

Exploring the Source of Green Gold

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Abstract

The global value chain has provided opportunities for artisanal gold mining communities in Colombia to build a mining model based on ecological principles. In the region of El Chocó, Colombia Corporación Oro Verde was established in 1999. The program established a certificate scheme, which is now integrated into the newly developed Fairmined and Fairtrade standard. The label guarantees that the gold is extracted and processed in compliance with social and environmental standards, and without the use of chemicals. In return the miners are offered favorable market access and a 15% premium on top of a guaranteed price. Oro Verde serves as an example of local development from the bottom up, while also illustrating that this development is achieved only when a set of actors works together – from the local to the international level. The challenge ahead is to balance the need for revenue generation activities and increasing production, with environmental considerations.

Keywords: gold mining, FLO Fairtrade and Fairmined certification, sustainable development, environment.

1. Introduction

The market for gold jewelry is one of the world's largest markets of consumer goods. In 2010 we spent 137.5bn USD on gold jewelry (Fairtrade, 2011). However, the 15 million artisanal and small-scale gold miners involved in low-tech and low-mechanized mining seldom benefit. They account for 10% of the global gold supply, but the profit is made higher up in the value chain. Even more so, the mining activities impose environmental threats on personal health and mining communities, in particular due to the use of mercury for extraction. Two mining communities in El Chocó, the pacific region of Colombia demonstrate another story. In this region the Corporación Oro Verde was initiated to maintain the traditional way of small scale, non-chemical gold mining operations. The initiative addressed the challenge of market access, unfair supply chains and environmental concerns. This has been achieved by bringing transparency into a value chain that has traditionally lacked such assets, strengthening the position of often self-employed, individual miners in an unfavorable international market, and teaching miners how their mining activities affect the environment and their communities. Oro Verde serves as an example of local development from the bottom up, while also illustrating that this development is achieved only when a set of actors work together – from the local to the international level. The challenge ahead is to balance the need for revenue generation activities and increasing production with

environmental considerations. This is the story of a visit from one of the funders of Oro Verde, the environmental non-profit Amigos del Chocó Foundation (AMICHOCÓ), to Fermin Palomino's mine in El Chocó.

2. Creating a Certification Scheme

Fermin Palomino's mine is in El Chocó, a region rich in biodiversity and abundant with gold and platinum. However, weak legislation and control of land use have resulted in uncontrolled exploitation of the region's natural resources. This has caused the loss of biodiversity and the impoverishment of the region's mainly Afro-Colombian population. Corporación Oro Verde was established in 1999, initiated by AMICHOCÓ, the Community Councils of Condoto and Tadó, and the Las Mojarras Foundation (Corporación, 2011). Together they created a market mechanism in which the social and environmental value of the traditional responsible mining practice was reflected in the final price of the buyer. Their aim was to encourage the communities to build sustainable mining models.

Their approach required the development and implementation of both an ecological mining standard and a transparent supply chain. One of the key elements to this model was Biodiversa. This institution is responsible for buying the gold from the miners, the refining process, and eventually selling the gold on the international market. The miners are paid directly 3% above the market price, while the 12% remaining is transferred to a fund owned by the miners. This structure addresses one of the main challenges for artisanal, small-scale mining; its weak position in the market. When the miners are unorganized and work in remote places, they often end up being dependent on middlemen. Through Oro Verde the miners in each community have organized themselves into member based producer groups, and made a direct link to the international market through Biodiversa.

The final piece of the puzzle was put in place this year. Oro Verde served as an inspiration for the development of the Fairtrade and Fairmined standard. The Fairtrade Labelling Organisations International (FLO) used the principles for ecological mining when developing the standard. In addition, standards for labor conditions, social and economic development, and requirements for trading were added. Today, Oro Verde is the brand while the producer groups of Condoto and Tadó will have access to a larger market using the internationally recognized FLO logo.

As a part of an AMICHOCÓ team, I am on my way to El Chocó. AMICHOCÓ's roles during these ten years have been to organize and build capacity within the producer groups and to manage funding and marketing. Now they are organizing an evaluation meeting in collaboration with the miners in Condoto and Tadó. My role is to assess the distribution of the premium generated from the certificate.

3. What is Green Gold?

From the national road going through Tadó, a small trail takes off. Just 100 meters on and I arrive at the mine of Fermin Palomino. Nine people, men and

women, are currently working to remove stones from a pit. Together they form a family producing unit, a traditional way to operationalize the mining activities. One unit is made up of about five to ten people. Their role depends on the capabilities and tools they bring to the unit.

I am standing on a huge pile of rocks, leftovers from years of mining. Fermin Palomino's mine stretches from the river further down and slopes up before it meets a steep wall of clay. The miners have followed the ore and are now working closer to the clay wall. Gold found in these kinds of river terraces can usually be harvested from the surface with basic tools, after vegetation has been removed and pits dug to reach the gold bearing beds (Fairtrade, 2011). Next to the mine a simple shed has been set up to protect the few tools that are being used: a couple of pans and bars. The only mechanized devices are two water pumps used to separate the dirt from the larger rocks.

The landscape bears witness of where the ore once started. In compliance with the responsible mining standard, an area from the river up to where I am standing has been rebuilt with stones and dirt that were initially removed while searching for gold. Any intervention must be small enough that the area can be brought back to its initial state. On average an Oro Verde family producing unit owns 42-hectares of land. They work on about 1-hectare each year.

So this is where the green gold is. Whatever associations green gold might bring to a consumer in Europe or the U.S it is most likely not what I see here. I am watching the miners lifting stones from the bottom of the pit, up and out. Their work is coordinated and routine, each stone going from hand to hand. In the back the engines pumping water to remove sediments are running loudly. This is work based on water and pure manpower. The technique is called hoyadero, which literally means the "hole" technique. Depending on the ore, the miners can spend weeks moving stones before they can start extracting the gold using panning trays. Other mines under Oro Verde use different techniques; however, common for them all is the use of manpower and water. Importantly, none of the other mines use chemicals.

Extracting gold without chemicals is unfortunately not the general case. Conventional artisanal mining is one of the largest sources of mercury pollution in the world. Mercury is the easiest and cheapest way to extract the gold. In Colombia about 50% of the country's gold is produced by 200,000 artisanal and small-scale miners, turning Colombia into one of the world's top mercury polluters (Soos, 2011). The problem increases with the price of gold, attracting more people into the sector. In addition to the use of chemicals, artisanal and small-scale mining causes environmental problems such as dumping and leakage of mine waste into water systems, sedimentation, and deforestation (Fairtrade, 2011). Creating awareness and knowledge about environmental impacts of the mining activities has been one important task for AMICHOCÓ. As a part of their capacity building program, they provide education in environmental management. In addition, they have developed an educational program for children who one day might become responsible miners themselves.

Thus, green gold means that the exploration is in compliance with ecological principles while being backbreaking work under a burning sun or pouring rain. While I am in El Chocó the humidity is about 75%, making the 34 degree Celsius appear even warmer. "The work is hard, and days are long" one of the female miners tells me, but as a member of Oro Verde her living condition has improved.

She feels relieved knowing that she can give her children clothes and food, and support their education by buying notebooks, pens and uniforms. This feeling of certainty is a result of the Oro Verde Program. As certified Oro Verde miners the Palomino family producing unit is secured a minimum price and a buyer through Biodiversa.

4. Oro Verde and Its Long-Term Impacts

It is a short walk from Fermin Palomino's mine to Estación Ambiental, an environmental station owned by the Institute of Environmental Research of the Pacific and a partner of the community council of Tadó. The station offers lodging facilities for researchers and students from the University of Antioquia who do environmental assessments in the area. 45 miners have come together for a half day evaluation meeting of the Oro Verde program. Its location is impeccable. Estación Ambiental is a two floor wooden house surrounded by tropical vegetation. There is also a small lake here for fish farming. The meeting is taking place on a garden terrace covered by leaves from palm trees.

The miners from Tadó are divided into groups and representatives from AMICHOCÓ provide cardboard and pens for the next activity. Each group is asked to describe what differences they have experienced after they joined Oro Verde. One of the groups says their security situation has improved. Before they could not leave their house because paramilitary and guerilla groups were fighting in the area. So, I wonder, is this progress due to Oro Verde? No, not really. The security issue has been determined by the presence of the army and more support from the government. Other miners are not as fortunate. One miner, Reuben, tells me that his family is being forced to move because they are not safe. Oro Verde is operating in an area where security is still urgent, thus making the working conditions highly challenging.

The formation of producer groups is a prerequisite for making a program such as Oro Verde work. This might also be one of the program's main long-term impacts in the mining communities. While some of the miners are fulltime workers and others combine mining with agriculture, forestry and fishing, they all have an interest in making the exploitation of the resources on their territory into a sustainable activity. They are all stakeholders in Oro Verde, and if one miner does not comply with the standard every miner will lose the certificate. The recent process to become Fairtrade and Fairmined certified has provided additional incentives to strengthen the producer group as an organization, and continue building management capacity. Watching the next group presenting, I realize that this is a valuable arena for sharing knowledge and developing leadership skills.

One of the topics that creates the most debate during the meeting is the distribution of the premium. This is the miners' collective profit, and together they have to decide how to manage it. Since the commercialization of Oro Verde in 2003, the premium has been saved in a fund. Now both communities are working on establishing processes and procedures on how to use the money. As with any natural resource, it is not only how the resource is extracted, but also how the generated money is spent which determines the long-term impacts on the society. Both communities identified health as a main concern and have set aside funds to address

this. However, the producer groups still need support to structure the process before it becomes operative.

“Silla eléctrica” (electric chair) is cried out from behind. We all laugh. Yes, the day has been long and we all want to stretch.

5. Expansion and Sustainable Development

Sustainable development is about balancing the aspiration for economic progress with social and environmental concerns. Extraction of green gold, just as any other economic activity, has environmental impacts. In particular, the necessity of using water during the mining process results in changes to the water flow and potential siltation of rivers. Looking out over Fermin Palomino’s mine, it is clear that it will take time to bring nature back to its original state, but within five to ten years vegetation should have started to grow again. Under Oro Verde the effects are small and controlled. Thus, the main challenge for Oro Verde is how to expand and bring more revenue into the model without encouraging large-scale operations. Today, approximately six kilos of Oro Verde gold reaches the market. In the long run, production must double to make the program financially sustainable.

The demand for green gold is currently higher than the supply. In theory, this should imply an increasing price followed by more production of green gold. However, the pace at which this is done must be in compliance with the reality in which many miners still sign documents using their fingerprint and others might go to sleep with the sound of guerilla gunfire. Patience and resources are needed to develop a legal, transparent and democratic organization in an area that lacks human capital and infrastructure. Nevertheless it is possible. My filled visit to El Chocó Fermin and Palomino’s mine has taught me that the global market does not automatically establish the link between producers and consumers, between El Chocó and Hollywood. This relationship is built through education and the making of institutions and finally symbolized with a Fairtrade and Fairmined mark.

A Fokker 50 brings me out of El Chocó. The flight takes about 45 minutes from Medellín, where green mountain areas unfold underneath. After the plane takes off I see huge wounds in the surface. These are mines that are not a part of Oro Verde and run on a larger scale. Mechanization results in large areas being left like open scars. In El Chocó, Oro Verde is still the exception. With record high prices for gold, individuals desperately in need of income are attracted to the mining sector. Gold mining will take place in El Chocó, legal and illegal, but hopefully many more communities will follow Condoto and Tadó in turning their natural resources into long term assets.

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