduct"; Alrosa—"The Company is committed to operating in a sustainable manner and with the utmost integrity to enhance the positive economic, environmental and social impacts of its business while maximizing the resources it mines"). The companies maximize local procurement (i.e. in 2016, 82% of Lukara's goods and services were sourced from Botswana; De Beers created a 7-pillar socio-economic programme) as well as local employment. The companies care about long-term socio-economic benefits for the communities in which they locate their operations (Alrosa—"We see social policy as core to our operations", Lucara—"Corporate responsibility is central to our strategic and operational thinking"; De Beers—"We focus on creating lasting socio-economic benefit wherever we operate"; "The Social Way requires that operations are aligned with a human rights 'lens' in assessing and managing social risks and impacts"; Dominion Diamond Mines—"We maintain a high standard of environmental stewardship throughout all phases of our operations"). This significant involvement in the social and environmental has been recognized by external entities. In March 2016 Lucara received a major international award for environmental and social responsibility, the Rio Tinto Group partnership with the Northern Territory Government, Developing East Arnhem Limited (DEAL), won a National Economic Development Excellence Award for best rural and remote initiative, and in 2015 Namdeb (Namibia De Beers) was declared the winner of the Chamber of Mines Safety Competition, recognizing the company's safety commitments and achievements. However, the research on the company operating in Zimbabwe's diamond sector was strongly compromised. Even though Marange is considered to be one of the world's biggest deposits of diamonds, thus constituting a profitable area for the mining of diamonds, it has been characterized by many conflicts in recent years. Unfortunately, as stated by Mbada Diamonds' chief security officer, Jabulani Mkoko, "Marange's potential has been overshadowed by violence, smuggling, corruption and most of all, lost opportunity" (Zimbabwe Situation, 2018).

## 5 Conclusion

From this first exploratory analysis some conclusions can be drawn. Observing the positive trend in the global demand for the diamonds and raising awareness of the consumers, the efforts of companies toward the corporate social responsibility will

be constantly more required. Due to the necessity of implementation of CSR strategy in the mining sector, we propose a study of analyzing initiatives of CSR of six diamond producers, members of Responsible Jewellery Council. In this way, results show a set of initiatives that producers operating in the diamond supply chain may implement in order to contribute to the corporate social responsibility. Based on this assumption, the perspectives of sustainability and viable system are intertwined in this viable system approach highlighting not a few trade-offs that certainly make complex Sustainable Supply Chain Management. What has been said so far does not claim to express conclusive conceptualizations with respect to the possibility of developing a new perspective of an investigation, capable of explaining decisional dynamics and managerial choices. However, it is believed that the coherence guidelines found are not negligible and therefore sufficient to favor the possibility of a further commitment by a community of scholars with interdisciplinary skills and competencies, to explore the frontiers of knowledge related to dynamics of organizations. Future work might improve this framework by taking a different research methodology perspective. This might allow specific features to be identified in greater detail.

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