

Universidad del Rosario



**"Evaluating ethical and sustainable sourcing practices on the luxury jewellery industry:
A case study of Colombian Emerald mining"**

Trabajo de Grado

Arianna Valentina Londoño Bohórquez

Bogotá D. C, Colombia

2025

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Declaración de originalidad y autonomía**Declaration of Academic Integrity and personal Work**

I declare under oath, that I have written the titled document "**Evaluating ethical and sustainable sourcing practices on the luxury jewellery industry: A case study of Colombian Emerald mining**" in the degree option of graduating project and that therefore, its content is original. I declare that I have clearly and precisely indicated all direct and indirect sources of information and that this work has not been submitted to any other institution for the purpose of qualification or publication.

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Arianna Valentina Londoño Bohórquez

Table of Contents

Acknowledgements	3
Confidentiality Agreement for Graduating Project	5
Declaración de exoneración de responsabilidad	5
Table of Contents	6
Glossary	12
Resumen.....	14
Abstract.....	15
1. Introduction.....	17
1.1 Relevance of the study	18
1.2 Research question	20
2. Literature Review	20
2.1 Chopard and ethical sourcing.....	23
Table 1.	24
Leading watchmaker luxury brands and their position on sustainability.	24
2.2 Ethics and CSR	25
2.3 Social and Economic implications of the Gemstone mining	27
2.4 Challenges for the sustainable mining practices of Colombian emeralds	28
Figure 1.	29

Conditions of people living and working in the mines	29
2.5 Colombian emerald mining and ethical practices	30
Figure 2.	31
Showing life in the Colombian emerald mines.....	31
Table 2.	34
Emerald extraction process	34
2.6 Dimension for sustainable development.....	35
Figure 3.	36
Sustainable development goals	36
2.7 Ethical sourcing initiatives.....	37
2.8 Impact on brand image, market positioning and sustainability	39
2.9 Theoretical frameworks	40
2.9.1 Corporate Social Responsibility	40
Figure 4.	40
CSR diagram.....	40
2.9.2 Luxury jewellery brands that adhere to CSR principles	41
2.9.3 Stakeholder Theory	42
Figure 5.	43
2.9.4 Theoretical Model.....	43
3. Methodology	47
3.1 Method.....	47

3.2 Sampling	48
3.3 Data analysis	50
4. Results and analysis of the interviews question	52
4.1 Getting to know the respondents: their backgrounds.....	52
4.2 Personal experiences in the mines	54
4.3 Life in the mines	56
4.4 Working conditions in the mines and experiences	58
Table 4.5 Improvements in working conditions	60
Table 4.6 violence in the emerald mines	61
Table 4.7 Violence as a major problem	63
Table 4.8 Safety measures	65
Table 4.9 Emerald sale process.....	67
Table 4.10 selling emeralds to exporters and local buyers	69
Table 4.11 Prices of the emeralds	72
Table 4.12 Perspectives on emerald trade.....	74
Table 4.13 Ethical and sustainable practices as an important role in emerald mining in Colombia.....	76
5. Case studies.....	79
5.1 Cotillard Turns Jewellery Designer	79
5.2 Sustainable jewellery practice: a creative approach to communicate sustainability	80
5.3 Materials Sustainability across the Crafts and Applied Arts: a review and reflections	81

6. Conclusions and Recommendations	83
6.1 Limitations	85
7. References	85

Figure list

Figure 1.....	29
Figure 2.....	31
Figure 3.....	36
Figure 4.....	40
Figure 5.....	43

Table list

Table 1.	24
Table 2.	34
Table 4.5 Improvements in working conditions	60
Table 4.6 violence in the emerald mines	61
Table 4.7 Violence as a major problem	63
Table 4.8 Safety measures	65
Table 4.9 Emerald sale process.....	67
Table 4.10 selling emeralds to exporters and local buyers	69
Table 4.11 Prices of the emeralds	72
Table 4.12 Perspectives on emerald trade.....	74
Table 4.13 Ethical and sustainable practices as an important role in emerald mining in Colombia.....	76

Glossary

Block caving: it refers to an underground hard rock mining method that involves undermining an ore body which allows to progressively collapse under its own weight.

Chamfering: is a machine process that helps to remove the edges of parts. It helps to avoid breaking or wear of the edges, and it protects people against knocks or friction with a part or to avoid burrs so that they have a more aesthetic finish or to help the processes to be carried out.

Ethical sourcing: Ethical sourcing practices are the responsible and sustainable method to organize a supply chain and their original sources of raw materials. It is the responsibility of entities in the public sector to monitor that the products they are acquiring have been ethically sourced and also ensuring that the health and safety of employees is protected in the process.

Gem mining: is the process of searching for precious or semi-precious stones hidden in the earth. It is not commercial mining because this involves heavy machinery and deep excavation, gem mining allows individuals to find gemstones in a more accessible and environmentally way.

High-end jewellery: high-end jewellery is the complementing and enhancing the beauty of the finest garments. Crafted with precision and creativity, high jewelry pieces are often considered wearable works of art.

Responsible jewellery council: Responsible Jewellery Council is the world's leading sustainability standard setting organisation for the jewellery and watch industry.

Tunnelling: Comes from the word tunnels, is an underground structure which is constructed through the surrounding mass of soil or rock. In the case of mining, tunnels are designed to withstand earth forces applied from all sides. They are mostly used in mining (ore extraction), public utilities and transportation.

Resumen

Este estudio pretende comprender el impacto de las prácticas éticas de minería sostenible al momento de buscar esmeraldas colombianas y cual es la percepción de la imagen de las marcas de lujo. Este estudio nos da el entendimiento de como las marcas de lujo perciben y comparten las prácticas éticas y si son realmente prácticas responsables, especialmente en la minería colombiana que se ha caracterizado al pasar de los años como violenta, con abuso laboral y demás. Teniendo en cuenta esto, cuando la minería no es responsable, y estamos en un momento en el mundo en el que los consumidores quieren saber la verdad y el origen de lo que compran, este estudio llega al punto de comprender como estas prácticas en una marca de lujo podrían afectar la imagen de la marca en cuanto a sus prácticas no éticas, o como podrían estar posicionadas en el mercado, entendiendo así el comportamiento del consumidor cuando entiende de donde vienen este tipo de prácticas realmente.

Palabras clave: Ética, minería sostenible, esmeraldas, marcas de lujo, violencia, abuso laboral, consumidores, imagen de la marca, comportamiento del consumidor.

Abstract

Luxury jewellery brands are facing pressure to adapt sustainable practices and responsible mining of their sourcing to change the perception and their transparency on the traditional practices of environmental degradation and labour abuse. Ethical sourcing of gemstones, emeralds in particular, are becoming a key focus for brands to align with consumer demands on the products they are buying. Colombian emeralds are well known in the luxury market for being the most prestigious due to their rarity and quality, but also for their harmful mining practices.

This study investigates the impact of ethical mining practices in the gemstone sourcing in Colombia and the perception on the brand image in the luxury jewellery brands. The research gives us the understanding on how the luxury brands perceives and engage with the ethical and socially responsible practices in this market and to what extent these practices may affect the brand image, market positioning, sustainability and consumer behaviour. This study conveys a mixed method approach due to the incorporation of qualitative interviews surveys and data analysis and market performance indicators. As well as the theoretical frameworks that includes the CSR, stakeholder's theory, brand image, market positioning, sustainability theories and supply chain management in order to inform the analysis of the emerald sourcing.

Finally, through case studies and interviews, this study aims to deeply investigate on the relationship between ethics and emerald sourcing, and how it affects the brand positioning. The findings from this study shows the understanding of the ethics in brand perceptions, market dynamics and sustainable efforts that can be made in the jewellery industry, in order to enhance

trust and competitiveness. This study offers a framework to understand the benefits of ethical emerald sourcing to promote sustainability in the global jewellery market.

Keywords: Sustainability, ethics, emerald sourcing, gemstones, consumer behaviour, luxury brands, CSR.

1. Introduction

The luxury jewellery industry has been showing a huge growth by increasing consumer preferences for personalised products and having more luxury private experiences. This market has a diverse range of high-end jewellery items, such as necklaces, rings, bracelets, earrings and many other pieces that are crafted with precious metals and gemstones, Colombian emeralds have a prestigious position in the market due to their purity, rarity and vibrant colour. Colombia is the world's leading emerald producer; it is well known that they are the most expensive in their category and the most unique. However, they are also known for using the traditional methods of emerald mining that include environmental degradation, labour exploitation, and enormous social conflict that comes from years. Nowadays, luxury jewellery brands have captivated even more consumers with artistic craftsmanship and their unique designs, taking into account that jewellery is a timeless elegance and that might be an investment for the future.

Moreover, beneath the surface of this opulence, glamorous and elegant world, consumers have become more conscious of the origins of these precious stones that are used for the jewellery designs, which is why many luxury jewellery brands have been reevaluating their approach to how their supply chain is working and what can be done in order to change some of the socially responsible practices in the gemstone sourcing as well to improve their ethics in the industry. This is the case of many luxury brands such as Cartier, Tiffany & Co,

Graff, etc. For this study we will focus on the commitment that Chopard has had over the past years to ethical sourcing and sustainability in its jewellery but most importantly on their use of Colombian emeralds in their collections. Chopard is known for their transparency in their supply chain and how have they wanted to make sure that all their partners ensure responsible mining initiatives.

In response to the problematic, many luxury jewellery brands have embraced ethical sourcing by ensuring that emeralds are mined in a way that the impact is reduced considerably. This initiative presents an opportunity for luxury jewellery brands to strength their brand image and global reputation, by ensuring that they commit to ethical practices and differentiate themselves by adding value and importance to the social concerns. This study focuses on how the ethical sourcing of Colombian emeralds influences the brand image of these brands by providing insights into how these practices contributes to the brand's reputation. the exploration between luxury branding, corporate social responsibility and consumer behaviour.

1.1 Relevance of the study

The relevance of this study is significant on the context of ethical emerald mining in Colombia. Nowadays, consumers prioritise sustainability and social responsibility at the moment of the purchase, which is why many luxury brands have adopted ethical sourcing in most of their goods. This shift not only helps that the brand image has a greater visibility but as well it has a positive impact on the sustainability that the whole industry manages.

While examining the impacts of ethical sourcing in emerald mining regarding to the brand perception, this provides valuable insights and effective strategies that the brands may use to communicate to their customers the ethical practices, this results in an increase of loyalty and trust that the gemstones used are only of the best quality, by being also a differentiator in Chopard and compared to other brands to satisfy customer needs and address current issues that affect us all and that everyday people are more conscious about.

Mining in Colombia is more than just having the best emeralds in the world, but also it has social conflict behind, poor living conditions, low rates of employment, and different social factors that the country has to constantly live with due to being a developing country. Colombia's gemstones have a huge part of the market in jewellery luxury brands, but not many people know about the process behind it. The costumers of luxury brands all around the world are not conscious about the quality living standards that many workers have in order to supply the basic to their families. This is exactly what happens to the average Colombian households, in which many of these miners work in poor conditions to supply to these luxury brands around the world, and afterwards the final product is sold by ten times the actual price and the miners are not paid enough by risking their lives.

Gemstone sourcing is a huge problem nowadays, not only because of the poor quality live that these mining regions have, but also because of the environmental degradation that these imply, and all the violence that comes with it, mostly in a country as Colombia which violence has been on the radar for more than 60 years. It is important that consumers are conscious about what they are buying and all the implications of having these products at home without knowing all the story behind it.

1.2 Research question

To what extent can luxury jewellery brands like Chopard ensure ethical and sustainable practices in the sourcing of Colombian emeralds, given the socio-economic and safety challenges faced by miners?

2. Literature Review

The multi-billion-dollar industry of the gemstone mining is somehow devastating. Starting from human rights, deforestation, habitat destruction, etc. “Despite efforts to regulate the industry such as the formation of the Responsible Jewellery Council to promote responsible practices in gemstone sourcing, or the Alliance for Responsible Mining established to promote sustainable mining practices, the mining of precious stones continues to take a toll on our planet.” (Biron, 2023) Of course, it is not everything bad, there are positive things at the moment of exporting gems, increase of local employment, but still these benefits only serve operators, gem dealers, and people that live from gems.

How does gem mining occur? Well, it involves the extraction of the precious metals from earth when digging into holes and separating the gems from the rocks by having heavy use of toxic chemicals. The main gem mining methods are the open cast mining, which is used to extract gems and metal ores, from digging the ground and can be large until 150 meters deep

earth. The other option is the river mining which includes the extraction of gems from the alluvial deposits in rivers or lakes when there is slow streamflow. This is the main method used in Sri Lanka where people stand with a type of basket and collect the precious metals. On the other hand, there is the underground mining which involves the digging into tunnels that are less than 10 meters below the surface of earth and have different types such as: chambering, tunnelling and block caving. Finally, there is the deep-sea mining in which it is able to extract the gem deposits by using nets, the gems that can be collected are pearls that are produced by molluscs and they collect them by hand.

With all the awareness that people have raised the consumers have aligned with companies' values, which has been a trigger to many companies that don't follow these practices. The gemstone sourcing includes the impact that the jewellery industry has on the environment and all the local communities that might be affected during the gemstone extraction which is a global problem, and this also follows to the unethical practices such as the environmental degradation that the extraction of the gemstones includes, labour exploitation and human abuses which is a main problem in the making of these products that probably is not always known. Which is why this research contributes to CSR. By also understanding the motivations and strategies of the luxury jeweller brands in incorporating and being more ethical and provide insights on how an ethical and sustainable practices would evolve on the responsibility of a brand.

“Nobody used the word "sustainability" when Charles Lewis Tiffany cofounded this company, in 1837, in New York.” (Cumenal, F. 2017) At that time most jewellers were just retailers, they bought products from middlemen and sold them. In the case of Tiffany & Co, they had hired many artisans to make the jewellery in the house, this was due that he wanted

to design and manufacture the products he sold in order to express his artsy and creativity. Which follows to the internal operation of cutting and polishing diamonds, this was not necessarily more environmentally friendly than the other jewellers, but they did have more control over their supply chain which is also important in this business.

Ethical and responsible practices within the gemstone sourcing have increased attention in the industry due to growing of consumer awareness and the demand for sustainable products that nowadays has had a huge impact on most of the products that we acquire. The understanding of the attitudes and strategies of luxury jewellery brands towards these social practices can be essential on the impact that may occur on the brand image, the market positioning and the sustainability.

“Human exploitation such as forced labour and child labour is an all-too-common effect of gemstone mining.” (Lam, D. 2023) Most of the operations of the gemstone mining take place in developing countries in which the workers are subjected to unregulated working conditions and low wages, this is usual to see in developing countries such as Colombia, where emerald and diamond mining is very common, and workers are subjected to take care of their families due to the violence and danger of that industry that may be caused by the guerrilla and terrorism.

Another common mining side effect is the water contamination, due to the extraction of gems it involves the use of toxic chemicals like cyanide, ammonium nitrate and fuel oil that contaminates the water resources, this may cause disruption of aquatic ecosystems. As well as the carbon emissions due to the heavy machinery and equipment because of the fossil fuels which leads to the release of the greenhouse gases.

2.1 Chopard and ethical sourcing

Chopard has become a role leader in sustainable and ethical sourcing in the past years, not only for emeralds but they have insisted on improving their sourcing materials as a project to become more responsible and aware. “By the end of 2023, all Chopard steel watches, including bracelets and cases, will include 80% recycled steel” (Chopard), this is just an example of many projects they have for the brand in terms of becoming more socially. Chopard ensures that there is the greatest transparency at the moment of sourcing a gemstone, by also giving a self-regulation initiative to the suppliers to source ethically.

Chopard has been a pioneer to marketing sustainable campaigns in which they want to communicate to their customers the transparency, responsibility, sustainability and all those practices they have implemented to communicate on social responsibility commitments.

Table 1.

Leading watchmaker luxury brands and their position on sustainability.

Company	Active Participation in Rating Process		Governance structure & policies	Due Diligence	Materiality analysis & target setting	Monitoring & reporting	GHG emissions (inventories, reduction targets, etc.)	Waste management and product packaging	Sustainable procurement	Traceability & emissions of transportation	Environmental impact of products	Transparency and certification of raw materials	Environmental certification and % coverage of certified raw materials	Sourcing & environmental projects for raw materials	Capacity building of suppliers	Engagement with employees	Customer awareness on sustainability impacts	Membership in business initiatives for sustainability
	Overall score	environmental rating																
Audemars Piguet		non-transparent																
Breguet		non-transparent																
Cartier	X	upper midfield																
Chopard		lower midfield																
IWC	X	ambitious																
Jaeger-LeCoultre	X	upper midfield																
Longines		non-transparent																
Omega		non-transparent																
Patek Philippe		non-transparent																
Piaget	X	upper midfield																
Rolex		non-transparent																
Swatch		non-transparent																
TAG Heuer	X	lower midfield																
Tissot		non-transparent																
Vacheron Constantin	X	upper midfield																

Note: The sustainability reporting journey of Swiss luxury watchmakers. Compact; Compact Magazine. *Valkovicova, J., Evers, E., & Galanti, S. (2022, December 20).*

<https://www.compact.nl/articles/the-sustainability-reporting-journey-of-swiss-luxury-watchmakers/>

“Brands like Cartier, Piaget, Vacheron Constantin and IWC claim to reach carbon neutrality through the offsetting from the funding of environmental projects, other brands like Jaeger LeCoultre and Chopard have reported 40% reduction in their carbon footprint.” (Evers, E) For most of the reports in the different categories, Chopard has around 31% of positive visibility by being a high performer with more transparency and communication with their customers.

For sourcing metals, “For the Richemont brands, the Swatch Group, Tag Heuer and Chopard confirmed in their sustainability reports that the diamonds they purchase are compliant with the Kimberley Process Certification⁵, so brands communicate the commitment to the removal of conflict diamonds from their supply chains.” (Valkovicova, J). Chopard is one of the companies that it is seen as an upper midfield in terms of sustainability not only for watch making but also for sourcing metals. It is really difficult for a brand to know exactly how they are sourcing every material, which is why having a clean supply chain might become difficult when they don’t actually know the actual situation of the mining country and the poverty that comes behind it.

2.2 Ethics and CSR

Ethics and CSR practices in the gemstone sourcing go further than only environmental sustainability. We need also to consider human rights, fair labour practices, environmental degradation, unethical mining associated with the traditional gemstone sourcing and practices throughout the supply chain.

By understanding the meaning of sustainability, we could say “one of the most significant translational research problems of our time” (Proctor E, Luke D, Calhoun A, McMillen C, Brownson R, McCrary S). We can see how nowadays sustainability has become a really important factor in our daily lives in which we now think about all of the things that we can do to become “sustainable”. On the other hand, this goes linked with the principle of ethics. Ethics is just something we hear about our whole lives and it is more than doing right

or wrong, “ethics is based on well-founded standards of right and wrong that prescribe what humans ought to do, usually in terms of rights, obligations, benefits to society, fairness, or specific virtues.” (Velasquez, M. Andre, C. Shanks, T. S.J. Meyer, M)

For example, Tiffany’s focus on sustainability began 25 years ago. As the company was in their process of expansion, they wanted to focus on growth which meant that they needed more precious metals and diamonds. But at the moment, people were really aware of the environmental and human costs that mining brought.

To have a wider view of this topic, mines usually use cyanide and other toxic chemicals in order that the metals can be extracted especially for gold. And in the case of diamonds, most of the diamonds originate from countries that have political conflicts or human rights abuses so it might be seen as if you buy diamonds, then you are financing all these types of violence and meaning you have no awareness of ethical responsibilities. Ethics come from different thoughts in our minds, in which we make decisions, and we make them based on what we feel is best or about what we want to accomplish “many people tend to equate ethics with their feelings.

But being ethical is clearly not a matter of following one's feelings. A person following his or her feelings may recoil from doing what is right. In fact, feelings frequently deviate from what is ethical” (Baumhart, R). The sociologist also mentions how “Being ethical is also not the same as following the law. The law often incorporates ethical standards to which most citizens subscribe. But laws, like feelings, can deviate from what is ethical.” (Baumhart, R).

This might be hard to digest, due that most of the times we make decisions, or we act in a certain way without thinking what this might be influencing in our lives. Ethics are not only what society accepts but actually to differentiate right or wrong and acting accordingly. Baumhart mentions that “Ethical standards also include those that enjoin virtues of honesty, compassion, and loyalty. And, ethical standards include standards relating to rights, such as the right to life, the right to freedom from injury, and the right to privacy.” Which is exactly what we find here in the ethical mining practices.

Then, we could say that people working at the mines have high standards of good living conditions, or that all of them have the right of life. Now that all of these mines have been subject of violence in the past years, meaning that most of them get killed just to have better emeralds. The mines are no such place to live without injuries, many people get killed due to the poor conditions in which these mines are operated. With due reason, are these mines really ethical? Even if there has been government intervention and if there are international companies around, does it ever really change?

2.3 Social and Economic implications of the Gemstone mining

The mining communities all over the world, even more in developing countries have diverse social and economic problems. As a well-known topic in the new days, the child labour, labour exploitation, lack of education and health care systems and the bad working conditions are main problems in developing countries and even more in the gemstone mining regions that do not promote fair labour conditions.

When looking out for people here is an example of Tiffany & Co. “In thinking about sustainability, our inclination is to focus on the environment, because mining by its very nature disturbs the earth and is going to have an environmental impact. But how our employees and the employees of the mines from which we source are treated is also crucial.” The fair treatment of workers is a thing that need to be prioritized and this also goes along with environmental conversation rather than deterioration.

2.4 Challenges for the sustainable mining practices of Colombian emeralds

Sourcing emeralds has been developed since pre-Hispanic epoch; this has become a traditional culture in Colombia in the main departments of the country in which this precious stone is sourced. “The arrival of international mining companies has encouraged a shift away from the informality of this process, positioning Colombia as the world's leading producer of emeralds and the top producer in Latin America” (National Mining Agency, 2018). The main municipalities where the production of emeralds take place in Colombia as mentioned before Muzo, Chivor, Peñas blancas, have been subjected to long and lots of violence periods due to the war to take control of the mining operations in these areas.

Victor Carranza, is a well-known trader of emeralds and owner of the largest mines in the department of Boyacá, where there are the highest percentage of emeralds that can be found. He died in 2013, and due to that it occurred a restructuring of emerald mining and as well the violence in emerald mining decreased significantly, which has been a war long time ago

between the government and locals to fight for their lives and their safety due to irresponsible mining.

Figure 1.

Conditions of people living and working in the mines



Note: The man that lost his leg due to a mine accident and now he dedicates to seek emeralds in the ravine. *Al Jazeera*. (2017, March 20). *Into the green land: Emerald mining in Colombia*. *Al Jazeera*. <https://www.aljazeera.com/gallery/2017/3/20/into-the-green-land-emerald-mining-in-colombia>

In the image above we can see how the people from the mines work and the conditions of work are not good. Often, people in these conditions have to work to have something to eat, and most people suffer due to violence in the zones, which it is supposed that it has decreased over the years. However, the diminution in violence did not generate huge benefits for stakeholders of emerald sourcing, due to the large mining groups that were concentrated in

small-scale mining, which were considered as the main source of income for a great part of the population in these areas.

Taking into account Colombia's war and violence history, the peace processes were not easy to follow, and development took different paths in which non-local political and economic forces centralise power and are the main source of impact to development of the most vulnerable communities in mining municipalities that usually government doesn't provide any attention and are forgotten municipalities. This creates important challenges for the emerald sector in order to search for social, environmental and economic sustainability that allows the development of communities.

2.5 Colombian emerald mining and ethical practices

In Colombia there are two principal mining districts: Muzo and Chivor. These districts are owned by Colombian government and currently there are various private companies that operate under leases. Emeralds mined in Colombia have been used for personal use and trade long time ago in history since the Spanish arrived in the 16th century. "In 1946, the government entrusted the management of the Muzo mines, including the power to regulate all mining and marketing of emeralds from that district, to the Banco de la República" (Feininger,1970). However, illegal mining has been always been on the radar which has been awarded a loss for national government of around 30 million pesos during 1946 and 1970. The situation got worse when people were killed due to violence and the mines were obligated to close, they remained closed until 1977, after extensive negotiations and government intervention.

Figure 2.

Showing life in the Colombian emerald mines



Note: The conditions in the mines are usually very poor and people suffer from bad labour conditions, most of them live and work in very dangerous ways. *Bloomberg. (n.d.). Bloomberg.com. Retrieved October 29, 2024, from <https://www.bloomberg.com/features/2019-emerald-mining-colombia/?embedded-checkout=true>*

Nowadays illicit emerald mining is still a thing, and it has no relation to the government, which has been a war between the private companies that are under lease to mine, and from the “guaqueros” which are the people that market the illicit emeralds. In 1991 some emerald mining leaders in Colombia signed a peace agreement in which the conflict would finally come to an end. This agreement gave the miners hope and the ability to control de supply of emeralds

from the market. In times of war in Colombia, dealing with emeralds was a tough business, due to all the money that this business moves.

Even though government intervention was helpful to bring peace to the dealers and owners of private companies, it didn't bring peace to the thousands of men and women who depend on the emerald mining to sustain their homes. Most people were killed due to violence and armed groups, which also led to labour exploitation, bad working conditions and of course unethical mining sourcing, due to the danger that this represented for people working in mines.

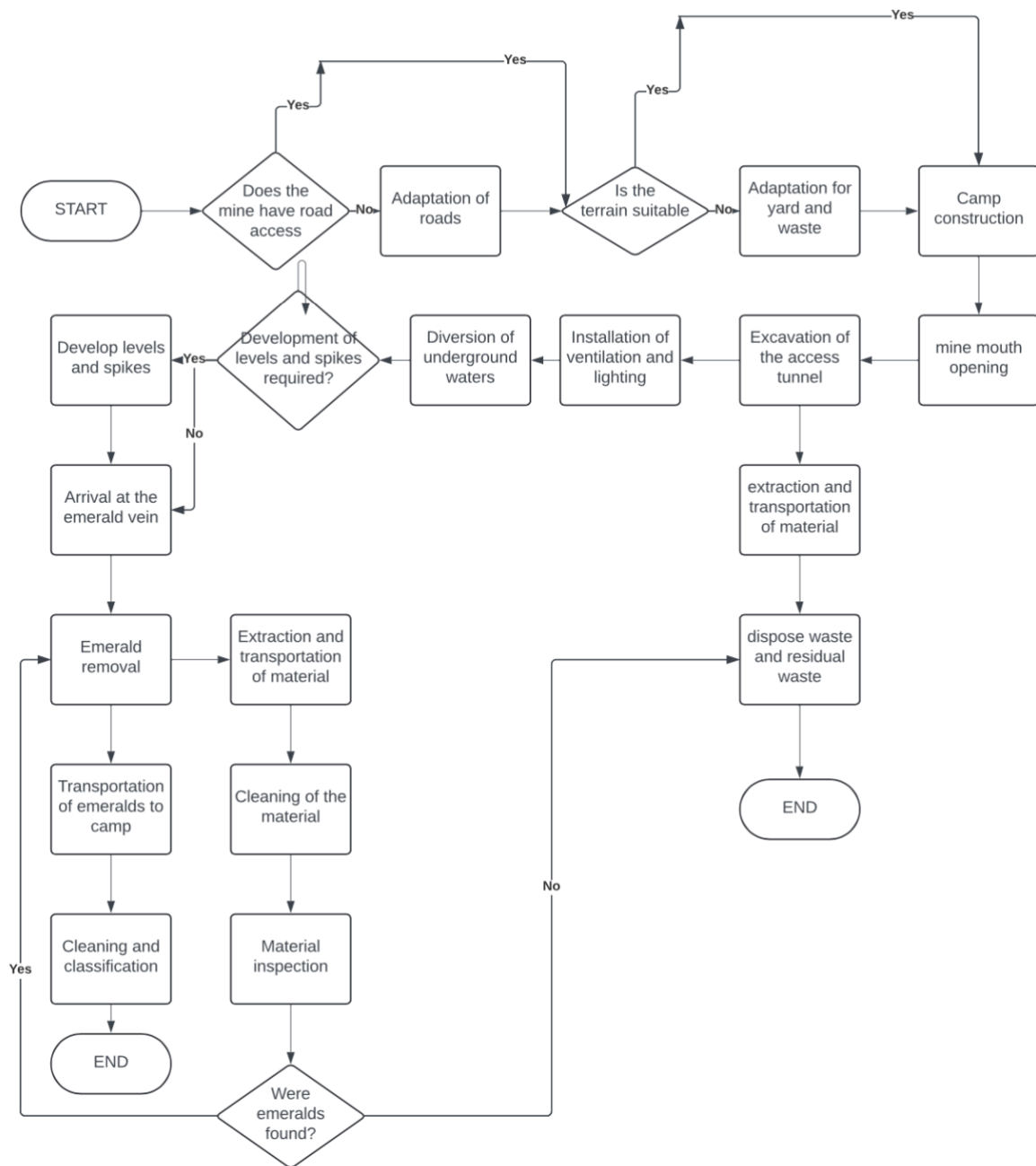
Ethical mining in Colombia has improved and has progressed over the last years specially in the mines of Muzo, which are considered the most important. "In areas of mining detritus, their automated planting system helps stabilize the soil and restore the beauty of the environment. An estimated 35,000 square meters have been replanted thus far. Additionally, since the quality of the crystal cannot be compromised, the use of aggressive mining with dynamite is strictly prohibited. (Muzo, Colombia 2024). There have been adaptations of the responsible mining by modernizing practices that improves quality of living for local residents, miners and former miners. Nowadays the extraction process is made with help of surveillance to ensure that the quality is unmatched and that there is no aggressive mining with dynamite.

"Emerald mining is characterized as a low-tech process and its predominant methodology is tunneling" (UNEP, 2016). They are huge holes in the ground that are hold by wood structures, in this way the liquid that is naturally produced by soil can be drained. There are lots of installations of gas meters to control the accumulation of gases that leads to contamination, this help that the miners don't get seriously affected in health and can get in

serious conditions and may present unwanted health diseases such as asphyxia or poisoning due to the high exposure that miners get to these gases.

This is all part of being responsible at the moment of sourcing these materials, and it is important that ethical mining not only corresponds to the status of the soil and deforestation but also think about the health of the miners and the people that live close to these mines in order to be conscious about all the process that this takes and all the tools and equipment that must be taken into account to ensure a good working practice.

As we can see in the following diagram showing the emerald mining process, from the starting point of the sourcing, then preparing to clean and sorting the emeralds and in the final disposal stage of waste.

Table 2.*Emerald extraction process*

Note: it shows a diagram with the extraction of emeralds and all the process that this has to overcome.

L. Arianna (2025)

2.6 Dimension for sustainable development

Mining sector for Colombia has been an incredible push for economic growth and it is really important for the country and for the mining communities. For the country's GDP it contributes to 1,96% and it generates around 400.000 direct employment and around 1 million indirect employment according to (Agencia Nacional de Minería). This of course shows a great impact in the development of mining communities by creating bonds with other economic activities that are important in Colombia, such as agriculture, cattle farming, etc. Moreover, emerald sourcing has helped and increase the foreign investment now that many companies arrive to the country seeking for investment in the sourcing of this precious stone which leads to growth and development to the communities that live in the area.

The arrival of these foreign companies has also helped and impacted positively in the formalisation of legal mining but has also reduced almost every artisanal mining and illegal mining which can have a side effect in the economy of many habitants of the region that live thanks to emeralds.

There is no secret that sourcing gemstones implies on deforestation and harming big parts of vegetation and soil in order to allow this practice. Even though technology has helped increasingly to make these practices smoother and simpler, this also has huge impacts on the environment, not only because of natural degradation but also air contamination that affects negatively biodiversity in the mining regions. The extraction of emeralds does not require any toxic chemical such as mercury as in other cases of sourcing, but still, there are environmental damages now that they are deteriorating the soil.

Figure 3.*Sustainable development goals*

Note: It is important to know the goals that measure sustainability, understanding that there are 17. Gaffney, O. *Sustainable Development Goals. Improving Human and planetary wellbeing*. Igbp.net. Retrieved October 01, 2024, from <http://www.igbp.net/download/18.62dc35801456272b46d51/1399290813740/NL82-SDGs.pdf>

“long- term sustainability for a global society will require a careful watch on Earth’s life-support system. The group identified seven environmental priorities, or “must haves”, for inclusion in the sDGs: climate, biodiversity, ecosystem services, freshwater provision, nitrogen and phosphorous cycles, pollution and use of novel materials. Future Earth has also cemented

close ties with sDsN.” (Stafford, M). The main purpose of the SDGs is to emphasize the global commitment that the sustainable development needs to have in order to achieve all these seventeen goals. The importance of the SDGs has become increasingly important due that many industries rely on the natural resources, in this case of course this industry relies on the extraction of precious stones which come from natural resources, such as the gemstone mining and the different jewellery markets that is no secret that they hide lots of secrets and involve huge environmental and social impacts that affect directly some of the SDGs

All along history from emeralds in Colombia, there has also been evidenced social conflicts and violence in the mining regions of the country. “Currently with the reduction of acts of violence in the quest for dominance of emerald mining that caused the death of more than 3,000 people in the municipality of Muzo” (Franco, Puppim de Oliveira and Ali, 2018). Due to many of these deaths and social conflicts caused by the extractions of this gemstones, there has been lots of foreign investment so that the productive process of these technologies can optimize the extraction process and become more transparent. As well, this has had some negative opinions on the communities nearby because the small-scale sourcing has decreased and there is less employment due to the technology that has been adapted in the extraction process.

2.7 Ethical sourcing initiatives

There are various initiatives and standards to address the ethical and social challenges that are associated with the gemstone mining. Previous researches have examined various

aspects of ethical sourcing practices, studies have highlighted the importance of the considerations at the moment of the purchase in order to understand the ethics and brand perceptions. Not all jewellery designs use ethical gemstone sourcing, and most of the brands don't. The ethical sourced gemstones are said to be more expensive now that the miners are fair paid since there has to be an extra care to protect and restore the environment. Still, most jewellers are not willing to pay more for stones now that this would mean that they have to increase prices or if the prices are not increased then they would result in less profit.

Truly ethical mining combines the human rights and environmental care, but responsible mining is not that easy. It involves a great treat of miners and workers, fair wages and all the ethics behind the supply chain. In the case of gemstones its different, there is no such thing as sustainable gemstones because the resource is not naturally renewable or easily restored.

The process of mining precious gems occurs when taking the non-renewable resources out of the ground that take lots of years to form and cannot be replaced in coming years, it's said that eventually there will be no more gemstones because of the unsustainable practice that it involves. Mining could become more sustainable by restoring land after mining, not using chemicals, having a purer process to extract minerals, many processes that might not get even close to be sustainable.

There is another aspect when we think of conflict-free gemstones. This is a very interesting and important aspect regarding to all the negative insights at the moment of mining especially in developing countries. Researches have confirmed that mineral resources in developing countries present unique opportunities for the citizens to gain socio-economic

development. “Ideally, through good governance practices, this could be realised without having to compromise their traditional and cultural integrity” but sustainable development does not compromise the traditional and cultural integrity, people just look for better living standards.

The most recent disruptions of the mining industry in developing areas are likely to be in Africa, Pacific Island Countries, South America which has had big costs of human life and the lost mining revenues. For example, Peru in South America which mining represents 12% of their GDP, they are huge producers of silver, copper, zinc, tin, lead, molybdenum and gold; this has also led to an economic growth in Peru for about 6% annual.

2.8 Impact on brand image, market positioning and sustainability

Nowadays, many brands prioritize being transparent, ethically conscious and some other prefer to have conduct codes in their supply chain. The ethical sourcing practices have significant implications for the luxury market of jewels, everything that implies the brands image, market positioning and sustainability. It is not a secret for everyone that gemstones are not ethically mined. Which is why is a topic that brand not usually tell. When the gemstones are ethically sourced the company will make a big deal out of it and will tell everyone it is sustainable. This might also increase a positive reputation and could maintain a positive brand image to enhance creativity on the market. In the case of sustainability initiatives, the implementation of these practices to minimize environmental impact can be a great change in

the brand image because this means they are not only thinking about the money and business, but they are also thinking about long-term environmental degradation.

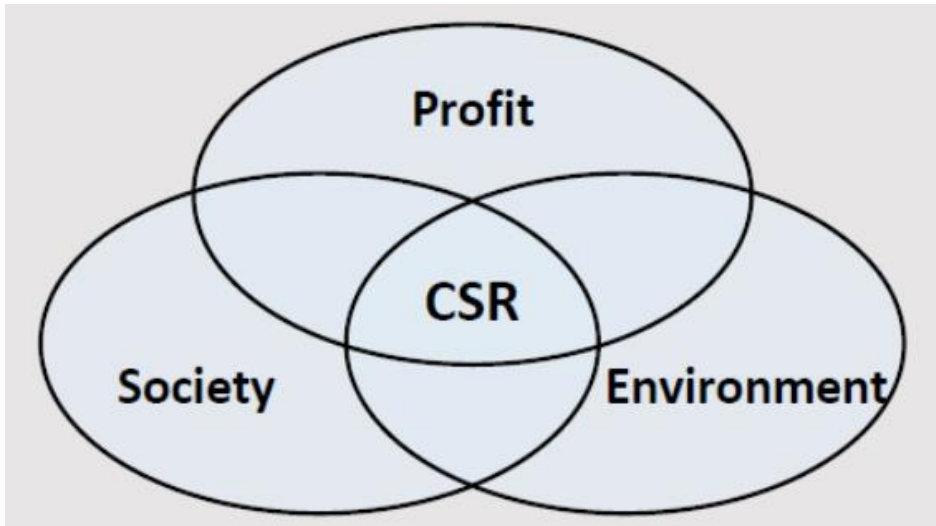
2.9 Theoretical frameworks

2.9.1 Corporate Social Responsibility

Corporate Social Responsibility (CSR) is a framework that refers to business practices that follow or are pushed by social or environmental purposes to integrate ethical, social and sustainable considerations. Many definitions of CSR emphasize that it is generally related to the firm's core business and contributing to its profitability. CSR can be conceptualized as a set of practices integrating social, environmental and profit-related considerations. We can see in the following diagram, how profit, society and environment make a huge part of CSR and how this are all attached together:

Figure 4.

CSR diagram



Note: Diagram simultaneously the objectives of the three elements. *What is Corporate Social Responsibility (CSR)?* (n.d.). HEC Paris. Retrieved March 15, 2024, from <https://www.hec.edu/en/faculty-research/centers/sustainability-organizations-institute/think/so-institute-executive-factsheets/what-corporate-social-responsibility-csr>

2.9.2 Luxury jewellery brands that adhere to CSR principles

In the context of luxury jewellery brands, they can implement ethical sourcing policies which can establish standards for the gemstone sourcing in order to become more ethical and prevent the conflicts on the minerals that are used and obtained through this mining practices.

The stakeholder engagement are the brands work with suppliers, industry associations, NGOs and government agencies to make it more transparent and that follows to be more moral and sincere, accountability and continuous improvement in gemstone mining practices. Which follows to the contribution to community development in which brands support initiatives that improve the well-being of mining communities, such as education, health and infrastructure,

to promote sustainable development and improve quality of life. One could add, the environmental care that brands use sustainable sourcing methods, in order to reduce environmental impact and support efforts to preserve biodiversity and natural resources.

The communication of CSR initiatives occurs when the brands need to clearly communicate their initiatives to consumers, investors and other people involved in the business through corporate messaging, marketing campaigns and engagement to build trust and credibility. Which is why social responsibility providing a framework for luxury jewellery brands to integrate ethical and socially responsible practices into their business models even more in the responsible mining, which it is not easy and might be a little controversial for high-end luxury, but it could also improve their reputation, and relations in the long-term sustainability in the luxury market.

2.9.3 Stakeholder Theory

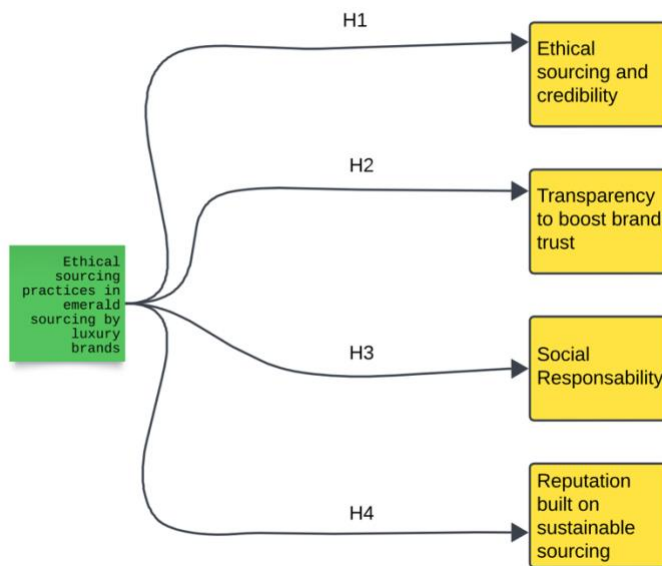
This occurs when businesses operate from the interconnected stakeholders, customers, suppliers, investors, etc. If we think of luxury jewellery brands and mining the stakeholder theory shows us the importance of considering diverse interests and perspectives that are involved in the supply chain. “If you were to ask me for the one defining characteristic that sets stakeholder theory apart from other approaches, I’d probably say that stakeholder theory puts ethics at the heart of business.” (Van de Linden, B. 2021). Stakeholder theory gives ethics a more pragmatic view because ethics it’s what we do in our daily lives to solve problems and make things better in the world.

In order to identify the stakeholders, the brands make analysis that identify and prioritize key stakeholders that might be affected in their gemstone mining practices, “Taking a stakeholder perspective is, therefore, a way of thinking that can help us understand a company’s purpose.”

If the mining business could work in this setting, they could have a stakeholder-style focus in order to create value for their brand and from different participants. These may include, employees, suppliers, environmental organizations, investors, etc. In order to understand the stakeholder expectations, the brands engage to understand their expectations, concerns and everything that relates to ethics. As well, everything is a balance, and it is important to take into account the interests and expectations of the different stakeholders in order to know the feedback into the decision-making process so that it can adopt the concerns. To involve the fair labour standards, it is important to support the community development and minimize the environmental impacts.

Figure 5.

2.9.4 Theoretical Model



Note: This theoretical model implies the different hypothesis for this study.

L. Arianna (2025)

In this theoretical model we will cover the independent variable of ethical and socially responsible practices in the gemstone sourcing which include the ethical sourcing policies, the stakeholder engagement initiatives and how does the sustainability can be measured. With this independent variable we can add the hypothesis that led to the main purpose of this research. In which there are 4 main points that we take under consideration.

H1 as luxury jewellery brands that are always implementing ethical and sustainable practices and have a greater level of transparency between the consumers and the stakeholders as well as the brand reputation that the brand may have and how is the credibility that they may have in the market. As the H2 we evaluate the working and living conditions taking into account the safety measures for the miners in the regions by correlating this onto how they get involved with international luxury brands and how are they committed to ethics. For H3 that is

the long-term ethical and sustainability of the brand's operations and the contribution to environmental and social sustainability. And finally, H4 the commitment of the luxury jewellery brands and how their ethical sourcing influences their brand image even though transparency seems difficult due to supply chain complexity in the mining operations.

The different hypotheses are measured on how the ethical and socially responsible practices in the gemstone sourcing affects the dependent variables. The independent variables represent the factors that influence the jewellery brands and the perceptions that engages with ethical and sustainable conscious mining. In the case of the dependent variables shows to what extent can ethical practices be consistent and verifiable in terms of transparency in the supply chain, the working and living conditions and the environmental impact of sourcing.

In order to measure the consistency and verifiability in terms of transparency in the supply chain, the working and living conditions and the environmental impact of sourcing it is important to conduct a qualitative research method in order to gain enough information from to measure the variables.

In the case of transparency in the supply chain, surveys will be conducted to industry experts and additionally, analysing case studies from the brand and from the perspectives of people from Chopard. That will allow us to know and access the transparency and the brands commitment to the ethical sourcing and sustainability. As well, it is important to analyse the working conditions for miners, by conducting surveys with miners and local jewellers that might give us an insight of the reality that they might live inside of the mines, perhaps safety measures, wages, health insurance, etc.

When we study the environmental impact of mining, we can compare different reports, case studies, and we can review data from local agencies or environmental papers about the local impact. By looking at this reports it will help us understand if luxury jewellery brands adhere to this problematic and what in reality they do about ethics and sustainability. As well it is important when conducting the surveys to know about loyalty, socio-economic and political conditions, willingness to pay and if people would pay more for ethical sourced mining of course if there are ethics in mining.

Finally, it is important to analyse the controlled variables in order to see how the political conditions affect lives in the mines, and how this has been a trigger to violence and leading to poverty and socio-economic major issues. As well taking into account all these things might lead to illegal mining which is very common in Colombia and how has the government intervened, or what to the interviewees think about this problematic.

By analysing all these methods, combining interviews, case studies, and reviews of secondary data from industry information, it will have great insights on the understanding of how effectively the luxury jewellery brands specially Chopard, implement the ethical and sustainable sourcing.

3. Methodology

3.1 Method

In order to conduct this research, we will examine a qualitative method approach, in which it will be focused on conducting semi-structured interviews. A total of 3 interviews will be carried out with the help of professionals on the field of emerald mining. For the secondary data, it will be focused on the exploration and examination of existing reports, documents, press releases, communications or media coverage on the ethics and sustainability of Chopard's sourcing practices by focusing on the emerald sourcing. This, in order to provide a wider background on how the luxury brands are considering the use of ethics in their sourcing practices, in this case how is Chopard managing their transparency and ethics at the moment of sourcing their gemstones and their approach to their clients on this topic.

Moreover, the interviews will be focused on knowing the perspective on Colombian jewellers to know their point of view on selling emeralds to luxury brands or in general what do they feel when extracting emeralds and what is the process of selling, and also their perspective on the low wages they are paid in Colombia compared to the increased costs that people pay to this luxury brands for Colombian jewels. As well, it is important to explore how effectively luxury brands perceive or keep track of the and how is this a problem or a threat at the moment they are portraying their brand image and their transparency to their customers.

These interviews will explore topics such as ethical challenges in the supply chain at the moment of sourcing the emeralds, their experience with international markets, how luxury

brands demand on local producers, how does a local miner and jeweller perceive the opportunity to supply to international luxury markets, or if it is a threat, how are the conditions of working in the mines, how do they sell emeralds, and most questions regarding to their job and all the importance of it.

These interviews will help us provide insights on how Colombian jewellers see the relationship between ethical mining and brand reputation in the luxury market. The tools that will help us to get through this process are WhatsApp video and Microsoft Teams now that it is not possible at the moment to meet face-to-face to conduct an interview, which is also a positive point in order to record the meeting if in the future something is not clear enough, we can go back to it.

Furthermore, the qualitative approach will help us to provide a full view of how ethical sourcing of Colombian emeralds influence brand image and market positioning, by at the same time exploring different perspectives on the supply chain. This combined approach allows a comprehension on the different dynamics between suppliers and consumers in the luxury market and jewellery market, by mainly focusing on the influence brand image and market dynamics behave depending on how the mining activity is.

3.2 Sampling

The sampling method that will be conducted for this research will be purposive sampling. This method will allow that there is a selection of participants based on a specific

area so that we ensure that they are relevant for this study due to the expertise, experience and the relevance that they might give to the research. In this particular case we will focus on the artisanal jewellers in Colombia and the miners that work by hand with the jewellers.

Since we are referring to semi-structured interviews, the sample was reduced to three high quality interviews, from the industry experts with more than fifteen years of experience in the market. Based on their experience and the knowledge on the emerald supply chain, particularly the local sellers that have they small jewellery businesses and that have had the opportunity to export their emeralds. The sample will consist of miners that work directly by extracting the emeralds or jewellers who work selling gemstones and most importantly that know about ethically sourced emeralds or have insights on sustainable practices in the Colombian emerald mining industry.

We are not looking for experts in the European side where they bring the emeralds because the process and the ethics go directly from the mines. It is more valuable to evaluate how is the perspective and the reality of ethics and sustainability in the Colombian mines, rather than knowing opinions and perspective from Europe. One could add, all these interviews will be followed by case studies, communications, press releases, social media, and every type of communication that Chopard has launched in order to portray their transparency on sourcing. Rather than knowing a worker's opinion in ethical sourcing when it is far from reality.

It is important also to see the other side of the luxury brand in which we can see what is the main objective or goal that they want to achieve with being sustainable or ethical, which is why the use of case studies will help us to see other perspectives. If it is beneficial for them just because the brand image, or if they are really interested in making a change in the world

and they really want to be part of something good. It is important to see the luxury brand's perspective to compare and contrast the different points of view of different parties on this topic that has become really popular in the past years.

Given the qualitative research, the aim is to gain deep insights and from different points of view but also it has to be kept manageable and interview three Colombian jewellers that can answer to the desire questions. The main purpose on the sampling approach is to know deeply the opinions and the points of view of the supply side and the demand side which are the consumers, in order that all this gathering of data gets a deeper understanding of the topic. The main goal is to dive into the ethical sourcing of emeralds and how this influences brand image, to see how this impacts the consumer view of what the luxury brands are selling, the consumer perception of ethics and sustainability in this aspect, by focusing on the perspective of stakeholders in the supply chain of ethical luxury jewellery.

3.3 Data analysis

The data analysis for this study will be focused on framework analysis, by allowing the qualitative data from the Colombian jeweller's and miners interviews. This method helps us to analyse different data from different perspectives by staying aligned with the research objectives. This framework analysis will take place in the following steps.

- Familiarisation with the data: this involves being really confident about the data and become familiar with it. By identifying principal topics and recognising patterns that meet the objectives of understanding the ethics in emerald sourcing
- Identify a thematic framework: By following the familiarisation process then the thematic framework will be developed. This allows us to know the research objectives and dive into the main topics, such as ethical practices in sourcing, brand reputation and image, and all that has to do with the moment of purchase when the consumer reacts or has an attitude depending on the ethical or non-ethical luxury products.
- Indexing: This step helps us to separate the transcripts by coding the data. Which means that this will allow us to differ the data according to the main topics and the different patterns. For example, the responses of the jewellers and the miners will be indexed separated, thanks to this we can make it easy to comprehend and there is an organisation in which we can compare and contrast the different answers. As well, by separating the data we can focus on different themes for the study and having a good organisation to gather and display data. The jeweller's responses will be portrayed as a normal interview so question – answer, so that we can see how the person answered and to see a continuity of the interview. But at the same time we will see the interviewees which will be displayed in order to see a comparison.
- Charts: After indexing, chart will allow to display the data for every theme. It will also summarize the responses from the interviews to make it more dynamic and to know the comparisons on the different perspectives of the responses of the suppliers. This step is really important to help us identify an insight of the perception in ethical sourcing and the influence that it has on the Colombian mines

and living conditions and furthermore the perception they might have while exporting to the luxury brands.

- Mapping and interpretation: finally, for this step it is important to analyse the responses to find different patterns or trends in data, in order to draw conclusions on what we found, and following to this we could be able to answer to our research question. Also answering to how do jewellers perceive the relationship between ethical emerald sourcing and the demand from the luxury jewellery brands, or maybe to understand and see if they are influenced by ethical and sustainable practices at the moment of sourcing, it is important to understand their point of view as workers.

In conclusion, the data will be portrayed in a table to be able to compare every response, so that it is easier and more visual to conclude on how ethical sourcing practices affect both, supply chain and the final destination which would be the luxury brand. The final conclusion will be by answering to the research question and understand the patterns and trends.

4. Results and analysis of the interviews question

4.1 Getting to know the respondents: their backgrounds

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)

<p>Tell me about yourself, how long have you been working in the emerald industry?</p>	<p>I am from Chivor municipality of Boyacá in Colombia. I've been working in mining my whole life, since I was 16. I'm about to turn 60, so it's been around 43 years."</p>	<p>More than emerald industry I've been working with jewellery for about 36 years, of course I trade emeralds but it is mostly to sell them.</p>	<p>I've been working with jewellery for around 20 years, my family trades the emeralds and me with the help of an artisan we make the pieces and sell them. We barely try to sell them for export because it is our business, and it is not an easy business, we are risking our lives here, nobody really knows the truth but is hard</p>
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Note: Background question to the interviewees, organised in tables to follow a specific order in the rest of the questions. L. Fabian, B. Hugo, R. Johanna (2024) jewellers from Colombia

To begin, the interviewees introduced themselves. They gave a small brief of where are they from and they mentioned how long have been they working with jewellery or emeralds. Some of them even gave more context about their lives and why are they here now and what did they do to be now at this position. Each of the participants come from different backgrounds

but we can see that they also come from similar situations because of their families and their background is mostly heading through the same direction.

The experience from these professionals is a journey, not only by having their businesses long time ago but also their families have been in the business and they have been also part of this tradition over the years. They all come from the regions that the emerald mining takes place. A similarity between them is that they have been the majority of their lives working in these places and all related with jewellery, which is really interesting to know that most of these people are always working on this followed by traditions on their families.

4.2 Personal experiences in the mines

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
How would you describe your personal experience working in the emerald mines?	It's a very positive experience, and I feel blessed to have worked in the mines and to have always done well. It's a legacy from my father, so I'm very happy to continue with this. It's a	I don't like it, that's why I don't work directly in the mines. I think is very hard to get a place and sometimes it just gets violent and it is uncertain. It's a tough job, sometimes not very	When I grew up, I noticed that the mines are not really good. People live in the worst conditions, sometimes they don't even eat because there is no food, sometimes people get harmed

	tough job, but well-rewarded.	well-rewarded due to the amount of work there is.	and there is no way they can be helped. I am very thankful for the mines because I am what I am right now because of them, but for me it is a place that I prefer not to go.
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Note: Personal experiences in the jewellers life taking into account the mines, organised in tables to follow a specific order in the rest of the questions. L. Fabian, B. Hugo, R. Johanna (2024) jewellers from Colombia

From this second question we can gather different conclusions. We can see how there is a difference between the first interviewee which is an actual miner and the other two interviewees which are jewellers. If we see how they have different opinions about the life in the mines this can lead to similarities based on their responses. For example, they all talk about the challenges that the mines have by mentioning that is a tough job, all of them mention it has lots of difficulties and as well violence. As well they keep mentioning that they have a certain appreciation for mining due to family traditions or heritage and they also express gratitude to the opportunities that the mines have provided them with.

As well we can see some differences at the moment of the satisfaction, they have with the mining profession, of course for the first respondent which is an actual miner we get that his experience is positive rather than the other two interviewees which dislike the mining

environment, and they think of it as a negative experience due to the living and working conditions. All the responses provide a different perspective of the different challenges of what the mines are, they all have different perspectives of the different experiences and this also gives us like an image of the different ethical concerns of the emerald mining.

4.3 Life in the mines

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
What is daily life like in the emerald mines of Colombia?	<p>The working conditions are something people don't believe.</p> <p>Basically, you work with whatever the land produces. Some people spend their whole lives trying to find something, while others don't; it depends on your location and luck.</p> <p>Life is hard in general because we</p>	<p>This is seriously not good, people can say whatever they want on this, some people think that this is not true, but there are no such good working conditions. It's not easy and it's not a job for everyone. It's a hard life, not everyone lives in flats, and it's no secret that these are regions of war and</p>	<p>For me it was not that bad of an experience, I remember when going I refused to see lots of things just because of my mental health, but of course you see violence, even nowadays, you see lots of things that are not nice, you see how people are killed and you see</p>

	<p>spend long periods away from our families while in the mines</p>	<p>economic hardship for the people who live there</p>	<p>how lots of people are trapped in the caves because this is a hard job, not everyone can do it</p>
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Note: The life in the mines of the interviewees, organised in tables to follow a specific order in the rest of the questions. L. Fabian, B. Hugo, R. Johanna (2024) jewellers from Colombia

By examining these responses, we can see how all of them don't think that the life in the mines is good enough. The three perspectives talk about the realities of the workers in the mines in the emerald industry and perhaps in the jewellery industry. They all talk about luck and about all the emotions that this brings to the people which affects their well-being. All of the interviewees refer to the mines as a place where there are high risks of working and that the conditions are not good enough, because as well there is lots of violence that sums up with the quality of living and the reality that most of the miners have to live if they are not employed by a company.

We can see how the respondents talk about the poor-quality life, which is something we rarely see when buying from these luxury brands. If we notice, most of the luxury brands portray their ethics and their transparency in the supply chain but are they really aware of the supply chain ethics. By the responses of the interviewees, we can see that they live the reality of the people in the mines, and none of them have positive things to say about the experience, all of them mention violence, poor labour conditions, and as well bad living conditions for the

people in the area. People live different the experiences in the mines but certainly most of them are difficult situations.

4.4 Working conditions in the mines and experiences

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
What are the working conditions like in the mines where you work or have experience with?	There's a lot of violence, greed, these are things you always see in the mines. Even today, we see many deaths, and even though companies have tried to regulate this, violence persists. Everything is about who has more and the power to see who's the best.	You could never imagine how working and living conditions are in the mines. This job is not for everyone, sometimes you see awful things that you need to live with. In this world everything turns around money, this is exactly what happens in this business.	The conditions are not very good, they are risking their lives down there, it is very hot and there is a lot of humidity which it means that there is not much oxygen, and this can cause fatigue and workers dehydrate very quickly which is why many of them get out of the caves almost dying.

Note: Experiences of the interviewees in the mines, talking about the labour conditions, organised in tables to follow a specific order in the rest of the questions. L. Fabian, B. Hugo, R. Johanna (2024) jewellers from Colombia

It is difficult to listen that everyday there is violence and that in the mines people need to be very careful due that they might get killed. Here the three respondents have similarities in their answers by saying that they have all seen violence, and they all think that all the miners are risking their lives. It is incredible how they say that they see deaths and that there are always awful things that happen in the mines. The most unrealistic thing it to think that it is normal, the way they communicate on it, giving a sense as if it was a common thing and they don't think is impressive. There are many similarities in the way they answer by highlighting the challenging conditions of working in the mines now that they all emphasize on the physical and psychological impacts that workers have to go through in this environment, they all mention the bad conditions and all the dangerous things that can occur in the place to work, in which they are constantly threatening their lives.

As well we can see some differences between the first respondent and the rest. The first interviewee is always mentioning violence and the competitiveness that there is in the mines, by mentioning that most of the problems that there are in the mines are due to the people that want to have power, and that even though there are companies intervening there is still that seek of power. The second and the third interviewee focuses more on witnessing all these disturbing scenarios in which the miners have to work intense hours with high temperatures, humidity, lack of oxygen, they mention that it is not easy to understand what it is really to be in that position if you haven't had the chance to live it and to see it.

Table 4.5 Improvements in working conditions

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
<p>Have there been recent improvements in working conditions, or is it still a challenge?</p>	<p>There have been recent improvements over the years, thanks to the companies that have entered the country. But the mines aren't ethical and there's no respect for life. These are troubled areas because of the gemstones, and working conditions are poor. Now, with the companies, peace has been signed, the war is supposedly over, and miners are paid a salary.</p>	<p>Working conditions are no longer as poor as they used to be. Now, people complain more and stand up for their rights. Nowadays, everything can be fought for. If companies aren't willing to pay an employee, the employee will complain, sue them, and it will become a bigger problem. All of this has made things change for the better, and now not everyone needs to be armed.</p>	<p>There have been some positive changes in the working conditions, but this is thanks to the companies that have arrived, they have helped a lot with a better ventilation that is something that long time ago was terrible, and people were killed because of the low oxygen. But the international companies have helped a lot in investing for the good of people.</p>

Note: Improvements that can be taken into account or some ideas they might have to improve, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

The improvements and the working conditions according to the interviewees have improved during the past years. We can attribute this to the companies that have invested in the mines. This companies have helped a lot to the development in the mines due that violence has decreased a lot in the past years because the government had to intervene in order to make everything more transparent. The thing is that all respondents say that even though the government intervenes in the mines and there are better working conditions it is still not ethic and that lots of people live in the worst conditions.

Based on the responses we can also notice how the government policies now require that the companies in the mines have to pay a full salary to their workers. In Colombia this is a big deal now that there are many workers that are considered as hidden unemployment, meaning that they are illegal workers for many companies around the country. In this case in the mines, the companies have to provide them with social security, health insurance and of course all of the safety equipment that is needed to work in the mines.

Table 4.6 violence in the emerald mines

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)

<p>Have you experienced or witnessed violence in the emerald mines?</p>	<p>Of course, it happens a lot, and it's not something people usually talk about because no one wants the truth to be known. Money moves everything, and here it's very important. I've seen how emerald miners are killed to steal what they have.</p>	<p>Thank God nothing has ever happened to me, but I've always heard and seen colleagues who, unfortunately, have had their emeralds stolen. This happens a lot when other miners haven't found any emeralds to give to their bosses. Here, miners live in fear because some miners die or disappear if they haven't found emeralds, and their bosses get upset, refuse to pay them, or harm them.</p>	<p>Unfortunately, yes. I have to say I am very lucky because nothing bad ever happened to me, but I have to say I have witnessed it. There is a lot of tensions, most of it when somebody finds a bunch of emeralds, this immediately goes to fights over territory and of course It goes by hand with threats.</p>
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Note: Importance of creating conscience of violence in Latin America, specially this places where they sell expensive products, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

From this question we can analyse in a deeper way the context of mining in Colombia. From the three testimonies we gather very similar information about violence in the mines and in the business. Violence seems to be common in the environment, even from the different points of view expressed by the interviewees we can see a strong correlation between testimonies. It is also possible to analyse that many of this violence comes from the people in charge of the mines, one of the interviewees talk about bosses threatening their workers safety for not delivering results. It is evident that there is a lack of control and regulation from the government alongside lack of presence of police or military, making it sound like a lawless environment, something that could have a negative impact on the development of the industry within the country.

From this question's answers we can also conclude that fear is always present in the mining industry, and people that works in there is always cautious and aware of the risks involved. It is very negative to have this kind of violence present even though it is further explained that the situations have gotten better throughout the years.

Table 4.7 Violence as a major problem

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
Do you think violence in the mines is still a major problem, or has it	Violence has decreased a lot in the mines, thanks to the companies that have	Violence is still a major problem in the mines and in the jewellery industry in	Violence is still a problem in Colombia in general, right now with the

<p>decreased in recent years?</p>	<p>come in since everything is more regulated. But this has also affected many miners because the emerald business is no longer as good as before. This has led to the creation of many small illegal mining operations, which are much more dangerous, but at least they make more money.</p>	<p>Colombia. After the peace agreement was signed, it became easier to go to the mines, but the business isn't as good as it used to be, and things have become more complicated. There are very violent people who, because they have power, can do bad things to you, and that's when everything becomes difficult.</p>	<p>government and the actual president we don't know what to expect. It is terrible what people have to live, and the conditions in which they are. In the mines it has decreased a bit compared to the past years.</p>
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Note: Violence in Colombia and in the mines, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

Based on the answers we can see how prejudicial violence is in these territories. Colombia is a country that has been full of violence for more than 60 years, the worst period of violence was a pioneer to all violent and narcotraffic groups that now are leaders of this thief groups. The mines long time ago were a point in which all deaths occurred by narcotraffic

groups in order that they could own the lands and have more illicit businesses, nowadays things have changed in terms of security but that doesn't mean that the reality in Colombia is altered.

The point of having companies imposed by the government in the mines was with the main purpose of decreasing violence, having the workers in safe conditions and of course that the government would end with the private businesses and make sure that those lands became part of the state. The thing is that in Colombia things are not well carried, most of the laws are not properly taken which is why the respondents tell us that due to the upcoming of new companies, people have created their own illegal businesses. Because the government is not paying well to the workers, so they are facing huge difficulties and heavy work by risking their lives and not being well compensated.

They all say that the business is not as good as before, because before they could own their lands and work with what the earth produced in the day, but now they all rely on the government and they are underpaid for the job they do. Of course, these small illegal businesses lead to violence and though relations between the miners and the government which is not ideal in the business and this could end up in the government forbidding any illegal practice or approach in the mines which would end with lots of employment.

Table 4.8 Safety measures

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)

<p>What safety measures, if any, are in place to protect workers and the mining community?</p>	<p>The pay depends on the emeralds found, so sometimes there are months when there's nothing to eat, and other times we make deals that are big enough to last the whole year. For miners working for companies, it's much easier, but they earn very little. The companies guarantee them a fixed salary, which is Colombia's minimum wage around 200 euros plus healthcare.</p>	<p>Well, the main thing is clearly to have the specialised equipment to be able to carry out these types of extractions. There are miners who don't have the money to pay for protective gear, but many of them already feel fine, and of course there is a risk but it's not that serious.</p>	<p>That depends on the regulations of the mines, because of course there are some people that work without the companies. For the workers that are working for the companies, they are of course provided with helmets, gloves, goggles and they are all tidied up so that they don't fall because of loose rocks.</p>
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Note: Conditions in which the interviewees used to or work, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024) jewellers from Colombia*

The first respondent answers that the safety measures that they are provided with are the health care service from the government and a fixed salary that goes around the 200 euros. Different from the other two respondents that think that the safety measures is the equipment

that they are provided with. They all relate by saying that if the miners are working for companies, they all have to be immersed in the health services, they have to provide safety equipment and that of course the company would veil for any issue there is regarding security. The positive point of working for a private company is that they are accomplishing all laws and they are doing everything legal which means that the workers have more back up and they can be in a healthier situation due that anything that happens will be the company's fault, which is rarely that something happens now that this international companies have lots of professional equipment and they try to have everything in rule by law.

Table 4.9 Emerald sale process

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
How is the sale of a lot of emeralds conducted? What's the process from extraction to sale to exporters	You extract a lot of emeralds, and as soon as you leave the mines, there are 100, 200 buyers waiting to see the emeralds you brought. It's basically a supply and demand process, plus the quality of	Emeralds are sold when they are available, but we don't always have emeralds to sell when we are in difficult times. But as soon as you have them and you get out of there, there are all the buyers trying to	This process is really complex, we export the emeralds, after that we need to know the people to make negotiations with. Afterwards the emeralds are sorted in lots which usually they organize in similar weight or

	<p>the stone. They choose the stones they want, then they go and cut them to sell to jewellers or international buyers from abroad. Foreign buyers rarely go to the mines because it's dangerous, and there can be violence</p>	<p>get the best deal to pay you for your emeralds. So that after we have the emeralds we can cut them so that they look perfect, and they are just where our customers want them.</p>	<p>colour or sometimes not, this just depends on the interest of the buyer if they want to separate them. The process of selling is intense, mostly when you are selling to international markets, now that most of those selling sessions are private and we need to fill in some legal documentations that take lots of time and are not always very easy</p>
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Note: Important process on how to find an emerald and of course how to sell it in the market, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

From this question, we can see different points of view, mainly because from one of the interviewees we can hear the side of the miner that extracts the emerald and for the other two, we see more about the person buying and selling the emeralds and also the ones that cut

the emerald to make it look perfect. We can see an overall of all the process from the moment the emerald is extracted to the moment they negotiated them in the national market and also the process when they want to export and sell to bigger company outside of Colombia. We can conclude that this people prefer to trade always whit the same buyers from safety purposes, this can lead to not achieving always the best deal possible. Also, it is expressed that the exportation process is complicated, this can let to sellers trying to avoid this kind of transactions giving the huge amounts of paperwork required and the complexity of the process, losing the opportunity to export these emeralds more frequently to achieve a better profit.

In conclusion, from this question we gather important and valuable information about the whole process of emerald extraction and also the opinions of the people that compose this process in Colombia, having a better insight about the context and situation of the industry within the country.

Table 4.10 selling emeralds to exporters and local buyers

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)

<p>What are the main challenges you face in selling emeralds to exporters or local buyers?</p>	<p>It's a big risk. If you extract 2 billion pesos worth of emeralds, for example, and don't know who to sell them to, that's when things get complicated. Miners are very careful when selling emeralds because these stones are very valuable. If we don't have a trusted buyer, things can get tricky. If you offer them to someone dangerous, they could kill you just to take a batch of emeralds.</p>	<p>I think the hardest thing to keep in mind is to know who we are selling to, this is where many scams come in, we have to be careful and know who we are selling to. There is also a lot of insecurity involved and many times we have to make sure that the people we are selling to are trustworthy, because this is when you see people dying or having accidents. All this happens just to steal the emeralds, because there are many people who go for years without getting them, so as soon as you leave</p>	<p>For me I think that one of the most challenging things of selling emeralds is pricing. Most of the exporters aim to negotiate prices down even if they are negotiating the best stones with the better quality. I think that also one of the most problems is security because transporting emeralds is not safe and along the way there might be problems not only at the moment of the transportation but also for the people that have them. This is where violence comes, and people</p>
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		with your batch of emeralds, people want to steal them.	steals the emeralds from the miners.
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Note: Exportation of the stones or selling them outside of the mines for no big prices, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

Through this question we can see all the challenges that might come when extracting the emeralds, the miners have to sell the emeralds to people they know, they need to sell the emeralds to the people they feel most comfortable with because there is when violence can occur, and fake people might come. According to respondent number one, the trickiest part is when the emeralds are sold, this is due that the miners need to know trustworthy people to whom they might sell the emeralds because if not there might be people that just to steel them, they might kill you.

From the three interviewees we can see how all of them feel that it is really insecure to sell the emeralds after extraction. That is why most of the miners already know the jewellers to sell them directly and afterwards they will make the pieces to sell to customers. As well, the first respondent told us about the black market which seems to be a difficult part for them, due that this is mainly from the international exporters, most of them are not certified to export the emeralds and sell them in other countries but there is not very much control over the illegal

emerald sourcing which is why many Colombian emeralds go out from the country without paying taxes and most of them are being sold in international markets without any lead.

Table 4.11 Prices of the emeralds

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
What factors influence the price of the emeralds you sell (quality, lot size, demand, etc.)?	<p>No one knows the exact price of an emerald; basically, it's whatever we want them to pay us.</p> <p>After extracting the lot, we sell them to jewellers and legalize them. For example, 1 carat of good-quality, pure emeralds can be worth between 50,000 to 100,000 dollars, but one carat isn't much. A carat of 'gota de aceite,'</p>	<p>Mainly its colour, although obviously there are buyers who don't know very well about stones. The price is governed by quality, purity, colour, size, and of course the famous 'oil drop' which is the most difficult to find and therefore the most expensive.</p> <p>Not many people understand the colour of an emerald and why it is so</p>	<p>To find the best emeralds always, off course it involves a lot of luck to find them but when you do is totally worth the effort, this is obviously in the case of a jeweller, because not everybody will pay ten million pesos for a ring, so if there are not very good quality emeralds, people will buy them, for me is a good business to</p>

	the most well-known and hardest to find, can be worth between 200,000 and 300,000 dollars. of each stone.	influential but I as a jeweller if many customers ask me for certain types of emeralds that are not easy to get, and I have to wait months to finally have one.	have all the qualities of emeralds, I really don't mind, I sell all types.
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Note: Information on the price of an emerald depending their features, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

This is a very interesting question due that we always see different emeralds, in sizes, shapes and colours and we always think they are the same. Here all respondents explain a little about the differences on the precious stone. They mentioned that there is not really a correct price to charge for the emeralds actually is completely the opposite. Most of them just extract the emerald and they put the price they think are worth of, of course there are different qualities. All of them talked about the “gota de aceite” which is a specific emerald stone that is the most expensive in the world, is hard to find and mostly we can only find it in Colombia. A carat of “gota de aceite’ can have a starting price of 50,00USD and can go up with no limit.

The colour, the size, the weight is what mainly measures the true cost of an emerald and it is really hard for people that don't know a lot of emeralds or jewellery in general to know the true price, which is why many people sell them for the price they consider and there is not an exact price of how much they should cost. The first respondent said to us that some of the

emerald were not good, so he sold them for about 3USD and some others they don't even use them and go to waste. Different from the third interviewee which believes that every person will buy emeralds no matter the quality, which is why she sells every emerald she has in her power.

Table 4.12 Perspectives on emerald trade

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
What changes have you seen in the emerald industry in recent years? Has it improved or worsened?	I feel it's a negative thing that foreign companies and investors are coming into Colombia to exploit these resources. Since Colombia is a third-world country, it has to allow these companies and international consortiums to come in and invest, but I see that as negative.	Foreign investment has changed the business a lot and on the one hand it is very positive because we have already made ourselves known in other parts of the world thanks to our emeralds. I feel that on the one hand, the intervention of the companies has been positive because	Well in recent years, we can see improvements in the conditions that miners work. This is given mainly because of the regulations of the government, also, we are no longer in the war that we were 20 years ago, so yes, things are getting better, companies are in need to make

	<p>The peace agreement was signed, local residents live in better conditions, people are more at ease, and miners no longer fear for their lives every day. I'd say it has improved in these aspects."</p>	<p>they regulate a lot of violence and allow people not to be affected, as security is increasingly reinforced.</p>	<p>conditions safer for its workers, so I think for the people it has changed for the best but there's still a lot of work to do. For me in some years the business will get harder due to this companies, some people might think this is good some others don't like the idea of it but is part of development.</p>
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Note: What do the interviewees aim on trading emerald or selling them, organised in tables to follow a specific order in the rest of the questions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

From this question, we can gather very important and interesting information about the opinion of the people that works in the Emerald processes in Colombia. We can see a mixed opinion about the international investment and the arrival of international companies to explore the mines of Colombia. The first opinion is a negative one given that the person explains that is not good that these foreign companies exploit Colombian resources.

On the other hand, we have an opinion that says that foreign investment is very important, given that it has improved conditions in the mines for the workers and also regulates a lot of the violence that was present years ago, security has increased. Another change talked about in the interviews is about the new technologies that makes mining safer than 10 years ago, these improvements are very important for the industry given that it gives the workers more security to work in the mines, and also provides the companies with a better profit extracting mineral faster than before.

In conclusion, we have mixed opinions about the changes in the industry. In the recent years in the Colombian context is not clear if the people involved think that it has improved or worsened the scenario of Emerald extraction and trade.

Table 4.13 Ethical and sustainable practices as an important role in emerald mining in Colombia

Complied responses	Fabian's Answer (Summary)	Hugo's Answer (Summary)	Johanna's Answer (Summary)
Do you think ethical or sustainable practices play an important role in emerald mining in Colombia?	No, that doesn't exist here. Why else can miners die easily without anyone knowing? No one knows how a miner lives for months to	I feel that ethics as such in jewellery is very difficult to say. For me it's a no, it's not common to see people in good working conditions	I would like to say yes, but I don't think so, If we refer to ethics, mmm not really, how can we think of ethics in mining when

	<p>find emeralds. No one understands what it's like to build a house with wooden sticks and trash bags, sleep on inflatable mattresses, be separated from family, and eat only if there's money to buy food.</p>	<p>working, it's actually a very heavy environment and there are bad things that happen, and nobody ever finds out about it. For me it is very hard to see co-workers and friends from childhood in the mines who have died because of the lack of sustainability and bad working conditions.</p>	<p>workers don't have good working and living conditions, they barely eat, they don't have enough oxygen in the caves, some of them don't have good equipment to work. They cannot even be sustainable because some of them use chemical to exploit the rocks, this depends, the companies would never do that because they are regulated by government, but government cannot regulate all illegal workers from the mines because it has been a job coming from many years and</p>
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Note: Studying if really ethics exist in the mining processes, and furthermore the ethics that miners are getting into also because of the labour conditions. *L. Fabian, B. Hugo, R. Johanna (2024)* jewellers from Colombia

This is an issue that is always a problem because ethics is not really usual in the sourcing of precious stones. During this interview all of the respondents mention that there is no actual ethics in the mines. From this question, we can get better insight about the ethical practices in the business. From the interviews we get data that tell us that there are no real or sustainable practices applied nowadays in Colombian mining industry, especially in emeralds.

From the different testimonies, we see that conditions for workers are very poor and lacked safety and security and also it is not well paid. We can also analyse that sustainable practices are not really applied given that mines are exploded until the end, even becoming dangerous for the workers that work in that specific mine and the environment. That's why the interviewees said that there is no real sustainable practice guides followed in the Colombian mining industry, but we can also see that the interviewees expressed that it will be good to have not only Sustainable practices, but ethical practices applied to the workers of the emerald mining in Columbia.

We can conclude that there is a steel a lot of work to do in this second given that these practices are almost not existent, and they will really help the development of the industry in Colombia and the quality of life of the people involved in the emerald extraction process.

5. Case studies

5.1 Cotillard Turns Jewellery Designer

Examining the ethical sourcing practices in the jewellery sector. Chopard's collaboration with the actress Marion Cotillard provides insights on the jewellery designs for Chopard, by producing the first "green" collection by using ethically sourced coloured gemstones. This collection is a perfect example of what Chopard has been trying to do in involving sustainable and ethical practices in their designs.

The importance of this collaboration is demonstrating that Chopard is in full commitment of going further with their sustainable mission by making part of the "Livia Firth's Green carpet challenge". The actress has previously been part of this event and these collections have marked a meaningful step towards responsible mining. The participation of Cotillard also allows us to see a unique perspective on the ethical designs and see a different perspective from the customer by saying "Why should the creation of dreams and luxury turn into a nightmare for the people who are providing the raw material?". By mentioning that jewellery design should not be a "nightmare" we can see that she is very aware and concerned about these practices, which is why in this press release we can see how there is a significant impact of the ethical practices relying on the brand image, now that meanwhile Chopard is adopting all these measures to be more transparent this also leads to become stronger and standing as a responsible luxury jewellery brand.

The relevance of this press release is to know that Chopard is aware of the broader industry challenges of ethical gemstone sourcing, especially in regions like Colombia in which the conditions of labour are not optimal and people suffer a lot to work. We can also see that there is a huge complexity on implementing sustainable practices and that this portrayal of their work in festivals make it easier for people to actually see that they are making an effort in being sustainable. Which leads us that the Cotillard-Chopard collection is actually a real example of how the ethical sourcing impacts the brand image because they want to portray all these positive things, they are doing so that their favourability becomes higher.

5.2 Sustainable jewellery practice: a creative approach to communicate sustainability

If we examine the role of sustainability in the luxury jewellery market, in particular the strategies adopted by Chopard, we can see that this is mainly a sustainability to marketing and production. All this ethics and sustainability occur to potentialize their reputation and of course become more exclusive at the moment of demand for ethical sourcing. Chopard has created partnerships with different communities by using fairmined certified metals and leading to ethical sourcing because this is all part of committing to being more conscious and responsible for the luxury brands to target different markets, and it creates visibility and attracts more customers. (Amatulli et al., 2017; Kapferer and Michaut, 2020)

If we think of the sustainable practices within the luxury jewellery market it is not easy, mostly because of all the lack of transparency that there is in all the process of the supply chain, there is no real measure to show the reality and the impact to the customers. If supply chain

was completely transparent, that means that brands as Chopard should own the mining companies and assure that they are all being ethic and sustainable from the starting point. The case study mentions how different are the perceptions on sustainability due to the different selling points. Some independent jewellers prefer not to integrate sustainable practices due to high costs; many brands see this as a threat rather than an opportunity. This means that it might be possible that the same unethical, unsustainable emerald is sold to Chopard and they increase abruptly their prices without really knowing the truth of its origin.

For a brand as Chopard it can be easy to charge their customers the amount they want, but not everybody is willing to pay a sustainable piece of jewellery. It actually just gives a better name to the brand changing the brands perception on the customers, maybe justifying its price or just giving a different perception on the product that they are buying. Sustainability is an opportunity but also a challenge, this can trigger Chopard have a better brand image and customer perception but as well it might become difficult to track the reality and be completely transparent about it.

5.3 Materials Sustainability across the Crafts and Applied Arts: a review and reflections

Through understanding and examining this case study we can say that Chopard's use of fairmined gold shows us a good understanding of the brand's approach to sustainable and ethical sourcing, which actually highlights the limitations of continuing with these practices in Colombian emerald mining. Chopard started this journey when they decided to make a change in their watchmaking, this was a bold move that changed completely the perception of ethical

luxury. If they decided to add some similar standards on the Colombian emerald sourcing this would go further, by navigating in a different ambiance and of course safety challenges would be seen.

If we compare it to this case, the fairmined gold is certified and it is a really good option for those regions that want to implement ethical sourcing, now that Colombia mining also presents a huge level of difficulty. Due that most of the emeralds sourced in Colombia are seen in areas that informal mining is most seen, there are lots of economic problems and stagnation in the economy, areas in the country where you can find the most violence and this are problems that are still recurrent, which creates an overview that all the traceability for sourcing emeralds is almost impossible to have ethical sourcing now that in order to be completely transparent the level of complexity would become extremely high. In order to ensure ethics and sustainability that means that Chopard would need to own the lands and trace every movement in the mines.

Chopard has really showed a compromised on aiming to be really sustainable and wanting to have a change on their brand image by portraying themselves as a brand making a change. If we compare the Chopard's move with Fairmined gold we can see that they are always one step ahead trying to make a change by inspiring to use similar methods in gem sourcing. However, by taking into account all the sourcing and mining of Colombian emeralds it requires more intervention due that this also means to build relationships with the miners and with local communities and invest in company intervention so that if they hire workers, they have a better life and safer working conditions.

6. Conclusions and Recommendations

To conclude we can say that all of the respondents have different points of view on what the sourcing practices in Colombia are. The conditions surrounding the mining practices include many factors that affect the people living in the areas and at the same time to all of the workers that make part of this. Even though Colombia has fought throughout the years to don't be violent nowadays we still see all lots of bad things occurring in the daily light, which this also involves the economic stagnation, desperation, poor people are everyday poorer, and the rich are richer. Unfortunately, is a third country fact, in which they are more likely that everything goes wrong way easier. The life in the mines is no more than violent, difficult, unsafe and a weird life that many people have to live not by choice but because sometimes there is no other work.

The lives of the workers are not respected, which actually reflects the ethics that all these places have and all the challenges that ethics face in the industry, where the most important thing is the money that the company gains thanks to the miners that are working by risking their live for 200 euros a month. The violence that they have to live with, their families, thinking that probably they won't arrive home because they might get killed because of sourcing emeralds. This is not a good life and it affects not only mental health but also the physical health, starting from the workers to be immersed in high temperatures, humidity, low oxygen levels, fatigue, dehydration, risk of fall, may things that are not safe in a normal work environment.

This goes further than the conditions that this people work in, because further than not being ethical, most of the luxury brands sell their products as ethical sourced. In luxury brands customer pay a huge amount of money for the products they want to purchase, but are the companies really being ethical and transparent? In this case with Chopard we get the sense that they are very transparent with all the process and they try to be the most ethical as possible. The thing is sometimes it just goes out of their sight. They might be compromised to work ethically and sustainable but who actually assures Chopard that all the process is being 100% ethic.

We should think of all of these miners, that work all of their lives with the risk of dying, sometimes not having anything to eat, living in tents meanwhile the earth is not giving emeralds, Chopard might say that their process is completely ethic and sustainable but sometimes there are things that cannot be completely ethical, they have a positive point by trying to be ethical, and trying to do something good for their brand to portray it as a caring brand, but even though some advancements have been made and the intervention of the international companies had taken place in the mines, the violence still occurs, the miners still die, they still work for a minimum wage which they can barely live with it.

Chopard has shown to be an ethical and sustainable luxury jewellery brand, and they reflect their commitment and transparency to the responsibility of being ethical, by adapting policies and trying to be responsible in the gemstone sourcing, which has helped them to become one of the most sustainable luxury jewellery brands in the market.

However, Chopard's efforts are well received but sometimes very complex to acknowledge. The complexity that brings a supply chain of precious stones in this case of

emeralds, taking into account this previous study we can say that there is no a complete transparency and fair practices in every step of the sourcing of the gems. As well, even though there are international companies now intervening in the mines, there is still illegal practices, unsafe work conditions, violence, poor health, and many other things that are not completely ethical. Chopard has done a great job by pushing their company to be more sustainable and ethical but to really get to true sustainability and being completely ethic, they need to be in constant monitoring, which is mostly impossible due that the mines are in Colombia, and not everyone can enter the zone.

This has been a war of many years that many people want to change, but it has not been easy, not even for the people working in the area. Of course, Chopard's sourcing of emeralds is legal and must be handed by the main company in the mines which is the legal enterprise, but many people in the mines work in bad conditions despite the company but working in a mine is not an easy job. Chopard's commitment to ethics and sustainability must be supported but as well verified so that they can continue promoting these claims.

6.1 Limitations

Some limitations for this research might be the data accessibility from the luxury brands' side. Of course, there are case studies and information online, but we don't really know if it is reliable, rather to find somebody that is on all the supply chain that really knows the ethical practices from Chopard's side. As well it is not easy to find much information about the

mines because is a private property and most of the things that happen there are shady and people are not used to comment on it.

One of the most complex things I have found with this study is understanding that there is no trackability of the supply chain, it is a complex track in which there is a journey from mine to all the jewellers, national or international. But many things can happen during this process, which can become really challenging due that many things can occur during the process. The research might be limited due to not many information and findings from the brand and from the mines, if there is nobody from the inside who can tell you some stories it is really hard to really understand how it works. Most of the reality of the livings in the mines are nowhere found, and the luxury brands only post what they will find convenient, which may not represent the actual practices and perceptions of the industry and the findings might get altered.

References

- Al Jazeera. (2017, March 20). Into the green land: Emerald mining in Colombia. Al Jazeera. <https://www.aljazeera.com/gallery/2017/3/20/into-the-green-land-emerald-mining-in-colombia>
- Bloomberg. (n.d.). Bloomberg.com. Retrieved October 29, 2024, from <https://www.bloomberg.com/features/2019-emerald-mining-colombia/?embedded-checkout=true>
- Brazeal, B. (2016). Nostalgia for war and the paradox of peace in the Colombian emerald trade. *The Extractive Industries and Society*, 3(2), 340–349. <https://doi.org/10.1016/j.exis.2015.04.006>
- Breakfast, G. (n.d.). The most comprehensive guide to buying ethical gemstones. Gem Breakfast. Retrieved March 15, 2024, from <https://gembreakfast.com/blogs/news/the-most-comprehensive-guide-to-buying-ethical-gemstones>
- EBSCOhost Login. (n.d.). Ebscohost.com. Retrieved March 15, 2024, from <https://eds.p.ebscohost.com/eds/detail/detail?vid=5&sid=0f4766db-8438-4c7a-bcf6-049527fbc669%40redis&bdata=JkF1dGhUeXBIPWlwJmxhbmc9ZXMMmc2l0ZT1lZHMtbGl2ZSZzY29wZT1zaXRl>
- Gaffney, O. Sustainable Development Goals. Improving Human and planetary wellbeing. Igbp.net. Retrieved October 01, 2024, from <http://www.igbp.net/download/18.62dc35801456272b46d51/1399290813740/NL82-SDGs.pdf>
- Gem mining 101: Beginner's guide to precious stones. (n.d.). Rockhounding.org. <https://www.rockhounding.org/blog/gem-mining-101-beginners-guide-precious-stones/index.html>
- Gems, B. (2023, May 12). 7 negative environmental impacts of the gem mining industry. BIRON® Gems. <https://biron-gems.com/biggest-environmental-impacts-of-gemstone-mining/>
- Geoengineer.org. (2018, July 25). Block caving: A new mining method arises. Geoengineer.org. <https://www.geoengineer.org/news/block-caving-a-new-mining-method-arises>

- Githiria, J. M., & Onifade, M. (2020). The impact of mining on sustainable practices and the traditional culture of developing countries. *Journal of Environmental Studies and Sciences*, 10(4), 394–410. <https://doi.org/10.1007/s13412-020-00613-w>
- Harvard Business Review. 2017, Vol. 95, Issue 2, pages. 6 “Tiffany's CEO on creating a sustainable supply chain: the jewellery company has long led the industry in working to address environmental and human rights concerns.” <http://www.igbp.net/download/18.62dc35801456272b46d51/1399290813740/NL82-SDGs.pdf>
- Home •. (2024, April 12). Responsible Jewellery Council. <https://www.responsiblejewellery.com>
- Keller, P. Emeralds Of Colombia. *Gia.edu*. Retrieved September 10, 2024, from <https://www.gia.edu/doc/SU81.pdf#page=23>
- Lam, D. (2023, March 30). 5 worst gem mining environmental effects. *The HK HUB*. <https://thehkhub.com/environmental-impacts-gemstone-mining/>
- Maier, R. M., Díaz-Barriga, F., Field, J. A., Hopkins, J., Klein, B., & Poulton, M. M. (2014). Socially responsible mining: the relationship between mining and poverty, human health and the environment. *Reviews on Environmental Health*, 29(1–2), 83. <https://doi.org/10.1515/reveh-2014-0022>
- Mensah, J. Sustainable Development: History, principles, pillars, and pillars for human action. *Tandfonline.com*. (2019) Retrieved October 02, 2024, from <https://www.tandfonline.com/doi/full/10.1080/23311886.2019.1653531#abstract>
- Milligan, L. (2015, April 1). Cotillard turns jewellery designer. *British Vogue*. <https://www.vogue.co.uk/article/marion-cotillard-designs-for-chopard-jewellery-collection>
- Moore, J. E., Mascarenhas, A., Bain, J., & Straus, S. E. (2017). Developing a comprehensive definition of sustainability. *Implementation Science: IS*, 12(1). <https://doi.org/10.1186/s13012-017-0637-1>
- Oakley, P. Case Study: Materials Sustainability across the crafts and Applied Arts: A review and Reflections. *Royal College of Art*.

Ramirez, T. Rodriguez, D. Gil, S. “Retos para la explotación sostenible de esmeraldas en Colombia”
Published by Revista Fuentes, El Reventón energético. Database: Fuente académica premier.
January 2022. Article.

Safdie, S. (n.d.). Ethical sourcing: Definition, goals and keys for implementation. Greenly.Earth.
<https://greenly.earth/en-us/blog/company-guide/ethical-sourcing-definition-goals-and-keys-for-implementation>

Santa Clara University. (n.d.). What is ethics? Scu.edu. Retrieved October 29, 2024, from
<https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/what-is-ethics/>

Stakeholder theory: What it is and how to use it. (n.d.). EDHEC BUSINESS SCHOOL. Retrieved
March 15, 2024, from <https://www.edhec.edu/en/news/stakeholder-theory-what-it-and-how-use-it>

Sustainability. (n.d.). Muzo Emerald Colombia. Retrieved September 10, 2024, from
<https://muzo.co/pages/sustainability?srsltid=AfmBOorL2vCuwng1ztbFZfis9AaFUHoe96Jwo tqnYPSc10VhlZRkVXyc>

Tsangaris. C. The journey to Sustainability: Responsible Sourcing with Chopard. Superyachts.com.
Retrieved October 01, 2024, from <https://www.superyachts.com/lifestyle/story/the-journey-to-sustainability-responsible-sourcing-with-chopard-10793/>

Tunneling. (n.d.). Geoengineer.org. <https://www.geoengineer.org/education/tunneling>

Valkovicova, J., Evers, E., & Galanti, S. (2022, December 20). The sustainability reporting journey of
Swiss luxury watchmakers. Compact; Compact Magazine.
<https://www.compact.nl/articles/the-sustainability-reporting-journey-of-swiss-luxury-watchmakers/>

What is Corporate Social Responsibility (CSR)? (n.d.). HEC Paris. Retrieved March 15, 2024, from
<https://www.hec.edu/en/faculty-research/centers/sustainability-organizations-institute/think/so-institute-executive-factsheets/what-corporate-social-responsability-csr>

What is the chamfering process and what is it for? (2022, September 23). Eonsi.Eu.
<https://eonsi.eu/en/what-is-the-chamfering-process-and-what-is-it-for-eonsi/>

Zi Yi Yin, Z. Sustainable Jewellery Practice: A Creative Approach To Communicate Sustainability.

OCAD University 2016