



CASE STUDY: Illicit Gold Mining in Peru

OVERVIEW

This case study presents the key findings of research conducted between June and August 2016 into the impacts of illicit gold mining in the Madre de Dios region in Peru, focussing on how communities can be supported in effecting a shift from informal mining structures to formal, specifically agricultural, activities. The study scrutinises the Agrobosque project, a cooperative which provides technical and financial support to its members, many ex or current gold miners, in growing cocoa and drives initiatives targeting the detrimental social impacts of mining. This reveals the key drivers incentivising the transition from informal to formal structures, and the main obstacles hindering this transition. Interviews with national and regional politicians shaping agricultural and mining policy, and the third sector working in this field, contextualise Agrobosque's work, yielding a set of programmatic recommendations to strengthen the current response, together with key changes necessary to national and regional policy.



Context and problem statement

Outline of the illicit gold mining industry in Peru and the communities affected by it.



Agriculture, and specifically cocoa production, as a viable alternative to illicit gold mining in the Madre de Dios region

Overview of the cocoa market and State and third party initiatives.



The Terre des Hommes Suisse (TdHS) project addressing the problem statement and other initiatives in place

Analysis of Agrobosque Project, incentives for communities to shift from informal to formal structures (particularly agricultural) and the challenges facing this transition.



Programmatic responses and targeted recommendations

Priorities for strengthening the current response and key recommendations for national and regional policies.



Acknowledgments

This report was written by Lucia Bird and Nils Krauer for the Global Initiative against Transnational Organized Crime.

Lucia and Nils would like to thank Tuesday Reitano, Global Initiative Deputy Director for her direction, and Livia Wagner for her insight and guidance in preparing the field research, reviewing and editing the case study.

The Global Initiative wishes to acknowledge the considerable assistance of Terre des Hommes Suisse for their generous cooperation and sharing their expertise, especially on the AgroBosque project in Madre de Dios, Peru. Further thanks goes to the OECD, who supported the Global Initiative with valuable inputs for starting a compendium of case studies, of which this is the first one.

The Global Initiative would also like to thank all of the experts and community members who generously shared their experience and valuable insight and all those who fight for the protection of human and labour rights and the environment.



Photographs by Nils Krauer.

© 2017 Global Initiative against Transnational Organized Crime. All rights reserved.

No part of this publication may be reproduced or transmitted in any form or by any means without permission in writing from the Global Initiative. Please direct inquiries to:

The Global Initiative against Transnational Organized Crime
WMO Building, 2nd Floor
7bis, Avenue de la Paix
CH-1211 Geneva 1
Switzerland

www.GloballInitiative.net



Executive Summary

Organised crime flourishes in the informal space - communities reliant on the informal sector are therefore vulnerable to entrapment by organised crime networks and are most affected by the violence it engenders. This case study is the first in a series analysing how the support of alternative formal livelihoods can empower communities reliant on the informal sector to participate in the formal economy, and protect them from the organised crime which pervades the informal. This launches a toolbox developed by the Global Initiative against Transnational Organized Crime which provides a framework for analysing the success of programmatic strategies for combatting the informal sector more broadly, thereby shaping and streamlining approaches in this area.

Across developing countries, the informal sector forms a significant proportion of GDP, often over 50 per cent. As at 2012, the latest point that figures were released, Peru's informal sector hovered at just under 70 per cent¹ of GDP. Although it is believed this has shrunk in the last five years, it remains a key source of income for a significant proportion of the population.

Illicit gold mining is prevalent across all the states in Peru. It causes severe environmental damage through uncontrolled mercury use, illegal deforestation and engenders poor working conditions and high levels of violence among those involved, including human trafficking for labour and sexual exploitation, extortion and vigilante justice amongst others. In the Madre de Dios region, the geographic focus of this cases study, 100 per cent of gold mining falls outside the purview of the law,² and the vast majority of the population draw the bulk of their livelihood from the illicit gold mining sector, either directly (working as miners) or indirectly (working in one of the many supporting roles, such as drivers, security, mechanics, food provider, bartenders, sex worker etc.).

1 Peru21, INEI: El 74.3% de peruanos trabaja de manera informal, 4. June 2014. <https://peru21.pe/economia/inei-74-3-peruanos-manera-informal-161989>

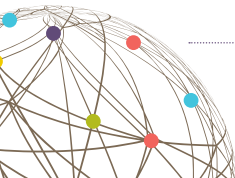
2 At the finalisation of this case study no miners had concluded the formalisation process in the region of Madre de Dios.



The Agrobosque Agricultural Co-operative of Fine Cocoa, supported by Terre des Homme Suisse since 2013, encourages its members to cultivate cocoa as part of a diverse crop yield. Just under 50 per cent of Agrobosque members have previously been, or continue to be, involved in the illicit gold mining industry.

This report presents the key findings of research conducted between June and August 2016 on the Agrobosque project and the Peruvian informal gold mining sector more broadly. The research methodology constituted a broad selection of long semi-structured interviews with relevant players in three key sectors in shaping the Peruvian response to the informal gold mining economy. Namely politicians and other state actors, at both a national and regional level, involved in the development of a policy on mining, agriculture and responses to the informal (this includes members of the military directly involved in the response to the regional illicit gold mining sector). Secondly leaders of NGOs and third sector organisations, both state and independently funded, seeking to target a range of the negative impacts illicit gold mining. Most importantly, the Agrobosque project co-ordinators on the ground in Peru and the members of the co-operative, both those continuing to be involved in mining and those who had either never been involved or who had renounced since joining the co-operative. This was supplemented by an extensive review of the body of literature on the informal gold mining sector globally, and specifically in Peru.

In order to analyse the effectiveness of Agrobosque in positing agriculture and especially cocoa cultivation as a viable alternative livelihood to illicit gold mining, this case study reviews the impact of the project against its strategic objectives. By interviewing a number of third sector actors in this area, and reviewing the effectiveness of such projects, this report draws comparisons with different strategies in place. In doing so it identifies key strategic findings that can inform future approaches to combatting the informal sector, and the organised crime that proliferates, across a range of disparate contexts.



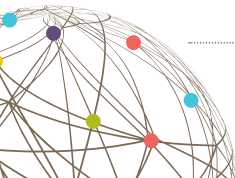
Contents

- 1. Context and problem statement 1**
 - 1.1 Illicit Gold Mining in Peru 2
 - 1.2 Communities affected by the Peruvian illicit gold industry..... 3
 - 1.3 Illicit Gold Mining in the Madre de Dios Region 3

- 2. Agriculture, and specifically cocoa production, as a viable alternative to illicit mining in the Madre de Dios region 5**
 - 2.1 Overview of the Cocoa Market 5
 - 2.2 Overview of State and third party initiatives..... 6

- 3. Analysis of the Terre des Hommes Suisse (TdHS) project addressing the problem statement and other initiatives in place 7**
 - 3.1 Overview of Agrobosque Project 7
 - 3.2 Key incentives for communities to shift from informal/illegal to formal structures, specifically from illegal gold mining to agricultural activities 9
 - 3.3 Main challenges and barriers in the transition from the informal sector to the formal sector, and support provided by Agrobosque to address such barriers..... 9

- 4. Programmatic responses and targeted recommendations..... 12**
 - 4.1 Priorities for strengthening the current response 12
 - 4.2 What other policies at national or regional level could be necessary? 14
 - 4.3 Possibilities for replication in other contexts? What prerequisites would need to be in place..... 15





1. Context and problem statement

Organized crime, in its many and varied forms, has been shown to threaten political, economic and social development: it can foster violence and corruption, undermine the rule of law, good governance and the democratic process; it can jeopardise economic growth and poverty reduction, and pose significant risks to public health and environmental sustainability.³

Development interventions, although often not directly targeted at organised crime itself, typically require working in environments where criminality forms a prevalent feature of the contextual landscape.

The focus of this pilot case study is how to shift from the criminal exploitation of the gold sector in the Madre de Dios Region in Peru to formal economic structures and the necessary responses to counter this criminal exploitation and provide a sustainable livelihood for these vulnerable communities. Therefore, it is extremely important to distinguish between traditional, artisanal miners who may work without a license, and miners doing illegal activities connected with organized crime and human traffickers.

By failing to make a distinction, the government and other involved actors wrongly criminalize informal miners and eliminate the livelihood of highly vulnerable populations.

Hundreds of thousands across Latin America earn their livelihood as artisanal and small-scale gold miners. **Artisanal and small-scale mining (ASM)** is a mechanism of poverty alleviation in developing countries; the great majority of workers in Madre de Dios work informally, which does not imply they are criminals, but it leaves them very vulnerable to labour exploitation and human trafficking by organized crime. Informal mining is conducted by miners who operate on a small-scale and have begun the process of formalisation but have not yet been able to meet all legal requirements.

³ Global Initiative Against Transnational Organized Crime (2016): Development Responses to Organised Crime: An Analysis and Framework Programme. <http://globalinitiative.net/wp-content/uploads/2016/04/Global-Initiative-Assessment-and-Programmign-Tool-for-Organized-Crime-and-Development-April-2016.pdf>



Illegal mining is carried out in blatant violation of the law and presents a gambit of problems that are difficult for states to combat, including severe environmental damage, lack of good governance in certain regions, social strife, violent conflicts and links to organised crime, and the loss of human life. In addition, illegal mining is often linked to the corruption of government officials, human trafficking, money laundering, and contraband, among other problems. Illegal mines which operate in protected areas and/or fail to comply with environmental, tax and labour law, or which use forbidden machinery, can be classified as illegal mines.

The Peruvian tax authority SUNAT estimates that 35 tons of contraband gold worth over USD 1 billion were shipped via Lima to the USA and Switzerland between February and October of 2014.

The human and environmental cost of the expansion of illegal mining is vast, as the following examples illustrate:

- The Carnegie Amazon Mercury Project found that more than 30 tons of mercury are dumped in rivers and lakes in the Amazon region every year, generating levels as high as 34 times the safe limit for women of childbearing age, whose unborn children could suffer from permanent brain damage from the mercury.
- Women and young girls from impoverished regions from all over Peru, as young as 12 years old, are recruited through false job offers and trafficked to mining areas, such as La Pampa and Delta 1 (both in the Province of Madre de Dios) and La Rinconada (in the Province of Puno) to work in brothels. It has been calculated that there are approximately 2,000 sex workers employed in the illegal gold mining town of Delta 1 alone, of whom 60% are minors.⁴ Peruvian police estimated that in La Rinconada there are more than 4,500 Peruvian and Bolivian girls trafficked for sexual exploitation to work in bars frequented by miners.
- Increased criminalization in the illegal mining area of La Pampa: extortion and violence against mining community by organized criminal groups.
- The National Ombudsman La Defensoría del Pueblo estimates that in the region, 50,000 to 70,000 illegal miners are active and that the illicit activity is expanding at an annual rate of 6,145 hectares per year.



1.1 Illicit Gold Mining in Peru

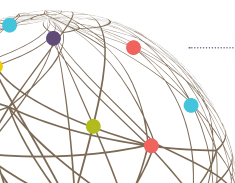
In December 2014, La Defensoría del Pueblo reported that there was informal and illegal mining in all of the 26 provinces of Peru, directly employing 100,000 workers. Other reports suggest that in addition to these 100,000 people, informal/illegal mining indirectly employed another 500,000 people.⁵

Rocketing drug use amongst miners has tightened the relationship between illicit mining and drug production, and provided a market for domestic cocaine producers. Some miners reported that lately there has been coca cultivation in some regions of Madre de Dios. The transport and sale of cocaine into Madre de Dios is controlled by groups separate to the mining community, largely from the northern cocaine-growing regions.

In 2012 Peru passed a legislative package seeking to regulate mining further, simplify the formalisation process and distinguish between artisanal and small-scale mining. Within these reforms, Legislative Decree 1106 introduced illegal mining into the definition of organized crime. Substantial lobbying from powerful groups related to illegal mining quickly spawned a new law in 2013, which excluded illegal mining. Under the current government there are efforts to further adapt the formalisation process.

4 Global Initiative Against Transnational Organized Crime (2016): Organized Crime and Illegally Mined Gold in Latin America. <http://globalinitiative.net/wp-content/uploads/2016/03/TGIATOC-OC-and-Illegally-Mined-Gold-in-Latin-America-Report-1718-digital.pdf>

5 Defensoría del Pueblo (2014): Balance de la gestión estatal frente a la minería informal e ilegal en el Perú. 2012 - 2014 Supervisión a las entidades de alcance nacional y regional. Informe No 167. <http://www.defensoria.gob.pe/modules/Downloads/informes/defensoriales/Informe-Defensorial-N-167-2.pdf>



1.2 Communities affected by the Peruvian illicit gold industry

As illicit mines operate outside formal legal structures, workers are more vulnerable to labour exploitation, either through poor working conditions, forced labour or human trafficking. Many workers on illegal mines fail to save any of their earnings, spending them on supplies within the mining camps which are sold at inflated prices, alcohol and sex workers. Workers sell the gold to local intermediaries at prices far below those of the open market.⁶ Consequently self-employed small scale miners may become victims to cycles of indebtedness, forced to borrow from middlemen in order to fund purchase of basic supplies.

In some cases young women and girls, particularly from rural and impoverished regions, are lured into sexual exploitation in mining sites by false promises regarding their job situation and wages. In Puerto Maldonado, a key mining supply hub and gold purchase town, stickers of the “do not be deceived” campaign launched in 2016 by Terre des Hommes Suisse (which seeks to ensure girls are not tricked into sexual exploitation), sit alongside job advertisements for barmaids in the illegal mining region. However, while some barmaids may have been tricked, many are aware of the ramifications of these roles but lack viable alternatives.

1.3 Illicit Gold Mining in the Madre de Dios Region

Due to a formalisation process not adapted to alluvial mining typical to Madre de Dios, all gold produced in the region is extracted illegally or through informal structures. In Madre de Dios, the majority of the population rely, directly or indirectly, on the mining sector.

The construction of the interoceanic road, inaugurated in 2011, facilitated both trade and access to previously isolated communities, and the transportation of key machinery and supplies to illicit mines. The rising price of gold, driven higher by the global financial crisis, further inflated the profits of illicit gold mining. The depletion of gold reserves in many areas where mining was permitted (the official mining corridor) due to heavy mining has driven activities further into national reserve buffer zones and, since 2016, into protected national reserves themselves, where daily extraction rates are estimated to be over ten times those of the official mining corridor.⁷

The Peruvian Ministry for Environment believes 16 to 18 tons of gold are extracted annually from Madre de Dios. Unofficial estimates are significantly higher. The ministry estimates, and conversations with local ex-miners support, that 50,000 to 70,000 illegal/informal miners are active in the region.⁸ Typically illegal miners in Madre de Dios are from other impoverished provinces (more than 80%) of Peru, driven into the informal sector by a lack of legal opportunities. As illegal mines operate outside of the purview of the state, their gold output typically falls outside international gold production calculations, so their scale may be greatly underestimated.

Formalisation

The Peruvian government, originally through the Miners Bank, sanctioned and incentivised mining in the Madre de Dios region, granting mining concessions over existing land rights and in areas currently classed national reserves. The current formalisation process does not allow the alluvial artisanal gold mining form, the only form of gold mining in Madre de Dios, resulting in the current situation that no alluvial gold miners can undergo the formalisation process in the region.

Case study interviewees working in the informal mining sector expressed a desire to formalise. The last High Commissioner for Mining Formalisation⁹, Colonel Sierra, described the formalisation process as “*not difficult*”. However,

6 At the time of this case study (July 2016) the price payable by regional intermediaries was circa USD37.70 per gram and USD43.70 per gram on the international market.

7 Monitoring of the Andean Amazon Project (MAAP), MAAP #60: La minería aurífera se incrementa en la zona de amortiguamiento de la Reserva Nacional Tambopata, 24 May 2017. http://maaproject.org/2017/maap60_tambopata_z/

8 Global Initiative Against Transnational Organized Crime (2016): Organized Crime and Illegally Mined Gold in Latin America. <http://globalinitiative.net/wp-content/uploads/2016/03/TGIATOC-OC-and-Illegally-Mined-Gold-in-Latin-America-Report-1718-digital.pdf>

9 ACAFMIRA. Under the new government under Pedro Pablo Kuczynski, this function of ACAFMIRA was suspended and the lawyer Máximo Gallo Quintanilla has been designated as Director General of the General Direction of Mining Formalization department of the Ministry of Energy and Mines.



the legal criteria for formalisation are ill-adapted to regional mining techniques, and the numerous state and regional entities involved lack co-ordination. This, together with the prevalence of overlapping land and mining rights, and high formalisation costs (*approximately USD 130,000 per Artisanal and Small Scale Mining Organisation*¹⁰) in a sector characterised by a chronic lack of capital, has made formalisation an impenetrable barrier for Madre de Dios miners, and for most artisanal miners across Peru. Indeed, by May 2017 only 280¹¹ 'mining entities' across Peru, had completed the formalisation process. Frustration with formalisation amongst local miners has pushed many previously attempting to attain formal status further into illegality as they ceased seeking compliance with costly legal requirements. The barriers to formalisation, together with the Peruvian Government's critiqued decision to target interdictions at both illegal and informal mines, have blurred the lines between informal and illegal mining, increasing involvement in the latter.

State response

At the time of the development of the pilot case study, the State conducted regular interdictions on illegal and informal mines in Madre de Dios. Endemic corruption ensures illegal miners are alerted of such interdictions, limiting their impact.

A number of regional public figures, international organisations and local miners suggest that the State has sufficient resources to eradicate illegal mining in the national park and buffer zone (La Pampa) by regulating access and blocking transport of key goods (including fuel and food) along the 10 access roads that lead to La Pampa between Km80 and Km120 of the interoceanic road. Many cite a lack of political desire to eradicate illegal mining, rather than an ability to do so, as the key barrier.

Persons interviewed cited a number of factors to support this belief, predominantly that President Humala's (the outgoing president) campaign was partly funded by donations from the Madre de Dios mining community, and that the Madre de Dios Regional Governor, Luis Otsuka, is a miner and former leader of the regional artisanal miner's association (FEDEMIN).

Under the former government of Humala, there was a significant disjunct between Otsuka and the State - State and regional representatives of the Ministry for the Environment say Otsuka is unconcerned by the destruction of the Amazon, and regional NGOs report that Otsuka has cut dialogues, forcing them to work independently of the state.

Otsuka led a regional protest in November 2015 demanding repeal of Decree 013-2015 which aimed to "cut the veins of mining", in the words of Colonel Sierra, by imposing daily gasoline allowances on unregistered businesses. Local farmers reported that the decree significantly impacted agriculture, while local miners stated the limits had only increased bribes to policemen monitoring fuel transportation on the road to the mines.

The State has failed to develop a comprehensive and long-term strategy to effectively address not only illegal mining but the supply chain of illegal mining, including providers of mercury, the machinery for mining activities, gasoline, safe storage of gold, banking and financing services. Many hope the new Government, led by Pedro Kuczynski who came to power in July 2016, will herald positive change. Kuczynski's early moves as President, visiting Madre de Dios to establish a dialogue with informal ASM miners and pledging to establish a commission to seek solutions to the current situation, may support such hopes.¹²



10 El Comercio, Un minero artesanal requiere US\$135 mil para formalizarse, 11 May 2016. <http://elcomercio.pe/economia/peru/minero-artesanal-requiere-us-135-mil-formalizarse-216857>

11 Presentation 'Nueva estrategia del proceso de formalización minera integral' by Máximo Gallo Quintanilla, Director General of the General Direction of Mining Formalization

12 El Comercio, PPK buscará consensos con la minería informal, 8 August 2016. <http://elcomercio.pe/politica/gobierno/ppk-buscará-consensos-mineria-informal-noticia-1922672>





2. Agriculture, and specifically cocoa production, as a viable alternative to illicit mining in the Madre de Dios region

The key formal alternatives to the illicit mining industry in the region are tourism, forestry and agriculture. The State has not promoted tourism as a viable alternative, in fact the outgoing Government's symbolic declaration of a 60-day State of Emergency in June 2016 due to contamination concerns severely deflated tourist figures. Agriculture, which also suffered from the State of Emergency as many regional farmers struggled to find buyers for produce commonly depicted as contaminated, has become the flag-ship alternative.

2.1 Overview of the Cocoa Market

Cocoa demand far outstrips supply - key global chocolate manufacturers including Mars, Inc. predict a deficit of circa 1 million metric tons by 2020. As at 2016 the International Cocoa Organisation (ICCO) calculated that Latin America produced circa 18 per cent of the world's cocoa, and was the world's fastest growing regional producer, Peru is the world's ninth largest cocoa producer (producing only 1.6 per cent of global production), but the second largest producer of organic cocoa.

On average six per cent of the cocoa value chain is received by farmers, the vast majority of profits are retained by chocolate manufacturers. The average annual income of Peruvian cocoa farmers is circa USD1,900,¹³ far below the annual minimum wage of circa USD3,000.¹⁴ Consequently most cocoa farmers supplement their produce with other crops and alternative activities.

¹³ <http://www.technoserve.org/files/downloads/case-study-building-a-sustainable-and-competitive-cocoa-value-chain-in-peru.pdf>

¹⁴ Trading Economics, Central Reserve Bank of Peru, <http://www.tradingeconomics.com/peru/minimum-wages>



Although Madre de Dios has historically been dominated by extractive (chalk, wood and mining) rather than agricultural industries, cocoa cultivation is becoming increasingly prevalent.

2.2 Overview of State and third party initiatives

The below outlines certain key cocoa projects in Peru seeking to support agriculture as a viable alternative to informal/illegal mining whose representatives were interviewed for the purposes of this case study. It does not provide a comprehensive analysis of all existing projects, but focuses on those distinctive through impact or innovation. It is key to note that in addition to these there exist initiatives which are entirely run by local farmers, including Valle Dorado, an association in La Pampa resisting the encroachment of mining which has already commenced the production of drinking chocolate.

State

Agroideas and MINAM+CAF, launched by the Ministry of Agriculture in 2008 and the Ministry of the Environment in 2015 respectively, illustrate the short-termism inherent to many state initiatives. Consequently, the impact is limited and locals perceive there to be no state support for agriculture.

Agroideas reviews business plans submitted by agricultural associations and co-operatives against economic and environmental sustainability criteria, granting financial and technical support to those deemed feasible. Agroideas pre-approved 5 business plans in Madre de Dios. Following approval of plans the project had funds for under 50 per cent. of projects approved, and consequently funds have been frozen since 2014.

MINAM+CAF seeks to mitigate the negative impacts of the construction of the interoceanic road in three regions, including Madre de Dios. It offers funds and technical assistance to economically and environmentally sustainable initiatives through a competitive process. To date only two projects have been successfully completed. The regional Environment Minister suggests this is due to the low quality of submissions, and a lack of awareness amongst local initiatives that the project existed.

NGO

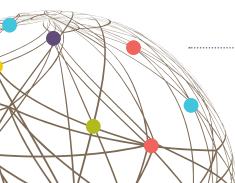
In addition to Terre des Hommes Suisse (see point 3), 2 initiatives can be highlighted:

REDD+ (Reducing Emissions from Deforestation and Degradation of Forests), launched by the Association for Research and Integral Development (AIDER) in 2010, is a USD12 million investment programme funded by private sector investors which seeks to support 1,100 farmers in sustainable cocoa production in the buffer zone of the Madre de Dios national reserves. Support, which includes funding for organic and fair trade certification, is conditional on farmers ceasing deforestation and returning a share of revenues to investors. The project seeks to create equal revenue streams from the sale of carbon credits and cocoa.

Caritas operates a multi-pronged approach in the region, providing support to a number of farmers as well as running orphanages and other social schemes. Caritas provides financial, technical and marketing support to farmers, predominantly regarding cocoa and copuasú (a Peruvian fruit) cultivation.¹⁵



¹⁵ The challenge of hybrid cocoa (CCN51 +), is that it depends on the international stock market and prices have fallen sharply to 1.50USD, whereas native aromatic cocoa is at 4.20USD





3. Analysis of the Terre des Hommes Suisse (TdHS) project addressing the problem statement and other initiatives in place

Terre des Hommes Suisse (TdHS) has been working in Madre de Dios and Cuzco for over 20 years, seeking to improve children's living conditions and to guarantee and promote their rights. In 2013 TdHS launched the global programme "Rights of Children in Mining Zones and rural integrated development", which supports local mining communities by promoting sustainable economic alternatives to mining and seeking to tackle a range of linked social problems, including wide-spread domestic violence.

3.1 Overview of Agrobosque Project

The Agrobosque Agricultural Co-operative of Fine Cocoa ("*Agrobosque*") is currently formed of 54 families (350 persons), of which 23 were, or continue to be, involved in the illicit gold mining sector. TdHS supported the creation of the Co-operative and began working formally with Agrobosque in 2013, aiming to diversify production in order to support vulnerable families in their efforts to shift to formal economic structures and in the prevention of the abuse of the rights of children, women and youths in the mining corridor between Laberinto and Mazuko. The cocoa has been targeted by the Co-operative as a quality product for exportation, the cocoa produced is 80% fine native aromatic cocoa, highly demanded on the international market.¹⁶

Agrobosque requires a fixed joining fee, attendance at monthly meetings, and an ongoing commitment to the cultivation of cocoa from members. In return Agrobosque provides members with technical assistance (through

¹⁶ Other cocoa production projects encourage the production of hybrid cocoa, half the price of the native aromatic cocoa on the international market and mainly sold on national marking.



workshops and home visits by agricultural engineers), supplies seeds and tools, and funds a rotating micro-loan facility which benefits 60 per cent of members at any one time. The co-operative also encourages organic farming techniques and promotes environmental awareness through regular workshops.

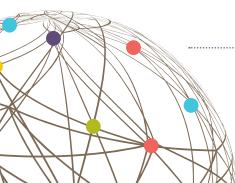
Agrobosque buys cocoa from its members and sells the aggregated produce, returning earnings to members. Currently Agrobosque sells to predominantly local buyers, however it is seeking to identify a number of international buyers in the luxury chocolate market in order to secure a higher price and steady demand. Agrobosque has, to date, planted 120 hectares and sold circa 900kg of cocoa at an average price of USD2.20 per kg. In 2017 the first cocoa exportation from Madre de Dios will be conducted to Switzerland through TdHS and Gebana at USD 4.20 per kg.

Through Agrobosque TdHS also promotes children's rights in local schools and conducts workshops to target domestic violence, endemic in areas where illicit gold mining is rife. By providing seeds and support for organic school vegetable gardens Agrobosque foments environmental awareness amongst children, supplementing the school breakfast provided by "Qali Warma", a state food security programme, with fresh fruit and vegetables. (not yet being implemented).

Agrobosque has participated in regional dialogue tables focussed on supporting agricultural activities and halting the advance of illicit mining activities. The regional government ceased participating in these following the election of Luis Otsuka as Regional Governor in 2015.

Don Alfredo (name changed) worked as a baker in Cusco before being hired by so called "contratistas" (recruitment intermediaries) to work in a mine in Madre de Dios for a three month fixed contract. Within 90 days, believing he was likely to die from the yellow fever he had contracted, he returned to Cusco vowing that he would never return. Within a month he was back. Having drunk liquid mercury from the mining process in order to cure "sadness of the heart" he worked in mining for eight years, spending his earnings on alcohol and other "vices". Seeking to combat alcoholism, and aware that he was failing to save money, he left mining and started to farm on a plot of land in Madre de Dios far from the mines. First he raised pigs, then turned to agriculture and finally, in the last four years, he joined Agrobosque and started growing cocoa together with banana and cocona, and has built a fish farm which now sustain him and his family. His children help on the farm and he hopes they will remain in agriculture rather than be tempted into mining.

Don Pedro (name changed) was a member of a coffee-co-operative in the region of Cusco after his cocaine plantation was destroyed by authorities. Seeking more land he moved to Madre de Dios in the early 2000s with his wife and five children. The family co-habited with informal miners working 100 metres from the farm for many years, noting the increasing contamination in the surrounding area and grateful it has not appeared to reach his plantation. Don Pedro implements organic agricultural techniques, using a selection cutting technique which negates the need for burning land to clear weeds, and slows re-growth. His daughter works as a cocaine farmer in the Cusco region while his four sons work as gold-miners in La Pampa, hoping to save enough money to leave. The oldest has worked in the mines for over eight years. None have so far earned enough to leave. Don Pedro expressed a hope that his children would turn to agriculture eventually.



3.2 Key incentives for communities to shift from informal/illegal to formal structures, specifically from illegal gold mining to agricultural activities

Longer-term secured income

Mining was perceived by interviewees as a finite activity which fails to provide secure income in the long term, in contrast to agriculture, and in particular cocoa which offers a 30 to 40-year yield

Although the income from mining is immediate, unlike in agriculture, most members previously involved in mining stated they had not been able to save earnings, which had tended to fluctuate significantly. Earnings were typically spent either on the “linked vices” of mining, such as alcohol, drugs and brothels, or in costs associated with mining, e.g. machinery, transport, fuel and police pay-offs. Earnings from agriculture were, despite market fluctuations, more guaranteed and allowed for greater long-term investment.

In the survey conducted, all those who admitted to working in illegal mining in the past stated that they had left mining due to a concern for the future – either in the form of long-term economic instability or in terms of environmental concerns.

Desire to minimise environmental impacts

A tangible growing concern amongst the community regarding the impact of the unregulated and illegal mining sector on the surrounding jungle and the fertility of the land had been part of the decision of some to move away from mining. Visible effects of mining, including contaminated rivers, were often cited as examples of the disastrous, and often perceived as irrevocable, effects of mining.

Avoiding social problems intrinsic to the informal sector

A number of members cited addiction and violence as two key push factors driving them from the informal/illegal mining sector to formalised agriculture. All those interviewed opined that alcohol, drugs, prostitution, health implications and linked (sometimes) organized violence and criminality, were synonymous with the illegal mining sector.

Greater access to market

Members recognised market access limitations inherent to the informal sector. However, often such limitations survived following the transition to agriculture: low volumes, a lack of transportation, and an ignorance of commercialisation, forced many farmers sell their produce to intermediaries, who depress prices to increase commission, or on a small scale to local restaurants and the mining industry. Although prices are elevated due to the mining sector, this inability to sell wholesale decreases profits and increases uncertainty. Many hoped the co-operation would grant them access to appropriate markets, contrasting the stability they perceived to accompany such access, which they hoped Agrobosque would provide, with unsteady informal income flows.

3.3 Main challenges and barriers in the transition from the informal sector to the formal sector, and support provided by Agrobosque to address such barriers

Immediate economic gains of mining

When judged by immediate earnings “*nothing competes with gold like nothing competes with cocaine*,” commented a regional State representative. An agricultural worker typically earns under a third of the wages he



would earn through illicit mining activities. Further, while mining yields immediate earnings agriculture has a delay in return of profit, further aggravated by cocoa which takes three years to yield a crop, and a further three to reach peak production.

Many members supplement farming prior to reaching peak production with mining in order to cover quotidian costs. One member had ceased mining activities shortly after joining the co-operative in 2014 but was intending to recommence in order to help finance her daughter's education. The continually changing number of approximately 30 per cent of Agrobosque members are still involved in the mining sector, either working as miners or in linked roles, such as providing transport. Given the commonplace reluctance to admit such involvement, the real proportion is likely higher. In addition, although the members themselves may not work in mining, it is likely a member of their family does.

Agrobosque targets the delay in return intrinsic to cocoa production by encouraging diversification. This is clearly visible on members' farms - most grow at least three crops in addition to the mandatory cocoa, usually comprising of a combination of banana, copuasu (a Peruvian fruit), cocona, citrus fruits, papaya and rice, both for own consumption and for sale. Most members who have been part of Agrobosque for over a year have, utilising micro-loans and the loan of machinery, invested in fish farms, which provides a steady source of income. Diversification is key to improving the food safety of the region and permits members to secure an income stream prior to the cultivation of cocoa, decreasing exposure to both crop diseases and significant market fluctuations.

However, the more lucrative Artisanal Small Mining (ASM) work (for example in agriculture, a daily wage is 50 PEN/15 USD and between 100 and 150 PEN/ 30 to 45 USD in ASM) leads to a lack of sufficient labour force for agricultural work.

Lack of technical expertise

The majority of those working in the informal sector lack skills and education. Thus unequipped to join the formal sector they turn to the informal, or find their transition to formality blocked by a skills gap. A number of members recalled that when they had sought to shift from mining to agriculture (prior to joining the co-operative), crops had failed due to incorrect planting and pruning techniques.

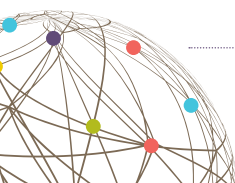
A significant proportion of Agrobosque members lack agricultural backgrounds, the majority had not grown cocoa previously, and most need to become familiarised with the cooperative's structures. The technical assistance provided by Agrobosque, through both group workshops and individual visits by agricultural engineers, was prized by members and key in facilitating the transition from informal to formal.

Lack of start-up capital

A lack of capital in the preliminary stages of agriculture pose a significant barrier to market entrants, and external loans carry interest rates of between 25 and 50 per cent. Agrobosque seeks to address this by providing micro-loans with a lower interest rate, seeds and other support to facilitate the economic investment critical in the first three years. Economic pressures remain problematic in the early stages of formality, forcing members to return to mining on a short term basis to fund investment into agriculture.

Continuing reliance on the informal market

The key market for farmers producing comestible crops in the region is the mining sector. Consequently, despite tensions between agriculture and mining, particularly regarding the escalation of violence and drug abuse, and contamination and deforestation, the relationship is symbiotic. This reliance will cease once the farmers are able



to rely predominantly on cocoa production with an access to national and/or international markets, which is the intention of the vast majority. Some expressed relief at the end of this symbiosis, largely because the mining sector is seen as a temporary market and therefore a threat to stability.

Unsecured access to stable market

Limited market access made members vulnerable to market fluctuation and saturation. Oversupply had deflated local prices of certain regional crops to levels where cost exceeded profit - bananas lost 80 per cent of their value from 2014 to 2015 and only began to recover in the second quarter of 2016. Members expressed concern that the cocoa market, which has become a prevalent regional crop in the past five years, would become similarly saturated.

A stable, diverse market, necessary to insulate members from market fluctuation and saturation, does not currently exist. As at July 2016 Agrobosque had not yet secured either national or international large-scale buyers, predominantly because such buyers demand significant volumes of produce prior to assuring purchase, which Agrobosque lacks. In late 2016 Agrobosque concluded negotiations with Gebana AG, a Swiss company specializing in facilitating access to market for smallholders, to export circa 1 ton of the cocoa production to Switzerland. In summer 2017 a Swiss chocolate manufacturer (Felchlin) was scheduled to start the processing of the cocoa variety and due to its high quality and the social commitment of Agrobosque, the cocoa farmers will receive almost double of the regular price (see above USD 2.20).¹⁷

However, the prevalence of mercury use in regional illicit mining poses an on-going contamination risk to crops, as well as having broader health consequences across the region. Members' cocoa has been tested on a regular basis by an independent laboratory in Lima and found to be negative for Mercury to date.

Positive results would render the produce unsellable. The perception of the region as contaminated, exacerbated by the State of Emergency called by the State across June and July 2016, could pose a significant obstacle to cocoa production and sale.

.....
17 www.gebana.com/agrobosque





4. Programmatic responses and targeted recommendations

Agrobosque was analysed against its goals: to empower vulnerable communities, and specifically ex miners, by supporting financially viable alternatives to illicit extractive activities and thereby mitigate the risk of such persons falling victim to illicit structures.

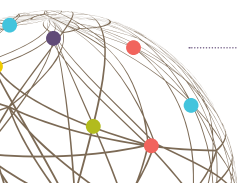
4.1 Priorities for strengthening the current response

Securing market access and offering value-add processes

In order to ensure the long-term viability of the project, it is key to implement a strategy regarding market access (in particular exports) and value add processes. Agrobosque is currently in the process of identifying and securing international purchasers, first seeking to target international organisations with a focus on sustainable produce or social enterprise. This may allow Agrobosque to bridge the gap before Agrobosque's production is sufficient to meet mainstream international buyers' volume requirements and build its brand globally.

Further technical assistance on exports is likely to be required, including training on logistics such as transport, packaging, control and standardization of quality; but also compliance with domestic and international regulatory requirements, and mitigation of financial risks, including cross-currency hedges and futures.

The construction of a cocoa processing plant in the region has been mooted as a key element of the value added process, allowing farmers to tap into the domestic tourism market. The costs of this are substantial, however it should be a long-term aim which could add significant value to members' cocoa gains. Furthermore, it would allow for a diversification of purchasers, targeting both national and international markets.



Agrobosque has now built a fermentation and drying plant (funded by TdH Suisse and MINAM-CAF), and will be equipped by the end of 2017 with a cocoa processing plant, funded by the Swiss Embassy in Peru.

Certification presents a key challenge to Agrobosque given the environmental concerns in the region, the ongoing use of pesticides by most members, and the high costs of attaining certified status. Such costs may not be offset by the premium payable, which remains low, circa USD200/tonne for fair trade certification, which also provides a (very low) guaranteed price which is not pegged to the stock market. This premium will not be financially beneficial until Agrobosque production exceeds 15 to 20 tonnes, expected by 2020. However, certification is growing in importance therefore, despite the fragmented certification market (key certifications include Fair Trade, UTZ and Organic), and the high costs and low premiums involved, this should remain a key priority. Agrobosque, with the support of TdHS, is pursuing certification via its relationship with Max Havelaar Switzerland (a Swiss Fair Trade organisation), and CLAC (the Latin American Fairtrade organisation for small producers), which will conduct a gap analysis by early 2017 to facilitate the certification process. In late 2016, Agrobosque was granted the support of the program MINAM+CAF, a public investment program by the Ministry of Environment that has four components: competitiveness, conservation, institutionality and environmental projects.¹⁸



Increased co-operation between regional initiatives

In order to address the challenges presented by small-scale production, including volumes below international purchasers' requirements, and high certification costs, Agrobosque should seek to increase dialogue with other national projects with the goal of aggregating cocoa production. This technique has been implemented in initiatives in other regions of Peru to significant success.¹⁹ Agrobosque has links to Caritas but also a number of regional NGOs, however in practice co-operation is minimal. The creation of a central co-operative headquarters would ease co-ordination, facilitate discussion of lessons learnt and could present a solution to key challenges which may be difficult to address through individual co-operative structures in the short-term.

Greater private sector involvement

The private sector presents a resource to Agrobosque, which should be further exploited both as regards purchasers and investors. Many players in the international target market, luxury chocolate makers and companies with an interest in fair trade have track records of providing technical involvement both in the cultivation of cocoa and in the production and design of chocolate. Agrobosque has made preliminary contact with Root Capital, an international NGO that lends capital, delivers financial training and strengthens market connections for small rural businesses, and SUMAQAO, a national fair trade cocoa purchaser that helps fund certification. These relationships require structured development and management in order to tackle key weaknesses: a lack of capital and unsecured market. Alternatively, a social investment model like that of REDD+ could be considered.

Ongoing mercury contamination monitoring

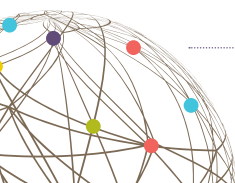
Although studies have been conducted into mercury contamination in Agrobosque crops, it would be advisable to establish a monitoring system to provide ongoing oversight of mercury contamination.

Clear and streamlined strategy

The wide range of social and agricultural objectives of the Agrobosque project arguably diffuses the finances

¹⁸ <http://www.minam.gob.pe/minamcaf/quienes-somos/>

¹⁹ Such as by Technoserve in the San Martin, Huanuco and Ucayali regions.



and time spent on each. However, while this may make progress less quantifiable and slower, the social aspects of the project are highly valued by almost all involved and are vital to the holistic improvement of the wider ramifications of illegal mining. Nevertheless, given that cocoa production and therefore revenues still remain low, Agrobosque currently lacks resources and personnel to ensure long-term sustainability and continue crucial elements, such as one to one psychological support in schools, and should focus investment on production and sale in the short-term.

4.2 What other policies at national or regional level could be necessary?

Facilitating formalisation of informal and illegal gold mining

In parallel to the development of illicit mining alternatives, the State should facilitate formalisation while implementing an effective programme towards eradication of illegal mining in the region. Formalisation is intended to lead to greater regulation and the controlled use, or possible eradication, of mercury, as is the case in formalised mines in other regions. Clean mining technology significantly improves the recovery of mercury, however its impact is limited while mining remains informal. Formalisation could help regulate currently stateless areas, weakening the illicit drug industry which both gains revenues and launders money through illicit mining. Taxation of mining could fund support for alternatives and associated alcohol and drug addiction.

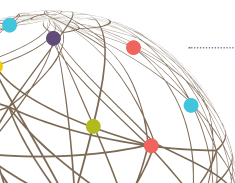
Development of state strategy focussing on alternatives to illicit gold mining

To ensure effective and long-term eradication of illegal mining, the State must develop a clear strategy focussed on alternatives to illicit gold mining and streamline co-ordination between the numerous entities involved. There exists a significant bank of expertise at both state and regional level in providing agricultural alternatives to cocaine production. The State should exploit the parallels presented by the factual matrices to catalyse and accelerate the development of a sector and region-focussed strategy regarding illicit mining.

As an example, the Agroideas project in the VRAEM region posits agriculture, primarily cocoa, as an alternative to cocaine production by providing technical assistance to farmers who voluntarily join the project alongside a monthly stipend (funded by the State) of USD194 per hectare converted from cocaine production to licit products until these yield a crop – three years in the case of coffee and cocoa. This seeks to ensure farmers don't return to cocaine production while alternative products are yet to provide a livelihood. The project offers low interest loans, and identifies purchasers for participants.

While large-scale cocaine production yielded high returns, on a smaller scale it provides subsistence incomes, comparable to small-scale gold-mining. Following state intervention, the income of many small-scale cocaine growers increased from conversion to coffee or cocoa. The project converted 2, 200 hectares of cocaine-production land in 2015 and the first half of 2016. Within two years the project envisages that circa 50 per cent of converted land will be producing coffee or cocoa (most are currently in the first three years of growth and have therefore not yet yielded a crop). The implementation of similar initiatives to those utilised in the VRAEM region could be similarly effective for illicit gold miners wishing to enter the formal market.

To date the government has implemented a repressive strategy centred on interdictions. Instead the State should adopt an inclusive strategy which seeks to offer alternatives to marginalised persons forced into illicit industries by a lack of options. A greater support of agriculture as well as tourism would be one manifestation of such a policy in Madre de Dios.



Investment into agronomical research

As noted by the regional Minister of Agriculture, a lack of knowledge regarding cocoa strains in the region, perhaps unsurprising given that cocoa is a recent crop to Peru, hampers innovation and diversification. Investment in research into high-yielding varieties of cocoa strains could yield substantial benefits - to date research has focussed on the CCN 51 variety²⁰ which could lead to a monocrop environment.

Strategies for combatting corruption

Corruption, endemic at state and regional level and amongst the police force, must be targeted. Regional functionaries identify corruption as a key institutional weakness and locals report the involvement of police in regional attacks and rapes. Tackling informality through providing alternatives may facilitate this.

4.3 Possibilities for replication in other contexts? What prerequisites would need to be in place

Rural communities engaged predominantly in illicit activities are often affected by organised crime which flourishes in the informal sector. They typically suffer from substantial marginalisation, discrimination of indigenous and/or rural communities, unequal distribution of income and unequal access to the formal labour market, health services, education and government support. Regions particularly affected are typically removed from state support, or in some cases control.

Strategies of inclusion and, where possible, formalisation rather than repression recognise that in order to minimise the informal sector its root causes, largely a lack of viable alternatives, must be addressed. Interviews with Agrobosque members emphasised that economic factors alone had not prompted the move from the informal, emphasising long-term considerations and peace of mind as key push factors driving them towards formality. Projects, both in the context of illegal mining and more broadly, should recognise and value such drivers.

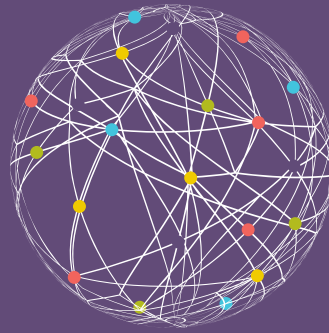
The failure of a number of regional short-term projects highlight that long-term strategies are crucial to sustainable improvement while the negative impacts of short-term intervention, particularly on morale, outweigh the benefits.

In projects dependent on the sale of goods, including Agrobosque, access to market is a hurdle that should be considered at the outset and addressed in the early stages, prior to peak production. Although low production volumes may pose initial barriers to entry, they do not prevent the building of relationships with the private sector, whose involvement should be maximised. Models based on socially responsible investment, rather than charity, constitute long-term sustainable solutions to informality.



²⁰ CCN 51 is a hybrid variety that reaches more productivity than the native cacao forms, but doesn't have the same quality (and further same value/price) as cacao used by luxury brands.





THE GLOBAL INITIATIVE
AGAINST TRANSNATIONAL
ORGANIZED CRIME

www.globalinitiative.net



A NETWORK TO COUNTER NETWORKS