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GOLD RUSH IN PERU

ILLEGALITY SPREADS AS THE STATE STUMBLES

Lajos Kossuth / Philip Reiser

Peruvian press has recently been replete with news of informal and illegal gold mining operations, of the government's actions to formalise and/or punish those who extract this precious metal and of a series of social unrests that have arisen as a consequence. Peru abounds with a range of metals, which have been extracted since long before the Spaniards occupied the territory in order to exploit this seemingly infinite mineral wealth. Today, many of the traditional practices persist, yet they have been combined with new technologies to create a booming industry of small-scale mining. The profitability that can be attained extracting relatively small amounts of gold has directed almost all small-scale operations to this pursuit, creating a powerful and dangerous gold rush that operates, in great measure, beyond the reach of the law. In 2011, illegal mining operations generated an estimated 2.9 billion U.S. dollars worth of gold. In comparison, in the same year, formal gold mines sold about 10.1 billion U.S. dollars.¹ In other words, illegal mining amounts to about 22 per cent of all mining operations performed in Peru.

The practice has amassed strong economic and political power, and as other illegal industries, such as drug production and contraband, it undermines Peru's institutions and rule of law, spreading lawlessness, corruption, environmental damage and social ills in its path. As tends to be the case with these sorts of activities, incentives against its regulation and elimination are strong. The simple fact of avoiding the nearly 40 per cent tax,² not to speak of the labor and environmental regulations that formal operations

1 | Cf. "La Minería ilegal del oro", Macroconsult, May 2012.

2 | Cf. "La Tributación Minera en el Perú", Instituto Peruano de Economía, Jan 2011.

must submit to, make keeping this activity on the fringes of law highly attractive.

Progress is being made. A legal framework has been set up to punish those who are engaging in destructive activities on the one hand, and to help those who wish to become

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formalised on the other. The press has, for once, played a positive role, pressuring authorities through active reporting and sustained criticism. Light is visible at the end of the tunnel, but it is still far away. Considering what the past years taught us, it will be a grueling uphill battle. The challenge for the government of President Ollanta Humala is tremendous, as it has inherited a problem that can no longer be ignored. Firm and decisive action, an attribute current leaders have not displayed so far, will be crucial.

MINES, MINERS AND SOCIAL ILLS

As in most activities that operate beyond the reach of the law, people involved in illegal mining operations are generally kept out of the spotlight. Geographically these operations are usually situated in remote locations where state presence is weak and permeable. Local actors manage their business far from public attention. Hardly ever are these people ever exposed, and the media has historically paid little attention to the phenomenon.

There are about 100,000 people directly involved in illegal mining, and about 400,000 depend on the activity for subsistence.³ As a consequence, media attention has recently risen considerably. As usual, the political hype has followed. Some symbolic, truly amazing stories have emerged as a consequence.

Illegal mining operations can be found wherever there is gold, which is most of the Peruvian territory. In fact, a recent study found that illegal mining takes place in 21 of Peru's 25 regions.⁴ Nevertheless, some regions have been hit harder by this phenomenon than others. One region

3 | Cf. n. 1.

4 | Cesar Ipenza, "Manual para entender la pequeña minería y la minería artesanal y los decretos legislativos vinculados a la minería ilegal", Sociedad Peruana de Derecho Ambiental, 2012.

that has received special attention lately is Madre de Dios, which is made up of pristine rainforests in the southeast corner of Peru, bordering Bolivia and Brazil. Gold mining in Madre de Dios is an emblematic case of informal extraction of non-renewable resources, environmental destruction, social catastrophe and an imminent collapse of the rule of law.

Table 1
By the numbers: Illegal Mining in Madre de Dios

25,000	Number of illegal miners in the region
32,000	Hectares of rainforests lost to illegal mining
2.8	Kilogrammes of mercury needed to produce one kilogramme of gold
16,000	Kilogrammes of gold are produced in Madre de Dios each year

Source: Sociedad Peruana de Derecho Ambiental.

This region is located on the western side of the Andes, where rivers descend from the mineral-rich mountains, leading to an accumulation of gold particles in the soil around the riverbeds. This means that its extraction is relatively simple, but also highly destructive, as will be detailed further on. Perhaps fittingly, this is the region where German movie director Werner Herzog filmed *Aguirre, The Wrath of God*, the story of a bastion of Spanish treasure hunters who get lost in the deep forests and are progressively driven to madness by their greed. This phenomenon seems to materialise in a somewhat different form today.

In February, *Poder 360*, a major news magazine, published the story of Gregoria Casas Huamanhuillca, an analphabet woman who lives in Huepetuhe, a mining outpost entrenched in the depths of the rainforest of Madre de Dios. “Goya”, the name by which she is more commonly known, has amassed an astonishing fortune as the leader of illegal mining operations widely known to cause devastating environmental damage to this otherwise pristine natural environment.⁵

5 | Ricardo León, “Goya, la reina del oro en Madre de Dios”, *Poder 360*, Feb 2012.

"Goya" and her husband Cecilio officially have mining rights to about 1,545 hectares of rainforest and are in the process of requesting concession rights for an additional 600 hectares.⁶ These have been awarded by the Regional government and do not imply that the concessions are regulated or supervised. State presence is virtually non-existent in Madre de Dios, especially outside the capital Puerto Maldonado. Therefore it is widely assumed that the boundaries of "Goya"'s operations exceed the "legally" acquired areas. The Regional Department in charge of mining has given 3,207 concessions, but only a meager 82 of them are formal and comply with regulations.⁷

In an attempt to understand what they are up against, the Regional Government performed a study to determine the amount of gold these concessions were producing. They came up with an estimate of 450 kilogrammes monthly, which amounts to approximately 27 million U.S. dollars in gold.⁸ Labor and machinery costs are virtually insignificant in comparison, and this gold is always sold for cash without any taxes being paid, which makes it safe to assume that it is turned into direct profit for "Goya", Cecilio and their numerous children. It is said that at local festivities, "Goya" walks around shaking a bottle filled with gold pieces, a sort of golden rattle. Government tax collectors tell the story of a recent visit to "Goya", where she was asked to pay hundreds of thousands of dollars as a penalty for tax evasion after an audit. "Goya" asked one of her employees to hand her a bag, pulled out wads of money and paid the fine in cash on the spot, much to the astonishment of the tax collectors.

The story of "Goya" is intended to give a general picture of the size and power these groups are accumulating. The gold rush has also drawn hordes of outsiders to the rainforest, who mostly migrate from the mountain regions looking to make quick and substantial profits. In the past few years, the boom has even gained international attention. Groups of Brazilian and Bolivian miners have reportedly been crossing the borders to look for

The gold rush has also drawn hordes of outsiders to the rainforest, who mostly migrate from the mountain regions looking to make quick and substantial profits.

6 | Ibid.

7 | Cf. n. 2.

8 | Ibid.

their share, and foreigners from places as far as China and Russia have been spotted in the region, operating completely unchecked with powerful machinery.⁹

While Madre de Dios has attracted the most attention, illegal mining has also spread quickly in other parts of the country. The mid-south coastal region, a desert between the cities of Ica and Arequipa, has not attracted much attention, yet illegal mining activity has boomed here, too. In April 2011, nine miners who worked in an illegal mine became trapped underground when a tunnel collapsed.¹⁰ The men were ultimately saved, but the episode brought national attention to the precarious working conditions these men faced, and provided the government with yet another argument for the formalisation of the artisanal mines, along with a penalisation for those who do not comply with the law.

Another region where illegal mining is rampant is Puno, the southernmost part of the Peruvian Andes.¹¹ The mining deposits here have been exploited since Inca times, and formal mines encountered heavy opposition when

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they sought to operate in the region due to widespread mining activity of the communities, which have traditionally been suspicious of outsiders. There are serious social issues caused by these activities that cannot be ignored. For instance, children are known to make up a considerable chunk of the labor force in the mines.¹² While child labor is not uncommon in most rural, family-based activities, it has become a strong concern specifically in mining due to the subhuman conditions observed in many cases, which are close to slavery.

Most operations still function on a very primitive level, with little technology, not to speak of safety measures. This means that mostly intense manual labor is involved, which

9 | Ibid.

10 | "Los mineros atrapados en socavón en Ica fueron rescatados", *El Comercio*, 11 Apr 2012, <http://elcomercio.pe/peru/1400096/noticia-rescate-mineros-ica-comenzo-obreros-salieron-socavon> (accessed 10 Nov 2012).

11 | Ibid.

12 | Cf. CHS Alternativo, "La Trata de Personas en la región de Madre de Dios", 2012.

extends from the extraction of the mineral to its processing in order to acquire the gold. In this last phase workers are directly exposed to mercury, which is usually flushed into nearby rivers or simply dumped on the ground after its use, creating a highly toxic environment. As the mining camps are usually set up in the same places where extraction takes place, this has reportedly caused serious allergies, headaches, rashes and long-term damage to nervous and reproductive systems.¹³



A makeshift mining camp in Peru. In the background there is forest devastation. | Source: picture alliance / dpa.

With the proliferation of illegal mining outposts all over the country, the problem of human trafficking has sharply increased. Young men and women are lured away from home with promises of better lives, only to arrive at remote camps where they work in slave-like conditions. Many women are also forced to form prostitution rings in the *prostibares*, where they work as bartenders and are forced to have sex with clients upon request.¹⁴ The NGO Save the Children estimates there are 1,100 sexually exploited teenagers in Madre de Dios. In October 2011, a dozen men who owned prostitution rings were captured in Madre de Dios after the police raided 54 nightclubs and saved more than 200 women who were being sexually exploited, seven of them underage.¹⁵

13 | Ibid.

14 | Ibid.

15 | Cf. n. 10.

In the three regions mentioned above, sudden and numerous migrations from other parts of the country have also rattled set social structures, causing conflicts within communities and raising mistrust of natives towards immigrants. As an example, Madre de Dios has 121,000 inhabitants, of which 66.9 per cent originate from elsewhere, mainly from the three neighboring regions of Cusco, Puno and Arequipa.¹⁶

AN UPHILL POLITICAL BATTLE

Ollanta Humala's first presidential term has been successful at guaranteeing macroeconomic stability and preserving economic growth in the global context of depression and stagnation, especially in the euro zone, the U.S., and large emerging countries. But it has also been plagued by a serious number of social conflicts, ignited over disagreements on mining policies, especially because of environmental concerns. These are, in essence, ideological conflicts that arise due to disagreements over the development model adopted by the government.

Ironical as it is, social conflicts have been Humala's and the country's Achilles heel: Humala himself gained political recognition as the radical presidential candidate in the 2006 elections, who criticised economic growth based on free markets and was straightforward about his discontent with Alejandro Toledo's (Peruvian president from 2001 until 2006) mandate. According to the Defensoría del Pueblo,¹⁷ as of July 2012 there were 243 cases of social conflict registered (168 active and 75 latent), most of which were socio-environmental. If one compares these numbers to those of July 2006, the results are astounding: only 84 conflicts were registered (74 latent, 8 active, and 2 resolved) back then.

The most notorious conflict revolved around the Conga mining project in Cajamarca. Protests were led by Gregorio Santos (the regional president) and other radical

¹⁶ | Ibid.

¹⁷ | The Ombudsman's Office in Peru: created by the 1993 Constitution, as a constitutionally independent body to defend fundamental rights, monitor the performance of the duties of the state administration and the efficient delivery of public services nationwide.

local leaders, who succeeded with causing the project's indefinite suspension (until further notice). This conflict lasted for nearly a year. It brought violence and death to the region of Cajamarca, which is known for its vast mining potential. Until 3 September, three provinces were still under a state of emergency: Celendín, Bambamarca and the city of Cajamarca.

Other high-profile conflicts have appeared during Humala's first year as president, for example in Espinar, Cusco (socio-environmental conflict against a mining venture), in Lima (physicians of the national social security system, Essalud, went on strike for better salaries), or even at the national level (members of the public education teachers' union SUTEP protested for changes in a law being passed in the previous presidential term that allegedly diminished their benefits as teachers). The truth is, nonetheless, that this social instability (especially throughout and because of the Conga conflict) has taken its toll on the political spectrum. Humala has changed his ministerial cabinet three times within twelve months. The Peruvian newspaper *El Comercio*, and even credit rating agencies such as Moody's have stated that these ministerial changes implicitly acknowledged deficiencies in the strategies designed to resolve the Conga conflict, therefore menacing subsequent mining projects, investments at large and ultimately Peru's economic growth. In that sense, this framework of a relatively unstable political environment has also played an important role in the actions taken against illegal mining. Even though the country has dealt with this problem since colonial times, the past years have been critical in terms of directing the struggle against this devastating and booming activity.

As with almost every informal or illegal activity, any attempt to regulate it inevitably leads to disconformities among the people whose livelihood depends on it. This has been a critical factor with illegal mining, since there was no ad hoc legislation to define the phenomenon until March 2012. It had never been clear who fell into the "illegal" category and who counted as an artisanal, small-scale miner.

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In that way, political action involves a great risk of igniting new conflicts and fighting large economic interests, which was probably the reason it was easier to turn a blind eye to the fact in the past. The damage has become too critical to ignore in the past years, making some actions inevitable, but increasingly difficult due to the tremendous growth of the activity. Every regulation attempt was met with violent protests (especially in Madre de Dios), which eventually had tragic consequences. For instance, workers of the illegal mining sector went on strike in April 2010 leaving six people dead in response to an Emergency Decree, which in turn forced the government to appoint a committee to re-evaluate the norm. Likewise, one year later, in March 2011, violent protests arose again after a military intervention destroyed illegal dredges in Madre de Dios, leaving two dead.¹⁸

The protests peaked in the first months of 2012, when the Executive Power was given the faculties to legislate against illegal mining and eventually inserted the activity in the Penal Code, setting criminal penalties for many related activities.¹⁹ Suddenly, protests broke out in

In Madre de Dios, protesters blocked the main highways, which eventually led to a paralysis in economic activity. This caused losses of approximately 1.5 million Sol per day.

the regions of Piura, Ayacucho, La Libertad, Apurímac and Madre de Dios – a strong message of discontent with the legislation and an indicator of the scope of the activity.²⁰ In Madre de Dios, protesters blocked the main highways, which eventually led to a paralysis in economic activity. This caused losses of approximately 1.5 million Sol per day according to the regional Chamber of Commerce. The local people requested a state of emergency after approximately 10,000 protesters had gathered and several deaths were registered. Ultimately, protests ceased when the government decided to constitute roundtables.²¹

The political handling of social conflicts by the Humala administration has almost always led to the government giving in to protester's demands. It seems that the way

18 | Cf. n. 10.

19 | Cesar Ipenza, "Manual para entender la pequeña minería y la minería artesanal y los decretos legislativos vinculados a la minería ilegal", Sociedad Peruana de Derecho, Lima, Jun 2012, http://www.spda.org.pe/_data/archivos/20120608173442_La%20pequena%20mineria.pdf (accessed 2 Nov 2012).

20 | Ibid.

21 | Cf. n. 10.

the Conga conflict proceeded has established a standard for the way all social conflicts will be handled. A dangerous precedent has been set, which seems to be: The movement that blocks enough roads, gets what it wants. But it is also true that illegal mining steers different and more powerful interests than those behind regular protests. In 2011 a Congressman was accused of receiving payments from informal miners (30 grams of gold per week) and of being in possession of 5,019 hectares of concessions.²² In another case, in March 2012, the MINEM's²³ general director of hydrocarbons was found to be the owner of one of the largest gold exporting businesses in Peru, which was incidentally investigated by the authorities for money laundering and fiscal evasion.

There are also other forces that converge with illegal mining. According to Carmen Masías, director of Devida,²⁴ it also holds close links to drug trafficking, a natural ally, in many regions. Masías affirms that chemical inputs used in illegal mining are in many cases diverted and put to use in cocaine production. To add to the complexities, large capital flows from Russia and Brazil have been identified as important funders of illegal mining. Their influence is not limited to Madre de Dios: these shady investments have been traced to operations nationwide.

Illegal mining holds close links to drug trafficking in many regions. Chemical inputs used in illegal mining are put to use in cocaine production.

In a nutshell, the political framework in the struggle against illegal mining can be summarised into three fundamental aspects:

1. A reactive state: Social conflicts, which have escalated within the last years, have revealed an apparent incapacity of politics to handle them and address the matter effectively, perhaps as a consequence of past inaction;
2. Tough opponents: the way illegal miners have reacted to any attempt at regulating their activity indicates that a long and difficult path lies ahead;

22 | Ibid.

23 | Cf. Ministry of Mining and Energy (Ministerio de Energía y Minas).

24 | Organism in charge of implementing anti-drug policies.

3. Powerful interests: hidden and powerful interests are operating behind this activity, which will make its eradication all the more difficult.

PLENTY LAWS, LACK OF ENFORCEMENT

The legal definition is perhaps the fundamental issue to resolve when it comes to illegal mining and its effects on environment, economy and society. What constitutes illegal mining? The truth is that, before the publication of the laws that norm illegal mining – and also after it – the difference between informal and illegal mining was not even clear to the authorities that tried to eradicate it. In March 2012, for example, Jorge Merino, minister of Mining and Energy, declared that there was a strong difference between informal and illegal mining, since the latter is the kind that destroys nature, pollutes the environment, and generates corruption, prostitution, and human trafficking.²⁵

The Emergency Decree 012-2010, nevertheless, proposes a clearer definition for the difference between informal and illegal mining. This norm states that the former is legal due

to its location inside what is defined as *corredores mineros* (mining corridors), while the latter operates outside these corridors. This means that the only difference between both activities is the geographic location. Follow-

The World Bank applies a definition that is used by many countries but fails to discriminate between informal and illegal miners.

ing this reasoning, it would not matter if they both pollute, or “destroy nature”, or generate prostitution, for instance. The World Bank applies a definition that is used by many countries but fails to discriminate between informal and illegal miners. In other countries, these small-scale miners are referred to as *garimpeiros* (Brazil), *guiriseros* (Nicaragua) or *pirquineros* (Chile and Argentina).

The Sociedad Peruana de Derecho Ambiental has published a document recently that sheds light on the main differences between all types of mining, according to the law.²⁶

25 | Cf. “La minería ilegal es una lacra y el Estado será firme ante ella, aseguró titular del MEM”, *El Comercio*, 6 Mar 2012, <http://elcomercio.pe/economia/1383661/noticia-ministro-merino-estado-firme-contralucha-mineria-ilegal-lacra-estado-firme-ante-ella-sostuvo-ministro-merino> (accessed 10 Nov 2012).

26 | César A. Ipenza Peralta, “Manual para entender la Pequeña Minería y la Minería Artesanal y los Decretos Legislativos vinculados a la Minería Ilegal”, SPD, 2012.

For example, it points out differences between small-scale miners and artisanal miners, which are based primarily on the scale of the mining process, *inter alia* as indicated by the size of the mining concessions and the operative installations.

This document also includes a summary of the latest legal norms put in place to combat illegal mining. Specifically, it compares the various new decrees in order to provide a clear definition of informal and illegal mining. One has to take into account that, before the following legal action, illegal mining did not constitute a felony by itself. These are the decrees:

- Legislative Decree Nº 1100: states that any mining activity is illegal if it operates only with a mining petition (Spanish: *petitorio*) and a mining concession but without approved environmental permits, and more generally, without all the authorisations required.
- Legislative Decree No. 1102: this decree incorporates illegal mining in the Penal Code and states that a miner commits a felony if he does not have the respective authorisation from the competent administrative authority, and when he causes – or could cause – damages to the environment.
- Supreme Decree No. 006-2012-EM: this decree incorporates additional measures for the formalisation of mining activities and emphasises the difference between informal and illegal mining, defining their scope. Basically, as stated before in this section, the decree mentions that illegal mining operates in non-authorised mining locations, whereas informal mining does operate in authorised mining locations. Both of them, nevertheless, are found to have illegal mining characteristics as defined in the previous decrees mentioned above, the only difference is that informal miners have initiated all the procedures for their formalisation.
- Legislative Decree No. 1105: establishes dispositions for the process of formalisation of small-scale and artisanal mining. Again, this decree emphasises the fact that illegal mining operates in locations where mining activities are

prohibited, while informal mining operates in locations where mining is permitted, is in the process of formalisation, but has the trademarks of illegal mining.

- Legislative Decree No.1107: basically establishes control measures and regulations for distribution, transport and commercialisation of machinery that can be utilised in illegal mining.

These recent legislative measures have helped in the struggle against illegal mining, especially due to its inclusion in the Penal Code as a felony. Previously, only the environmental offenses applied (Title XIII of the Penal Code). It is still insufficient in some respects, especially since it leaves doubts about the definition of informal mining. Is every artisanal miner illegal unless he is in the process of formalising his activity? What about artisanal or small-scale miners who already met all the requisites but now are subject to the new legislation?

Supreme Decree No. 012-2012-EM authorises a state enterprise to directly purchase of gold produced by small-scale and artisanal miners in the process of formalisation.

Nonetheless, this obvious improvement in the legal framework has many flaws, some of which were the subject of intense media scrutiny. For instance, Supreme Decree No.

012-2012-EM authorises Activos Mineros del Perú, a state enterprise, to implement a temporary formalisation program which includes the direct purchase of gold produced by small-scale and artisanal miners in the process of formalisation. Essentially, this decree provides the framework to continue trading the "illegal" gold during the process in spite of the legislation to put a halt to it.

THE ECONOMICS OF ILLEGALITY

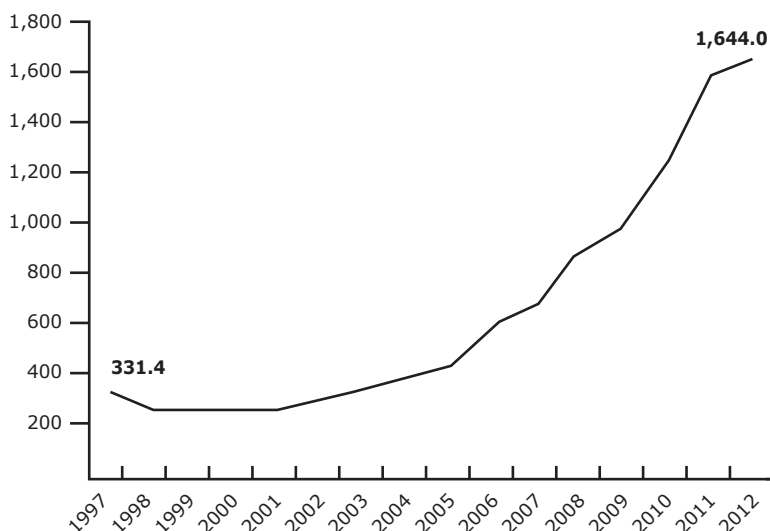
To fully understand the impetus behind this illegal activity one has to recognise the tremendous incentives its illegal exploitation provides. The main one, naturally, is the price of gold (fig. 1).

Gold prices have risen almost exponentially since 1997, growing by 396 per cent. In 2012, the price for a troy ounce of gold (on average) was almost four times higher than in 1997. This price spike can be attributed in large part to the global financial crisis (gold is seen as a security against the

collapse of national currencies) and has incidentally served as a powerful incentive by multiplying the profitability of illegal mining.

Fig. 1

Daily average gold price, 1997-2012
(in U.S. dollars per troy ounce)



Source: Peruvian Central Bank (Banco Central de Reserva).

That is probably the main reason why illegal mining is present in 21 regions of the country (Madre de Dios, Piura, La Libertad, Puno, Ica, Áncash, Cusco, Apurímac, Lima and Arequipa, among others) and employs approximately 100,000 people. In fact, according to the Sociedad Nacional de Minería, Petróleo y Energía (SNMPE), illegal mining generates more than two billion U.S. dollars a year, produces 20 tons of gold, and evades taxes that amount to approximately 600 million U.S. dollars.²⁷ Former Minister of the Environment Ricardo Giesecke stated that an informal miner earns an average of 500 Sol (about 200 U.S. dollars) per day – almost a monthly minimum wage salary – by collecting three to four grams of gold. In Piura, for instance, according to the Ministry of Mining and Energy, illegal

27 | Cf. "SNMPE: Minería ilegal evade impuestos por más de US\$600 millones al año", *Semana Económica*, 12 Apr 2012.

mining produces an estimated five tons of gold per year, valued at 285 million U.S. dollars. It generated 7,729 jobs, compared to the 1,310 created by formal mining.²⁸

In Madre de Dios, a region where – as stated before – the effects of illegal mining are at their worst (socially, environmentally, politically and economically), informal gold extraction makes up 97 per cent of all mining, producing about 16 tons with a value of 800 million U.S. dollars. Sunat²⁹ declared in March 2012 that illegal mining evaded 500 million Sol in regional taxes – an amount that, if collected, would double the annual budget of the regional government.³⁰

Studies of the phenomenon and its economic impact provide us with data that should be considered for policy-making. Macroconsult, a prestigious Peruvian economic consulting firm, performed a study of the impacts of illegal mining. It calculated that almost two million ounces of gold (out of five million that are exported annually) come from illegal mining. This means that almost 30 per cent of the exported gold comes from “unknown sources”.³¹ The firm also estimates that the value of total exports of illegal gold surpasses those of drug trafficking. While an estimated 2,900 million U.S. dollars of illegal gold is exported annually, drug trafficking “only” exports 1,208 million U.S. dollars.³²

Perhaps the most controversial and impressive finding has been the growth in revenues from illegal gold mining, which explains the recent and violent “gold rush” in many parts of the country. In 2005, revenues from illegal gold mining reached 47 million U.S. dollars; in 2011, revenues expanded a whopping 2,032 per cent to 1,002 billion U.S. dollars. The impact on tax evasion has equally shot up, as in 2005, the treasury lost nine million U.S. dollars associated with illegal gold mining; in 2011, this number has grown to 343 million U.S. dollars.³³

28 | Cf. *El Comercio*, 13 Nov 2011.

29 | Peruvian organism in charge of collecting taxes.

30 | Cf. *El Comercio*, 16 Mar 2012.

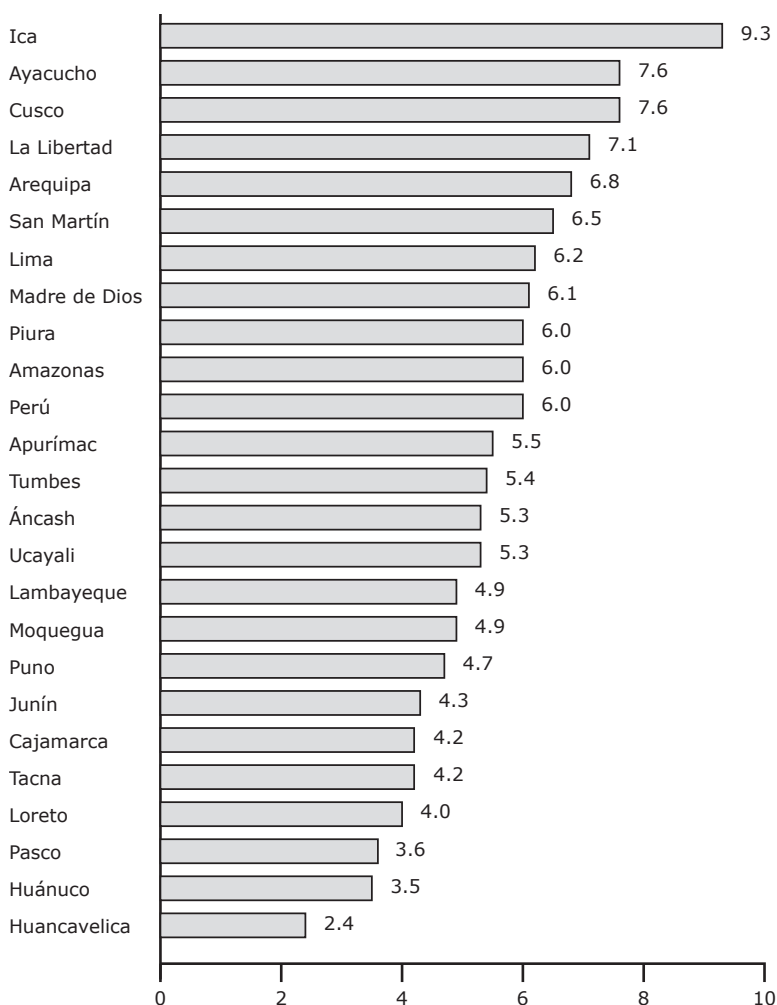
31 | Information taken from Minem and Sunat. Processed by Macroconsult.

32 | Cf. *El Comercio*, 16 May 2012.

33 | Macroconsult, n. 1.

Fig. 2

**Average Regional GDP annual growth, 2001-2009
(in per cent)**



Source: INEI.

At its heart, the problem of illegal mining is economic. It is so lucrative that thousands of people have decided to engage in this illegal and risky activity despite the economic growth Peru has experienced in the past decade and all the opportunities it has created in the formal markets. In that sense, one common criticism (and myth) against the Peruvian economic “miracle” is that it has only benefited few people, mostly in big cities. The numbers suggest the contrary, as growth has been strong in regions

where illegal mining is one of the main economic activities. Except for Apurímac, Áncash and Puno, all other regions where illegal mining has a strong presence in the economic structure have grown annually more than the national average (six per cent) (fig. 2). The data only accounts for legal trades and shows that outside of illegal activities the country as a whole has grown steadily, which could serve as an argument to defend public policies aimed at providing alternative opportunities.

AN ENVIRONMENTAL TRAGEDY

All mining activities, legal or illegal, have a deep impact on the environment. In the past, government regulations were lax or not enforced, which led to abuse by mining companies and left a negative mark on the people affected. Today this situation has changed, as formal mines have to adhere to strict international standards. To begin with, the mining camps are usually makeshift, temporary facilities, made of plastic covers and improvised structures. There are neither fresh water sources nor sewage of any kind. Water for cooking and cleaning is taken from the rivers, which are often already polluted with mercury. Trash being littered all around the camps attracts bugs and animals and thus becomes an infectious hazard. Once the surrounding areas have been exploited, the camp moves to a new location, leaving behind a barren, polluted landscape.

The widespread use of mercury in the process of separating gold and soil is a crime against nature and society. Mercury does not degrade; therefore it remains in the ground after being discarded and cycles through nature until the rivers flush it downstream, where it continues its destructive work. It is estimated that approximately 32 tons of mercury are put to use each year in Madre de Dios, a large part of which will remain in the soil and water, killing off all living things. Reports show that fish populations have decreased dramatically in the regions where this practice is common, to the extent that the inhabitants of Puquiri, in Madre de Dios, who have traditionally gotten a large part of their food from fishing, say that all forms of life have disappeared from the river.³⁴

34 | Ibid.

In the forest regions, where illegal mining grew the most, deforestation has been another major environmental tragedy. Again, Madre de Dios is the most insightful example. An estimated 32,000 hectares of pristine rainforest have already been lost.³⁵ To be clear, this phenomenon is not limited to the south of the country. Several illegal dredges have already been spotted in rivers in Loreto and San Martín, in the north of the country, as well.



An informal miner earns an average of about 200 U.S. dollars per day – almost a monthly minimum wage salary. | Source: picture alliance / Wildlife.

There are strict laws that punish such activities in Peru, but the problem is not the absence of laws, but rather their complete disregard by the population and the lack of control by the State to uphold them. The government has taken some action in the past years to punish those who flagrantly damage the environment. It began to investigate and pursue environmental crimes, such as deforestation or trafficking of chemicals and machinery. Still, these actions have until now been ineffective.

35 | SPDA, "Infografía: Minería Ilegal en Madre de Dios", 2012, <http://actualidadambiental.pe/?p=16438> (accessed 11 Nov 2012).

FAIR MINING: A PROMISING, IF ONLY PARTIAL, SOLUTION

The movement of conscientious consumption has taken many forms and created an array of certifications meant to assign ecological standards and transparency to the supply chain. An important idea is Fair Trade, which seeks to help producers from developing countries improve their conditions and uphold social and environmental standards across the supply chain. Initially geared towards more consumer-oriented products, this concept has been extended to raw material suppliers in the mining industry as Fair Mining. One of the pioneer organisations in implementing Fair Mining practices is Oro Verde (Green Gold), from Chocó, Colombia. A local initiative promoted by local miners working with activists, it has cooperated with artisanal mining communities in order to implement environmentally and socially sound practices for gold extraction, has helped them find customers globally and has overseen community development and organisation. The success of this initiative inspired others, and so the Alliance for Responsible Mining (ARM) was born. It was founded in 2004 in order to provide an organisational framework that helps the member groups (nine organisations in four South American countries, so far) by formulating a set of standards. Moreover, the Alliance accompanies their implementation

The Fairtrade Foundation, known for certifying a huge variety of products, has developed its "Fair Mining" certification in cooperation with the ARM.

and seeks to replicate the model throughout mining communities worldwide. Four small Peruvian communities have joined the ARM in the past few years, which shows that this can be a very viable and successful alternative to the underground and semi-legal status these communities commonly face. The Fairtrade Foundation, known for certifying a huge variety of products, has also caught on and recently developed its Fair Mining certification in cooperation with the ARM. Three organisations from South America, including Oro Verde, have already been awarded the certification.

These initiatives are still quite recent, but as with other products, the success of such programs will depend on consumers who gain conscience about the origin of their purchases and on their willingness to pay a premium in order to ensure that their dollars buy fair and clean products. It

is important to note that the miners have embraced the fair mining approach, as it shows a path to legality, allows them to trade at better prices and provides an organisational framework for the creation of local development. If properly implemented, this model could provide the proper incentives in order to become a coveted path to legality for many communities. The demand is huge and if advantage is taken of it, success stories will spread quickly.

POLITICAL AND SOCIAL CHALLENGES AHEAD

While the preceding section already hints at one possible solution, it has its natural limitations since it depends on a market niche and involves large amounts of work in order to certify the communities involved. To address

the issue at large, a wide-ranging, all-out approach will be necessary. In terms of public policies, the struggle against illegal mining has to focus on raising both the costs of engaging in such activity and the benefits of doing something else. The goal is to change every miner's incentive scheme so that other economic activities become perceived as more profitable than illegal mining. For instance, harsh penalties for engaging in this type of activity plus the actual risk that these penalties will be implemented would be a start. In addition, public policies focused on alternative economic activities, such as added value agriculture, could help to divert the incentives into such activities, a sort of "reinsertion" program. Furthermore, those that have possibilities of becoming formal, small-scale, tax-paying miners should receive aid and training to enter the formal economy.

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In economic terms, Peru is faced here with a clear "tragedy of the commons" dilemma. This problem arises when multiple individuals, driven by self-interest, end up depleting a common limited resource, even though it is in everyone's interest to preserve it. In this specific case, the shared limited resource is the water that is being polluted, the rainforest that is being ravaged and the gold that benefits only those who exploit it. The incentives to preserve these resources are currently not sufficient to assure they are put to good use; that their benefit is maximised.

A few other, more immediate actions aimed at exerting pressure on the miners must be strengthened. The first is the use of force, which has already been successfully applied in several military operations to destroy illegal dredges and machinery operating in the rainforest. So far the government has executed these operations sporadically, leaving the area after the objective was accomplished. The presence of law enforcement should be permanent in the most critical zones and they should patrol the areas to dismantle any illegal operation.

A second immediate action would be the regulation of the chemicals used in the process, such as mercury and cadmium. The supply chain for these highly toxic chemicals should be regulated and controlled in order to prevent their sale to illegal operations. This alone could be highly effective since without access to these chemicals, Gold production would be more troublesome and less profitable.

In sum, this activity burdens the country with enormous costs, while generating little positive effects concentrated in the hands of only a few people. The long and difficult path towards a State with an adequate Rule of Law could be side-tracked, as the interests of illegal miners stand in direct opposition to it. Environmental damage, health costs, child labor, prostitution, corruption, tax evasion, among others listed previously, sum up to tilt the balance strongly in favor of a strong and committed fight against this phenomenon. The government has taken some tentative steps to face this, but with the political instability it is confronted with, has become passive and thus taken some steps backwards. With gold prices set to reach 2,000 U.S. dollars per ounce next year,³⁶ any timid posture will certainly be overrun by the growing number of people who are reaping the direct rewards of a highly profitable business.

36 | According to a Deutsche Bank forecast released this year, <http://marketwatch.com/story/deutsche-bank-lifts-2013-2014-gold-price-outlook-2012-10-02> (accessed 10 Nov 2012).