

The Journey of *Ethics* – A Review of Responsible Sourcing Developments in the Gem Sector

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Introduction

The gem trade is one of the oldest forms of international trade in the world, as humans have been attracted to gems for emotional and material reasons over millennia. The rarity, durability and ease of transporting them (very compact and high potential value) has made them ideal objects of consumption, collection, and trade.

Lapis-lazuli from the Sar-E-Sang mines in Afghanistan has been traded and used for at least 4000 years (Wyart et al., 1981). This continues to be the best source of lapis-lazuli worldwide at present. The appearance of lapis-lazuli and other gems—e.g. Bactrian emeralds, Mediterranean corals, Sri Lankan gems, Egyptian peridot, Indian diamonds etc.—in Europe and beyond is a testament to the globalized trading networks that existed, much before that of other material goods. The notion that “ethics” is something new to the gem industry is nonsensical. Gems have been fraudulently imitated or treated (without disclosure) for centuries and millennia, so ethics have long played a role (Karampelas et al., 2020).

This article explores and reviews ethical and responsible sourcing developments in the gem sector over the past few decades, provides a short overview of terms used, and shares an outlook on where the ethical journey may take us.

From Exploitative Gold Mines to Conflict Diamonds and Genocide Gems – Story, Truth, and Reputation

In 1986, the Brazilian photographer Sebastião Salgado visited the infamous Serra Pelada gold mines in the Amazon and took extraordinary black and white photos that took the world by surprise (Salgado, 2019). These open-pit gold mines had 50,000 miners united in a brutal quest to find precious gold used also in jewelry. The *No Dirty Gold* campaign in 2004 initiated by Earthworks, a non-profit NGO (earthworks.org) further highlighted the challenges of the sector, and how to deal with artisanal mining (ASM) and widespread unsafe mercury use.

At the beginning of the 21st century, the diamond industry and sovereign governments formed the Kimberley Process Certification Scheme (KPCS) in response to great pressure from NGOs, consumers, governments, and others to stop “conflict diamonds” from entering the diamond supply chain. Such diamonds were extracted and sold by illicit forces, and the funds from their sales contributed to conflicts in countries such as Angola, the Democratic Republic of Congo, Liberia, and Sierra Leone at the time.

The KPCS sought to stop the inflow of these diamonds into the legitimate diamond supply chain by putting in place a *country of export* certification program, although there have



A ruby imitation offered to the author in South Kalimantan, Indonesia. What ethical and sustainability implications does incomplete disclosure have on the industry?
(Photo: Laurent E. Cartier)

been calls for the KPCS to be expanded to cover human rights abuses and other issues.

Gems from Burma (Myanmar) have been subject to multiple government and company boycotts over the past decade and have been labeled *blood rubies* (2008) and *genocide gems* (2018), among other terms. Is a boycott of questionable sources the answer? It is important to note that The Organisation for Economic Cooperation and Development (OECD) recommends engagement rather than boycott as a means of strengthening responsible supply chains (OECD, 2016). One of the reasons for the big push for *ethics* in the gem and jewelry industry is to address these issues and change the narrative on the origins and impacts of gems. The industry must not wait for the threat of a consumer boycott; it must seek a proactive rather than a reactive approach. As the actor Will Rogers once famously said “It takes a lifetime to build a good reputation, but you can lose it in a minute.”

The Gem Industry Today

The colored gemstone industry has undergone great transformations in the last few decades. Although it has always been a global trade, it has now become a globalized and highly interconnected industry (Michelou, 2010; Cartier, 2019). This growth has also become associated with con-



Proud artisanal diamond divers on the shores of the Sewa river in central Sierra Leone in 2007. How have “ethical” considerations in the gem and jewelry (including KPCS) industry contributed to sustainable development in Sierra Leone? (Photo: Laurent E. Cartier)

siderable sustainability challenges and, therefore, the sector needs to examine the social and environmental responsibilities that come with the production, trade and consumption of colored gemstones (Archuleta, 2016).

The jewelry sector has been relatively late (compared to other sectors such as finance or forestry) in realizing both the inherent obligation for, and the opportunities that lie in, pursuing and promoting sustainable development. For the industry to continue the *status quo* with respect to unsustainable social, economic and environmental activities, this is not an alternative. It would put its own sustainability as an industry at risk.

At present, a number of factors are shaping the development of responsible practices and the move for increased traceability and transparency in the gem and jewelry industry, and more specifically for diamonds and colored gemstones:

- ▶ Consumers are increasingly interested in knowing where and how the gemstones and jewelry they purchase are mined and manufactured.
- ▶ Media and NGOs are placing the gem and jewelry industry under increased scrutiny regarding the origin and sustainability footprint of various gemstones and human rights issues in the artisanal mining sector.
- ▶ Some companies want to be proactive so as to mitigate risks and better understand their own supply chains and contribute to positive outcomes.
- ▶ Governments want to improve the management and revenue collected from gem resources.
- ▶ Global governing bodies (e.g. OECD) have highlighted issues, such as smuggling and money laundering.
- ▶ Some governments (e.g. USA, EU) have instituted *conflict-mineral* legislation, requiring publicly traded companies to know and trace their supply chains and comply with their laws.

As barriers of communication are further broken down by technology, it is clear that the demands of these different stakeholders on the industry will not go away. Numerous studies of consumers show that they increasingly want access to accountable supply-chain information (Pinkashov & Nair, 2014) and that governments and banks will require businesses to increasingly demonstrate compliance to standards (OECD, 2016).

The Challenge of Talking About “Ethics” Without Defining Terms

The term *ethics* is a broad, personal, values-based, and subjective concept, which is hard to define. Phillip Lewis had a revealing title—describing the process of defining ethics as *jello-like*—for his 1985 academic article: *Defining ‘business ethics’: Like nailing jello to a wall* (Lewis, 1985).

The plethora of terms that have appeared in recent years to describe claims of good business conduct in production and sourcing of gems further highlight this challenge of communication and definition: sustainable, responsible, conflict-free, transparent, fair trade, development, ethical, conscious, traceable, clean, green, and ecological.

What do these terms and claims mean if they are not defined (with or without agreement on a definition) by the person and/or company making the claim so that the trade and consumers can understand (and potentially verify) the claims that are being made?

The absence of money laundering or child labor may be considered and promoted by some as a sign of *ethical* or *responsible* conduct, whereas others might argue that it’s the strict minimum as these are actions that simply comply with common international laws. It may feel like opening up a Pandora’s box to have to grapple with these terms, but it is necessary. Organizations such as OECD, RJC, CIBJO, ICA,

AGTA, FairLux, Jewelry Industry Summit, Jewelry Glossary Project, and others have initiated the process.

What about the often-used terms of sustainability and sustainable development? Sustainable development “integrates economic, environmental and social considerations in order to improve the lives of the current generation and ensure that future generations will have adequate resources and opportunities” (Hendrix, 2006).

It is an unfortunate reality that gemstones are a finite (though recyclable due to their durability and value) resource. Can, in this case, mineral resource extraction be equated to a sustainable activity at all or ever? It is evident that the concept of sustainability for a finite resource must be adapted, as it is not the same as for a renewable resource.

The fundamental question regarding the sustainability implications of gemstone extraction is: Has the extraction led to a viable natural and social environment, which can support livelihoods in the long-term, following the cessation of mining?

Mining can become a catalyst sector that plays a vital role in subsequently sustaining livelihoods and national economies following the cessation of mining (Ali, 2009). Thailand was formerly a gemstone-mining nation (producing ruby, sapphire etc.) and has succeeded in transforming its industrial sector to becoming one of the major international hubs for the refinement (treatment, cutting, polishing) and trading

of gemstones within a few decades. This, too, is a form of sustainability. Colombia has similarly catalyzed know-how and become a major hub for emerald value-adding activities. These are just a few of the many positive examples at a country-level in the gemstone industry.

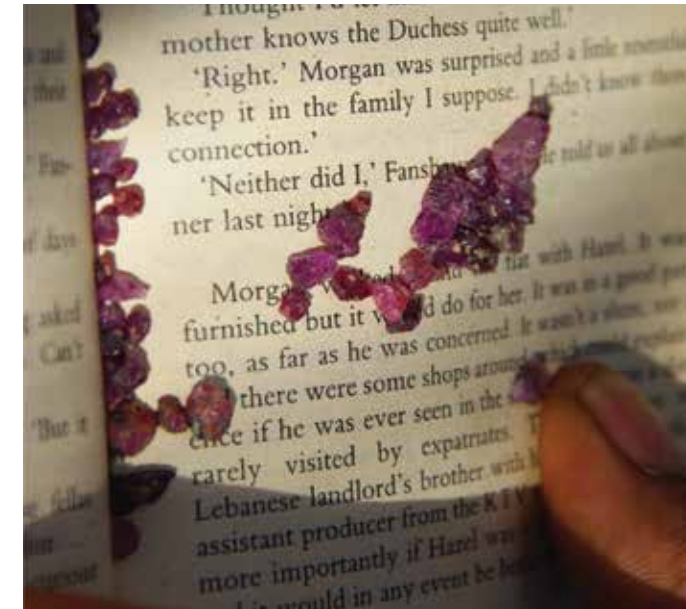
The leading authority on responsible sourcing of minerals are the OECD Guidelines. The Organisation for Economic Cooperation and Development (OECD) developed guidelines that are followed by companies seeking to respect human rights and avoid contributing to conflict through their mineral-sourcing decisions and practices. These guidelines now apply to all minerals, including colored gemstones (OECD, 2016).

Many of the jewelry and gem industry standards for responsibility are aligned with the overarching OECD Guidelines (available online), and interested readers are invited to study them for further information. It is important to note that due diligence is nothing new for the gem sector; companies have for decades been carrying out due diligence (without perhaps using that term) when trying to source goods that are correctly disclosed (for example, regarding treatments, synthetics, and origins).

The table below is a brief list of guiding definitions (by no means definitive) of terms used in the context of ethics and responsibility that may be useful for readers (see also Cartier et al., 2018 and references therein for further information).

Chain of Custody	The document trail recording the sequence of companies and individuals that have custody of minerals as they move through a supply chain.
Corporate Social Responsibility (CSR)	A management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. (What is CSR?, 2018. United Nations Industrial Development Organization, Vienna, Austria, www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr.)
Due Diligence	The act of proactively ensuring that the products sourced and traded by companies within a supply chain conform to national and international regulations (see OECD Guidelines).
Disclosure	The release of information by companies required by regulators or requested by business partners in the supply chain.
Provenance	A (documented) claim made on the origin (e.g. country or mine), source (e.g. recycled, mined, artisanally mined, natural, synthetic), previous ownership (e.g. a historic gemstone or a piece of jewelry formerly in a royal collection) or extraction and processing practices (e.g. conflict-free, untreated, responsibly sourced).
Sustainable Development	Defined in 1987 by the Brundtland Commission report (United Nations) as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 15). This integrates economic, environmental and social pillars.

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Exploring ways for gems to further contribute to education in gem mining regions could be worthwhile. (Photo: Laurent E. Cartier)

The *problem* is not artisanal mining in and of itself, for it has great potential for local income generation, employing far more local people (that often require no training) than any large mining company could. The problem lies in formalizing the inherent complexities of this form of mining and harnessing its dynamic nature.

The two NGOs, Alliance for Responsible Mining (ARM) and RESOLVE, have developed an open-source market entry standard, the Code of Risk Mitigation for artisanal and small-scale miners engaging in Formal Trade (CRAFT). This standard could be useful to support greater formalization of artisanal miners in the colored gem industry.

Concepts such as *Conservation Gemstones* could furthermore provide unique solutions adapted to the gem industry (Pardieu, 2010; Cartier and Pardieu, 2012).

What Is Traceability and Why Is It Useful?

Traceability and transparency are not the same thing, although they are often used interchangeably. Whereas traceability can be considered the *know*, transparency goes further and could be considered the *show*.

Traceability information may not necessarily be shared with consumers or other supply-chain actors; it may be used for internal purposes. Traceability is defined by ISO as “The ability to identify and trace the history, distribution, location, and application of products, parts, and materials.”

Traceability commonly includes tracing (from market to mine) and tracking (from mine to market) processes. Especially in respect to the gem trade, traceability can be useful in two ways: 1) increased storytelling as more is known about the source and journey of the gem; 2) make information available to respond to due diligence and compliance requirements of banks and governments.

Traceability has been a hot topic in recent years in the industry (blockchain, tagging, laser technology), but it is important to note that there is not one single solution for the sector. Furthermore, even though traceability technology can be disruptive, it has to be combined with chain-of-custody and auditable practices in order to be impactful in terms of furthering more sustainable outcomes.

Artisanal and Small-Scale Mining (ASM) as a Reality

Although mechanized large-scale mining is becoming increasingly important, artisanal and small scale mining (ASM) is still the dominating source of colored gemstones worldwide. This means that, at a production level, many of the efforts of the industry should be focused in this direction and on engaging with ASM communities and producers.

A large share of artisanal miners is engaged in this activity not because it is their vocation of choice, but because of a lack of alternative employment that permits them to sustain family livelihoods.

What's Next? Measuring Impact and Exploring Shared Value

The colored gemstone industry is beginning to address sustainability questions in more concerted forms and this has given rise to a number of initiatives, including those of CIBJO, RJC, ICA, and AGTA. The industry must not wait for the threat of a consumer boycott; it must adopt a proactive rather than a reactive approach, and has sought to do this by engaging in some of the above-mentioned efforts.

Ultimately, both traceability and standards seeking to promote *responsibility* and *ethics* seek to improve the sector's



The Colombian gem sector has successfully added value and jobs by supporting downstream activities such as gem cutting in Bogotá. (Photo: Laurent E. Cartier)

sustainability footprint. In order to be able to understand the impacts and improvements (as there is a common assumption that responsible sourcing and *ethics* do good), it can and needs to be measured using widely developed and tested sustainability indicators (Belle & Morse, 2012). This will reduce the risk of major negative backlash if investigative media or consumers find out that ethical claims made by the industry are not backed by verifiable reality.

Better understanding of the sector through research, education, and outreach (e.g. the Gemstones & Sustainable Development Knowledge Hub that is based at the University of Delaware, see sustainablegemstones.org) is also vital.

Although the gem sector may not ever be as heavily regulated or scrutinized as the financial sector, it is nevertheless valuable to look at developments in finance and how it relates to sustainability claims.

For those who think it is but a trend, it's worth pointing out that global sustainable investments rose by 34% over the past two years to reach US\$30.7 trillion in 2019 (Chasan, 2019). A recent Bloomberg article (Marsh, 2020) outlines that in a COVID-19 context, investors are increasingly wary of social washing, when "the impact of an investment on labor rights or human rights are falsely overstated."

This follows other trends such as *bluwashing* (using a United Nations affiliation to confer under-deserved sustainability credentials), *pinkwashing* (for false LGBTQ claims) and *rainbow washing* (to reflect inappropriate use of the UN's sustainable development goals logo) (Marsh, 2020).

As customers and investors increasingly engage with the gem sector on claims of responsibility and ethics, they will demand transparency and proof of claims and measurable impact (Bates, 2020).



A ruby is not always a ruby. Not all mined minerals are valuable gems, such as in this example with an artisanal mine production of low-grade corundum from Madagascar. (Photo: Laurent E. Cartier)



A sapphire from the Mogok Stone Tract in Myanmar (Burma). Every stone has its own story. (Photo: Laurent E. Cartier)

Conclusions

It is the industry's motivation and responsibility to inform consumers about possible treatments. It attempts to enforce correct disclosure of traded gemstones and has overcome this with considerable success. It would be illusionary to suggest that industry bodies regulate conditions in mining areas worldwide, but they could assume a certain responsibility in reviewing and improving them.

The complex and varied nature of supply chains of the gem trade—with its large share of family-owned small and medium-sized enterprises (SMEs) involved—are an integral part of its rich heritage. There are economical, geographical and historical reasons for the complexity and opacity of the supply chain and the difficulty (compared to other sectors) to come to terms with due diligence and responsible-sourcing guidelines such as those outlined by OECD.

There are countless examples of gem businesses supporting and investing in their communities and regions, and these positive success stories are complimentary to other efforts in the industry. The only way to continue to move forward is by collaborating in a transparent manner.

If consumers are informed about initiatives that seek to measurably improve the livelihoods of producers and other stakeholders, reducing environmental degradation (Cartier, 2010) and upholding human rights, it is the industry's own success that is improved.



Environmental reclamation of old mining pits is key if the industry is to improve the environmental footprint of gem mining. (Photo: Laurent E. Cartier)

Ethics is not about promoting some technocratic Western ideal; it's about ensuring that the full potential of gems to achieve more sustainable outcomes is achieved and strengthening the beautiful story that gems represent.

Origin and provenance can be important factors in determining the price of a gemstone. Ultimately, promoting both the natural beauty and the positive contribution that the extraction and trade of a rough precious gemstone has to a local community or region could endow a gem with additional value.

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