

SMALL-SCALE GOLD MINING
IN THE AMAZON

THE CASES OF BOLIVIA, BRAZIL, COLOMBIA,
PERU AND SURINAME

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SMALL-SCALE GOLD MINING AND SOCIAL AND ENVIRONMENTAL CONFLICT IN THE PERUVIAN AMAZON

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Introduction

This chapter provides an overview of gold mining in Peru and looks particularly at small-scale gold mining in the Peruvian Amazon. It describes mining development in Peru over the last twenty years, which has seen a spectacular increase and unfortunately has been accompanied by very high rates of social and environmental unrest in the country and especially in the Madre de Dios region. It discusses the official mining classification and the characteristics of small-scale and artisanal gold mining and looks at the impacts on the environment and public health in mining areas. It also gives the legal and institutional framework of the small-scale and artisanal mining formalization process.

The final part of this chapter highlights the continuous protests and conflicts between Peruvian Government and the heterogeneous miners organizations in Madre de Dios, which grew after military and police interventions in October and November of 2011 and in the first half of 2012. The main reason for protest was a number of new decrees intended to start formalization of small-scale mining, with an intention to organize and concentrate gold mining in a territory called the mining corridor and exclude mining in other areas, such

as the Tambopata Reserve buffer zone. Until now, there is little progress with regard to formalization, and the situation in Madre de Dios remains tense.

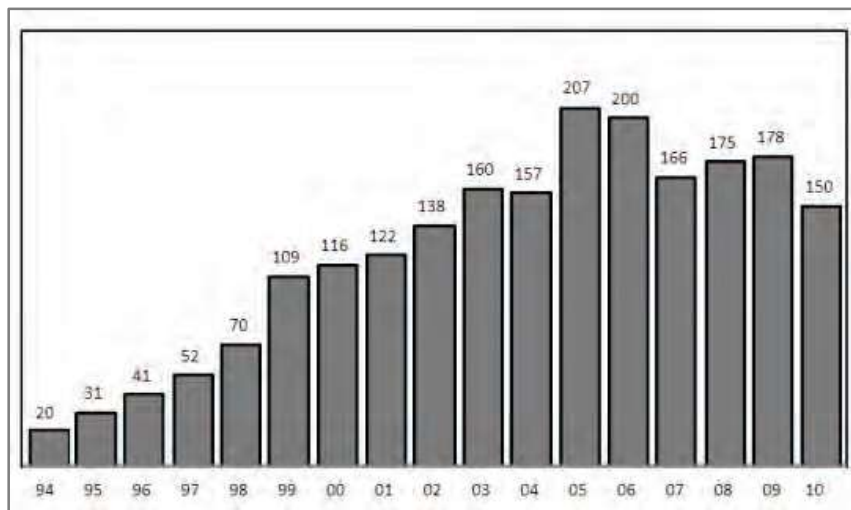
In general, the situation in Peru is characterized by conflicts about access to, or ownership of natural resources and territory, environmental impacts and consequent social mobilization requesting real benefits for the people. The Government lacks effective policies or measures, but instead answers with repressive interventions and unsuccessful negotiations. This context also influences the situation in Madre de Dios. This chapter's preliminary conclusions encourage to further address the social and environmental unrest around gold mining in the Madre de Dios department and the country in general, and improve government interventions, with the aim to improve the lives of the small-scale gold miners and the populations that surround them.

The expanding Peruvian mining sector and national gold production

Peru is one of the top producers of the world's most important metals. Between 1994 and 2005, gold production in Peru rose from 20 to 207 tons. Production fell to 150 tons in 2010 (see figure 1). It remains Latin America's most important gold producer and in the last decades Peru has become one of the chief destinations of exploration and mining project investments in Latin America (see table 1).

Peru's expansion in mining investments and production began in 1993, when the Yanacocha mining company started operations in

Figure 1. Peru: gold production in fine metric tons (1994 -2010)



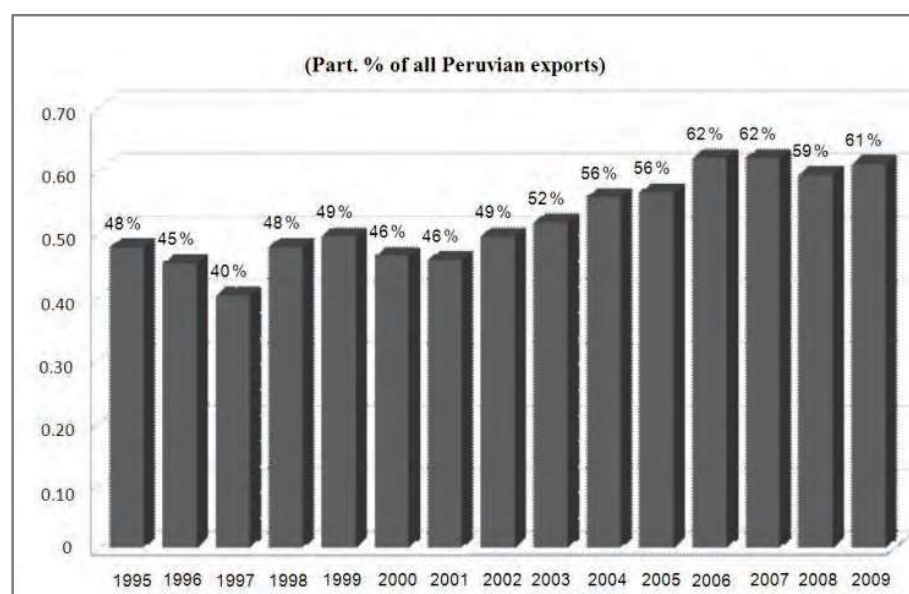
Source: Ministry of Energy and Mines 2010. Drafted by CooperAcción.

Table 1. Peru's position in Latin America and in the world in metal production (2010)

Main products		Position	
		Latin America	World
Silver	(Kg)	1°	1°
Zinc	(TM)	1°	2°
Tin	(TM)	1°	3°
Lead	(TM)	1°	4°
Gold	(Kg)	1°	6°
Copper	(TM)	2°	2°
Molybdenum	(TM)	2°	4°
Iron	(TM)	5°	17°

Source: United States Geological Survey 2011. Drafted by CooperAcción.

large-scale gold mining in northern Peru. Between 1995 and 2009, mining contributed around 6 percent to the yearly GDP and contributed with over 60 percent to Peruvian exports (see figure 2). The expansion was based on a number of external as well as internal factors, such as the increased demand for minerals worldwide, rising prices of gold and other metals, financial markets willing to back major investment, but also a number of national structural reforms,

Figure 2. Mining exports in Peru (1995-2009)

Source: Peruvian Central Bank 2010. Drafted by CooperAcción.

which were geared towards making the country more attractive to investors.

Mining in Peru is officially divided into four categories: large-scale, medium-scale, small-scale and artisanal mining. The division is based on the size of the concession and the mine's daily production capacity. Artisanal mining was only recognized in 2002, for an area of up to 1,000 hectares of mining concession and a production capacity of 25 MT/day.¹ See also table 2 for a complete overview of the classification system of mining in Peru.

Table 2. Mining classification system

Category	Concession Area	Production Capacity
Large-scale	Over 2,000 Ha	Over 5,000 MT/day
Medium-scale	Over 2,000 Ha	Up to 5,000 MT/day
Small-scale	Up to 2,000 Ha	Up to 350 MT/day (1)
Artisanal	Up to 1,000 Ha	Up to 25 MT/day (2)

(1) Small-scale mining: for non-metallic and construction materials: 1,200 MT/day and placer-type metallic deposits: 3,000 m³/day

(2) Artisanal mining: for non-metallic and construction materials: 100 MT/day and placer-type metallic deposits: 200 m³/day

Source: Ministry of Energy and Mines 2002.

In Peru, most of the gold is produced in large and medium-scale mines. In 2010, 85 percent of the total gold production was produced by these two categories and three large-scale mining companies accounted for 55 percent of Peru's gold production: Yanacocha, followed by Barrick Misquichilca and Buenaventura (Ministry of Energy and Mines 2010). The small-scale and artisanal mining accounted for the remaining 15 percent, of which 12 percent was produced by the mines of alluvial gold deposits in the Amazon and some Andean regions. This is called "placer mining", which refers to the alluvial mining of riverbanks and borders. The remaining 3 percent is produced by small-scale gold mining in primary bedrock, principally in the Peruvian Andes (Ibid. 2010) (see also table 3).

The category 'informal mining' refers to mining activities mostly in the small-scale and artisanal categories that are not recognized and formalized by the State and the mining and environmental ministries involved. A very small number of these informal miners are in the process of formalization in order to obtain concession rights. They need to have an environmental study and other registrations approved, pay some taxes and comply with a number of labor regulations. As is shown in table 3, a high percentage of the small-scale and artisanal miners are in the category of informal miners; they have not yet been formalized, because of the very complicated procedures,

Table 3. Gold production by categories (1998 -2010)

GOLD PRODUCTION PER STRATA (Thousands of fine ounces)					TOTAL
	LARGE/ MEDIUM MINING	SMALL MINING	ARTISANAL MINING	INFORMAL	
1998	2,230	74	---	725	3,029
1999	3,510	44	---	577	4,131
2000	3,723	10	---	530	4,263
2001	3,906	13	---	534	4,454
2002	4,453	10	---	602	5,065
2003	5,106	31	0	413	5,550
2004	5,054	40	0	475	5,569
2005	6,125	44	1	517	6,687
2006	5,933	79	1	508	6,521
2007	4,817	129	1	526	5,473
2008	5,095	150	1	537	5,783
2009	5,164	197	1	553	5,916
2010	4,474	168	2	610	5,253

Source: Ministry of Energy and Mines 2010.

obligations, different kinds of payments, overwhelming paper bureaucracy, dependencies from governmental offices, employees and often arbitrary decisions and time schedules.

Despite the high production numbers and corresponding revenues in large-scale gold mining, it is important to note that formal large-scale mining provides direct employment to only one percent of the economically active population (EAP) (Ministry of Energy and Mines 2011). Main motivation to attract large-scale mining for governments is to amplify their national budget by means of taxes and other financial incomes from the large-scale mining companies. It does not automatically mean however, that growing national income is converted into local and national progress and sustainable human development. The mining regions in Peru are also the poorest regions of the country.

Small-scale and artisanal mining in Peru

Small-scale and artisanal gold production was traditionally present in four main areas in Peru: the Puno department; in the Central South

which includes the departments of Ica, Arequipa and Ayacucho; Madre de Dios; and the provinces of Pataz and Sánchez Carrión in the La Libertad department (Torres 2007). In recent years, it has been developing also in the department of Huancavelica; Cerro el Toro in La Libertad, Progreso in Apurímac; Ayabaca and Sullana in Piura and recently in the province of Canta in Lima. In the Central South, La Libertad and the other more recent mining areas, principally primary deposits (seam) are mined.² In Puno, both primary and secondary deposits are mined. The alluvial deposits are principally mined in Madre de Dios in the Amazon.

In Madre de Dios, gold mining has been expanding since the 1970s. This has produced a lot of inward migration and created links between the highland areas and the lowland areas around Puerto Maldonado (De la Torre 1987, Lossio 2002). Despite differences in Andean and Amazon historical and cultural characteristics, an economic enclave has formed around the mining activity, joining people with different backgrounds and customs. This process accelerated because of the recently finished Interoceanic Road, which connects Brazil with the Pacific harbors in southern Peru, via Puerto Maldonado, Cusco, and Puno, enhancing the mobility in this Amazon region that used to be difficult to access.

To date, there are no official data on the number of people involved in artisanal mining in Peru. Pachas (2011) analyzed information from the Ministry of Energy and Mines for the period between 1994 and 2009 and states that in 2009, there were approximately 53,600 small-scale and artisanal miners and 268,000 people involved, including women and children (see table 4).³ Unlike large- and medium-scale mining, which is identified as men's work with little demand for manpower, small-scale and artisanal mining involves generally the whole family as well as migrant workers as temporal miners. Romero et al. (2005) show that in underground mining, the women are involved in *pallaqueo*, which is the recovery of mineral rock from rubble. This helps them to cover some of their household costs. In alluvial mining areas, women are also involved in managing the mining operations and some are leaders of their mining or trade associations. According to the ILO (2004), in most cases women have to work with their smallest children, since they have nowhere else to leave them. When they are older, the children get involved in the work themselves.

Together with the growth of artisanal mining, there has been a shift in the mining populations working in each mining area. The number of people working in some of the traditional areas like Madre de Dios and Puno has decreased. This is mainly due to the effect of the gradually improving technology and use of machineries in these areas, which has driven many workers out of the area, to search for new gold mining areas elsewhere. Despite this reduction, Madre

de Dios is still the region with the highest number of people working in small-scale and artisanal mining.

Table 4. Number of People Working in Artisanal Mining (1994-2009)

Region	Number of People working in artisanal mining					
	1994		1997			
	Population	%	Population		%	
Madre de Dios	8,500	23	9,500		42	
Puno	15,000	41	7,562		34	
Central South	12,459	33.9	4,690		21	
La Libertad	700	2	700		3	
Canta						
Other*						
TOTAL	36,659	100	22,452		100	

Region	Number of People working in artisanal mining					
	2001		2007		2009	
	Population	%	Population	%	Population	%
Madre de Dios	9,500	31	20,000	38	15,000	28
Puno	14,000	46	20,000	38	10,000	19
Central South	6,000	20	8,000	15	8,000	15
La Libertad	830	3	3,500	7	4,500	8
Canta			1,500	3	1,500	3
Other*					14,600	27
TOTAL	30,330	100	53,000	100	53,600	100

*In other departments. *Source:* Pachas 2011.

Small-scale and artisanal gold mining techniques in Peru vary according to the type of mine deposit. A primary deposit seam is mined via shafts. Miners dig narrow tunnels or chambers with explosives along the gold seam. Miners also collect the mineral from the slag heaps. To recover gold, the mineral is processed by rollers – this is rudimentary machinery for grinding the ore into fine sand – and treated with mercury or in cyanide treatment tanks to concentrate the gold particles (Torres 2007).

In alluvial, or ‘placer’ mining, gold is extracted from channels, lakes or wells where fine gold particles have gathered at the bottom of the water body and formed a mineral deposit. In Madre de Dios, different techniques are used: some are artisanal techniques, like mills, channels, and sweepers; some are semi-mechanized techniques, like water suction, solid suction, rafts, front-loading chutes and lance-style sweepers; and some are fully mechanized techniques, including 16" diameter or more suction sweepers (Mosquera et al. 2009). The gold is recovered by adding mercury to the process, which binds the gold particles and forms an amalgam. This amalgam is burned at the

mining site spot and in commercial stores in town to separate the gold from the mercury.

In the mining areas and the micro-watersheds where the artisanal mining takes place, there is a high risk of environmental pollution by sediments and solid waste in the rivers and the unsuitable use and handling of waste and chemicals like cyanide and mercury (see table 6).

Figure 3. *Caranchera* mining in the river Madre de Dios, Peru, August 2012



Photograph taken by L. Cremers.

Figure 4. Mining using raft in Fortuna 1, Madre de Dios, Peru, August 2012



Photograph taken by L. Cremers.

Table 5. Small-scale and artisanal gold mining techniques in Peru

Andes: Puno	Amazon: Madre de Dios
<p><u>Sluice box:</u> involves demolishing gold terraces using rods; the ore is subsequently washed with water and poured along a sluice box, for the gold to settle at the bottom of the sluice box. The auriferous sand which remains at the bottom is collected each week, every two weeks or each month and is amalgamated with mercury.</p> <p><u>Lake:</u> underground tanks and pillars are drilled manually. Explosives are used to blow up the auriferous material and this is then placed in sluice boxes lined with stones and sluiced down with large amounts of water (stored in the lakes), moving and washing it. The gold falls to the bottom of the sluice box, the sand is removed and the ore goes into amalgamation.</p> <p><u>River-bed well:</u> this involves sinking wells in the beds of rivers, which have gold ore deposits that accumulate when the rivers are higher. The ore is recovered with shovels and taken in wheelbarrows to the sluice-box for washing.</p> <p><u>Pallaqueo:</u> recovery of mineral rock from rubble in underground mining.</p>	<p><u>Ore mill:</u> this is a method used in the rivers and gullies throughout the year. Miners use picks and shovels to move the auriferous material to a hand-built channel where it is carried by running water to a gold recovery sluice box.</p> <p><u>Sluice box:</u> this method is used along the rivers and in the dry season. Miners use shovels and wheelbarrows to heap the auriferous gravel onto a hopper on top of a recovery sluice box. The gravel is washed with plenty of water, with a 5 hp electric pump or by hand with a bucket.</p> <p><u>Sweeping:</u> Involves installing a pump (8 - 20 hp) to pump pressured water against the slope of the river bank or gully side, gradually eroding it. The resulting slurry is treated to extract the auriferous sands.</p> <p><u>Caranchera:</u> A diver takes a suction hose and vacuums up auriferous material from below the surface of the river using 4" to 8" diameter pumps.</p> <p><u>Chupadera:</u> Used on dry land but near water sources. Stable soil is swept away with spurts of water, and the material that remains under the water is vacuumed up with a suction pump. The gold is recovered from the soil with a sieve and hopper.</p> <p><u>Raft:</u> This is a mobile unit for extracting material from rivers or from riverside shores. The raft has a platform for carrying a suction pump and a sieve and hopper are put at the end of the hose. A mat is spread on top of that to catch the sand holding the gold.</p>

There is little information about the precise impact on the public health of the population in Peru, but several studies have indicated the severe effects of mercury pollution from small-scale mining. In Madre de Dios, the risk of pollution in the trophic chain as the result of the uncontrolled and inadequate handling of mercury is high. Studies show that mercury levels found in fish are above the maximum levels recommended by the WHO (500 µg Hg/kg) (Ministry of Environment 2011: 46). Therefore, the artisanal miners, as well as the local population, are exposed to dangerous levels of mercury contamination.

There is also a high incidence of deforestation because of mining in Madre de Dios. This has a severe impact on the environment, since deforestation in these parts is an almost irreversible process. Once the trees and the top soil have been removed, the area becomes desert-like and it becomes very difficult to regenerate the vegetation. Erosion occurs, causing run-off of suspended solids in the rivers and more chance of flash-floods downstream. In Madre de Dios, already at least 18,000 has. of forest have been destroyed (Ministry of Environment 2011: 66). The use of mercury, the deforestation and the change in soil use, as well as the creation of unplanned mining populations with no basic services are all environmental problems that need to be addressed with urgency.

The legal context of small-scale and artisanal mining in Peru

In the past, from the mid-1970s onwards, the Ministry of Energy and Mines has been supporting alluvial gold mining, also in Madre de Dios, through the Mining Bank (Banco Minero 1979-1992), the Small and Artisanal Mining Program (MAPEM: 1996-2000) and the Small-scale Mining Program (PEMIN 2000-2004). After this period, the government has taken a number of rather disconnected steps to address artisanal mining (Trillo and Pasco-Font 1994).

A number of legal documents are currently in place that deal specifically with small-scale and artisanal mining:

- a) The Small-scale Mining and Artisanal Mining Formalization and Promotion Act (Law 27651):

Mining is governed by the General Mining Law (D.S. N° 014-92-EM) issued in 1992. The Law contemplates small-scale mining, but had no definition or category for artisanal miners until 2002, when Law 27651 and its regulations recognized artisanal mining and incorporated it into the General Mining Act.⁴

The law defines artisanal miners as follows:

- Individuals or groups who privately or as a legally established entity work for their living in mining and/or benefit directly from minerals, manually or using rudimentary equipment.
- Owning up to 1,000 hectares, including mining claims, petitions and concessions; or having signed contracts with the mine owners.
- With an installed production capacity of 25 MT/day, and gold placer gravel producers with a capacity of up to 200 m³/day.

Table 6. Mining techniques and impact on the environment and public health

Region		Type of deposit	Use of reactive
Type	Name		
Andes	La Libertad	Primary (seam)	Cyanide and mercury
	Puno	Seam and alluvial	Cyanide and mercury
	South central (Arequipa, Ayacucho and Ica)	Seam	Cyanide and mercury
Amazon	Madre de Dios	Secondary (alluvial)	Mercury
Coast	Lima (Canta)	Seam	Cyanide and mercury

(*) In arid areas where there are no rivers nearby. Drafted by CooperAcción.

It stipulates the steps to be taken to become a formal artisanal miner: obtain a tax number (RUC), obtain a mining concession or a mining contract with the concession owner and an artisanal miner certificate (MINEM 2007). It also establishes obligations for artisanal miners regarding the environment: a) the Environmental Impact Declaration (DIA) for projects which have little effect on the environment and a semi-detailed Environment Impact Study (EIA) for projects which have a moderately negative impact; b) Environmental Management Plans throughout the activity and c) Closure Plans. The Regional Energy and Mines Offices (DREM) in all Peru's departments are responsible for environmental supervision and monitoring.

So far, its results have not been encouraging. Until April 2011, the Mining Department had only formalized 3,065 people as artisanal miners (metal and non-metal) and 3,906 as small-scale miners (metal and non-metal). In Madre de Dios, in April 2012, only 5 percent of a total 3,000 requests for formalization had been attended.⁵

b) The National Plan for Formalizing Small-scale and Artisanal Mining:

In March 2011, the Ministry of Energy and Mines published Supreme Decree N° 013-2011 approving the National Plan for the Formalization of Artisanal Mining (PNFMA). It is a management tool, approved nine years after Law 27651 was enacted (Pachas 2011b)

The aim of the PNFMA is to formalize artisanal mining country-wide with legal, environmental, technical and organizational management tools. It has a two-fold strategy: (a) to formalize this kind of mining and (b) to promote sustainable artisanal mining. The plan is ambitious: its aim is for all artisanal mining to be formal by 2016.

In reality, informal artisanal mining in Peru is far more complex than the description in the PNFMA. It is not just the product of a major seasonal population shift of miners, it is also an activity of

Table 6. (continued)

Environmental impact			Impact on public health
Deforestation	River pollution (sediment and solid waste)	Chemical pollution of water and soil	
Very low	High	High	Yes
Very low	High	High	Yes
Very low	No(*)	High	Yes
High	High	High	Yes
Very low	Medium	High	Yes

farmers and native communities on their own land. As a result, it may be assumed that turning this activity into formal mining will be a complex process and one which will not simply involve granting concession titles. In Madre de Dios, the expansion of gold mining has made it one of the most common activities in the region and one of the main activities of some indigenous communities as well (Gray 1986). PNFMA is a positive step and one which implicitly contributes to arranging roles and functions and inter-agency relations of those directly involved in Peru's small-scale and artisanal mining. However, it must be acknowledged that the issues around mining cannot be reduced to formalization, and that the mining activity must be understood as a process of interaction between social and economic, environmental, labour, organization and also cultural aspects that should all be given due attention.

Social and environmental conflicts in the Madre de Dios Region

In Madre de Dios, mining has been present for decades and remained informal for many years. Between 1973 and 1978, the *Banco Minero* established a form of contract with the small-scale miners in the area. However, with the cancellation in 1978 of Decree Law N° 22178 that granted special rights to miners with a contract with the *Banco Minero*, mining was practically left as an informal activity. Even in the 1990s, when small-scale and artisanal mining grew, creating changes and unrest in the area with the native communities, no legal or administrative measures were taken. In the end, the question was addressed by the Government by suspending mining in various areas of the department (Pachas 2011b: 115-117).

In 1990, the Natural Reserve Tambopata was created and implemented to protect an area of high biodiversity south of the Madre de Dios river in the Tambopata province. It includes a so called 'buffer zone', which was created to diminish the influence of human activities on the actual Reserve's ecosystem within its boundaries. In this

buffer zone, in the Malinowski River basin, immigrants were already mining riverbanks, river bottom and related jungle bush strips before the park was officially declared. These traditional miner families and associations like APAYLOM, AMATAF, Munuani and Kotshimba were never told to leave the area nor the buffer zone. This changed drastically with the gold rush of the recent years. In February 2010, the Ministry of Environment issued Emergency Decree No. 012-2010 to prioritize the formalization of the small-scale and artisanal miners in Madre de Dios in order to stop destruction of the rainforest. The Decree contemplates mining zoning, exclusion areas and technical support. Since early 2011, the Ministry is also running a regional Government Support Program (APOGORE).

In order to accelerate the process, in the second half of 2011 several military and police interventions were realized to repress illegal small-scale and artisanal gold mining in the area. This included violent measures, such as the bombing of several small mining operation in the Malinowski river. Afterwards and after strong reactions and protests from different miners federations and associations, the Government declared new plans (Pachas 2012). These entail the organization and concentration of mining activities in Madre de Dios in a so called special mining strip or *corredor minero* and formalize mining activities, in April 2012 the Ministry of Energy and Mines formulated and published new Decrees, the ‘Decretos Legislativos’ DL 1100 about the intervention and annulation of illegal mining and the DL 1105, which delegate and support the Regional Governments in the formalization of small-scale mining.

But despite these measures, in practice the sector remains chaotic and the challenge remains to build appropriate mechanisms and policies to address and solve the range of social, environmental and cultural problems involved in small-scale and artisanal gold mining in Madre de Dios. An important aspect to be addressed here is the people’s distrust to governmental measures, promises and actions, based on bad experiences from the past.

It is important to note the diversity of actors, next to the miners in the area, involved in the conflict. Besides, not all the miners organizations are the same, and follow the same strategies. The large federations, like FEDEMIN, have more influence and negotiate through their own channels with the national or regional government. Their viewpoints may contradict with other smaller miners associations. There are also agrarian federations, who express their concern and protest against the on-going miner’s invasion. Sometimes however, their members can also be part of these mining activities as a part-time activity. The environmental NGOs present in the area are in favor of preserving the forest and are not well seen by the miner’s organizations.

Another factor that adds to the unrest is the overlap between different kinds of land use and the invasion by incoming miners who open up new mining areas in the forest, invading areas that were formerly used for agricultural purposes for example. In some occasions, landowners formerly involved in agricultural or forestry activities turn to small-scale and artisanal gold mining in their territories, by working the terrain themselves or renting it to others to mine it. This completely transforms the management and control of the territory and its natural resources, with often detrimental effects for the water resources, river creeks, rivers and the small river basin itself. The same process occurs with the territory of native communities, who are victim but also sometimes active actor and part of these changes in land use and mining invasions.

The environmental conflict is a hot topic, always present in the mass media and official governmental discourses, who spread their rather one-sided vision of small-scale and artisanal mining as being a devastating activity, executed by violent immigrant miners, who lack respect towards their environment and the authorities, and live in chaotic social patterns. What is often forgotten is that the current activities are based on a historic process of extractive exploitation in the region that started at the beginning of the 1900s with the extraction of timber, rubber, nuts (*castaña*), later oil, and now gold and probably also soon bio-fuel plantations. This has always affected the jungle and caused the exclusion, dispossession and diminishing of its native communities and Amazon cultures, benefitting the colonists or capital groups involved in these activities. Based on these former experiences, alternative development strategies for the region are proposed, such as payment for ecosystem services, tourism, small-scale agroforestry systems, but also controlled and sustainable small-scale and artisanal gold mining. Before these alternatives offer room for the local population and the growing Andean migrants to “live well” in the area, a lot still has to change.

The situation of Madre de Dios fits well within the wider national context. According to the regular reports issued by the Ombudsman,⁶ civil unrest is most often caused by environmental problems, including mining and hydrocarbon extraction. In 2005, these activities made up 15 percent of the total amount of registered social unrest in the country and six years later they represent over 54.4 percent of all the reported social-environmental conflicts. In a recent report, the Ombudsman stated that out of 217 cases of civil unrest, most socio-environmental conflicts occurred in the departments of Puno (10) and Cajamarca (14).⁷ It is worth mentioning that the number of a department’s social and environmental conflicts roughly matches its position on the Poverty Map. This is true for Puno and Cajamarca, where poverty rates are 56 percent and 49.1 percent respectively.

Concluding Remarks

In Peru and in Madre de Dios specifically, small-scale and artisanal gold mining are expanding in terms of territory and population. The sustained rise of the gold price, poverty and the fact that gold is present in many of Peru's regions, are reasons that explain the 'boom'. Although the gold sector in Peru is led by formal, medium and large-scale gold mining operations, which produce most of the gold in the country (85 percent), in terms of people working in the sector, small-scale and artisanal mining are more important than large-scale mining. Until today, Madre de Dios is still the region with the highest number of people working in gold mining.

In the previous decade, the Peruvian government issued more policies to encourage international mining companies, and related national companies and capital groups, to invest in different types of large-scale mine exploitations in the country. The general idea was and continues to be that each environmental and social problem with large-scale mining can be paid off and compensated, but in practice many conflicts occur. At the same time, local groups and governments lack capacities, funds and vision to refute the presence of large-scale mines, as they needed the extra incomes and gifts of the companies. This enables more company influence, manipulation and corruption, often accompanied by biased mass media propaganda, claiming that modern large-scale mining is the only way towards development.

At the same time, the Peruvian government is promoting initiatives for formalizing small-scale miners, but in a rather disconnected and non-consistent way. Initiatives concern the Law for the Formalization and Promotion of Small-scale mining and Artisanal Mining from 2002 and the recently approved National Plan for Formalizing Artisanal Mining (2011). However, these initiatives have not resulted in major changes in the sector, since only a very small part of the mining population has been formalized up till now and social and environmental problems continue to exist. Recent developments have shown an increase in conflict, also in the Madre de Dios region. It shows a lack of good State governance and that real peoples consultation and dialogue is still far away.

There is also a clear connection between extractive developments and the degree of unrest in the country. In the case of medium and large-scale extraction this connection is well documented. In the case of small-scale mining however, it is hardly visible and barely studied. We will therefore continue our effort to study this complex but important topic.

Notes

- ¹ Law N° 27651 “Formalization and Promotion of Small and Artisanal Mining”.
- ² Systematized information from Villachica et al. (1995) and Kuramoto (2001 and 2003).
- ³ Information from the register of regional and national miners organizations and specialized bibliographic information.
- ⁴ Supreme Decree N° 013-2002, passed April 21, 2002.
- ⁵ testimony of small-scale miners in a GOMIAM meeting in Puerto Maldonado, August 23, 2012.
- ⁶ The Ombudsman is an autonomous agency, commissioned to protect the constitutional and fundamental rights of individuals and the community and see that the public administration fulfills its obligations and provides the public with services.
- ⁷ Monthly Civil Unrest Report No. 88, Ombudsman, 2011.

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